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Editor's Column

The explosion of knowledge at the global hut due to technological dynamics has certainly redefined the very concept of education. The prevailing scenario of education--especially higher education--has become a matter of study and analysis for the scholars and practitioners who have a craving desire to face changes and challenges. It is because we, the human beings, are endowed with the faculty of choice and a free will.

Unlike other species, we are not programmed. We can make choices and use our free will to act and achieve our objectives. Despite the dramatic progress in ICT in education achieved so far at the school and college levels, much remains to be done: each country, to varying degrees, continues to struggle with issues of children out of school and illiterate youths and adults. Inequities in educational opportunities, quality of educational services and level of learning achievement persist by gender, rural/urban locality, ethnic background, and socioeconomic status.

The quality of learning and the capacity to define and monitor this quality is lacking in most developing countries. The means and scope of education continue to be narrow and confined to historical models of delivery, and the use of other channels continues to be ad hoc and marginal. The increase in quantitative and qualitative demand for education is not matched by an increase in resources.

At this juncture, it is safe to state that the polarity of views on the possibility of change is amazing. We, the publishers of Journal of research, are very much excited to view some aspects of these changes through scholarly articles contributed by august scholars and colleagues. The present issue contains papers with critical insight and analysis as well as systematic discussion and deliberation on various themes of language, literature, information technology, commerce and so on. We hope this will certainly be useful for the people who aspire change.

Chief Editor

Dr. Dinesh R. Chavda

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01

The Thirst of Humanity: a study of distinct temperament with special reference to Girish Karnad's the *Fire and the Rain*

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Abstract

Girish Karnad was well known Indian actor film director and Kannada playwright famous for *Yayati, Tughlaq, Nagamandala, Hayavadana, Odakalu Bimba* and *The Fire and the Rain*. He achieves his dramatic transcendence meanwhile working on Indian mythology concern with humanitarian aspects. *The Fire and the Rain* is instance of Karnad's best dramatic style which relates the thirst of humankind which never Quench. The play originally written in Kannada language as *Agni Mattu Male* then translated into English as *Fire and the Rain*. The story of *The Fire and the Rain* relates the story of Indian myth Mahabharata. It narrates the relationship of brothers and also detached with the dual side of it. The play seems like retaliation and revulsion of characters which lead their desire to choose good or bad, remorse or indifference, love or revenge, life or death and Fire or Rain. In the drama characters were playing whimsical and feign role as a Humans. The play is about envy, jealousy, discrimination, rights, Art, competence, potentiality which terminates with the mournful end.

Key words: Girish Karnad, *Fire and the Rain,* Indian mythology, Fire sacrifice for Rain, Thirst Of Humanity

Introduction

Girish Karnad is a well-known name in the history of Indian English literature. He was one of the finest writers of his era and not only limited to that but he was a successful actor, Film director, playwright, and a Jnanpith awardees. The time of the 1960s can be called as the time of Karnad as a playwright. Being an Indian he has used the Indian myths to shape his plays and he has used them in a way that makes all his plays stand out. He gives a modern-day touch to the famous Stories of myths and this makes the Stories interesting as well as the modern touch helps the readers to connect with the characters and it seems more relevant. Though the works of Karnad are available in English it was first written in his mother tongue Kannada and later on, he translated them into English. Hayavadana, Yayati, Agni Mattu Male (translation - The Fire and the Rain) are the best examples of Karnad's love for the myths and how he gives a modern touch to them. He was highly influenced by C. Rajagopalachari's version of the Mahabharata published in 1951. He stated in an interview that "I could hear the dialogues being spoken into my ears ... I was just the scribe", meaning, sometime in the mid-1950s, one day he experienced a rush of dialogues by characters from the Mahabharata in Kannada. This shows why he has been influenced by the stories of myths and especially Mahabharata.

Moving on, in this research researchers attempts a study for the thirst of humanity in the fire and the rain of Girish Karnad. The fire and the rain were originally written in Kannada by Girish Karnad and were translated into English by him as well. It is a story based on the myth of Yavakrita. It was extracted from chapters 135- 138 of the Vana Parva (the forest canto) of the Mahabharata. Girish Karnad shows various emotions of humans in this play using various characters that represents various thirst of humankind. Here thirst of humanity stands for the desires of humans which reflects with the characters of the play, let it be lust, anger, power, revenge all are present in the different characters of the *Fire and the Rain*. The story takes place in a small region of India which is suffering from a lack of rain for the past ten years. The king organizes a Yajana to please Lord Indra the god of rain in Indian mythology. The progression of the play introduces us to characters like Yavakri, Aravasu, Paravasu, Nittilai, Raibhaya, Vishakha, etc. The story was also adapted as a film with the name **Agnivarsha**. Some of the great actors like Jackie Shroff, Prabhudeva, Nagarjuna, Amitabh Bachchan, etc. played lead roles.

Human Thirst

As humans, every individual have some or other desires as it are a normal human trait. Some desires are good some might be bad but we all have something of it. Karnad being an excellent writer has used these desires in his favor to show us how human desires play a vital role in their life. Some lead to creations while others are responsible for the destruction. Having desires is a good thing but when a person loses his control over them, what he wants and tries to achieve something without thinking of the outcome and their desire becomes a thirst. So, in simple words, the title term thirst of humanity here means the desires and their role in ones' life, how it leads humans to do things that could be selfish, cruel, destructive, sinful, hateful, shameful, and so on. India is the country which has a rich heritage backed with hundreds of literary works that are full of morals and teaching of living a life at fullest. The ideas like these great literary works we cannot forget two great epics of India, of Hinduism, that are the Ramayana and the Mahabharata. Though they are a part of Hinduism but they are not limited to Hinduism as it is not about preaching the religion but teaching a way of life. Being an Indian Girish Karnad was a huge admirer or to call it in a simple language a fan of Mahabharata. He claimed that The Mahabharata has a huge impact on him and his career; many of his works take inspiration and background from the stories of the myth. One such work is the *Fire and the Rain*. In *Fire and the Rain*, he takes reference and inspiration from the **myth of Yavakri** which is part of the **Vana Parva** (forest canto) of **Mahabharata**. He has modernized the myth with his writing to some extent to make it more interesting and he also showcases how these myths are relatable even in modern times too.

All the Characters of the *Fire and the Rain* represent the thirst of Humanity and the outcomes of it. Here we see the ingenious writing of Karnad who uses the plot to give the reader an insight into various desires of humans and their possible outcomes. Characters like Paravasu, Aravasu, Raibhya, Nittilai, are blinded by the thirst of their desires that they do not care even a bit about their actions and the outcome. And Rakshasha, Paravasu, Raibhya, Yavakri are ready to kill others and their beloved one too for fulfill their thirst for revenge and they do everything through power to fulfill their desire without thinking about the cost or the harm they will going to make to others. Not only that but these characters try to give a lot of convincing reasoning behind their actions but if think about it with an open mind then it is not acceptable at the end of the day.

Though the term thirst of humanity here stands for the desires which have also relevance with the story of the *Fire in the Rain*. The story is about a village that is suffering from no rain for the last ten years and as a result, the people of the village are in real suffering from the water problem they have very less supply of water or nearly no water to live a normal life. The king of that village has organized a **Yagna** which can bring the rain by worshipping Lord Indra the God of the rain as per the Indian mythology. So this thing can be taken as the thirst of Humanity. Now, moving on let's talk about the thirst of humanity represented in the fire and the rain by Girish Karnad.

At the beginning of the story, the idea comes to know about the situation in the village and how people are suffering without rain for the past ten years. King has organized a Yagna under the guidance of the Maha Purohit Paravasu. A highly intelligent person, a Brahmin, and master of **Veda** working for the king as a leading person of the Yajana are called the Maha Purohit. At first, we think about Paravasu as a person who has high moral values and a saint type of personality but as and when the story progresses output comes to understand that he is not different from any other human being driven by the desires of power revenge, and self-centered personality.

The thirst of revenge has driven many characters crazy and to do the unspeakable acts in the story. Yavakri Who is the cousin brother of Aravasu and Paravasu comes back to the village after doing **Tapasya** for ten years to gain infinite knowledge. He goes to meet Vishakha who is his old love but now married to Paravasu. At first, Vishakha ignore him but soon the hidden desire inside her wakes up and they start talking and soon get intimate as the story progresses. Then Raibhaya the father of Paravasu comes to know about this intimate relationship of Vishakha and Yavakri and he is gone insane. Raibhaya is another character who is driven crazy by the desire for revenge and to prove he is better than others including his son. According to Raibhaya, he is suitable to be the Maha purohit but when Paravasu is chosen instead of him he feels jealous of his son. He calls himself a great person but he has also taken advantage of Vishakha being alone at the home by sexually harassing her while Paravasu was gone for the Yajana. He uses his powers and knowledge to give birth to a Brahmarakshas to kill Yavakri. When Brahmarakshas approaches Yavakri, Vishakha goes to warn him but here we come to know about the real intentions of Yavakri that he already knows about Brahma Rakshas and he has planned this all along. The intimate relationship with Vishakha is also a part of his plan of taking revenge on Raibhaya. He says that his father is superior and far more knowledgeable than Raibhaya his younger brother but because of his blindness, he never got the position and the respect he deserves. Thus he wants to serve justice by avenging the disrespect of his father. Soon things go wrong and Yavakri is killed by the Brahmarakshas sent by Raibhaya. When Vishakha goes back to the house Raibhaya tortures her and later that same night Paravasu arrives at home after knowing about the death of Yavakri and the relation of Yavakri and Vishakha.

After all these things Paravasu get confused yet not completely angry but disappointed from Vishakha for the act she did. Soon Raibhaya starts cursing Vishakha and when Vishakha tells Paravasu how Raibhaya is talking about morals but on the other side when Paravasu was gone he has taken advantage of her. After understating all this things Paravasu has gone crazy. He wish a revenge and the desire of doing the right thing, to be the one to solve justice and to give his father what he deserves his thirst of revenge makes him kill his father. As soon as Raibhaya is dead Vishakha says that now Paravasu will never know if she was talking about the truth or was just manipulating Paravasu. After hearing this Paravasu is confused but he has to go back to the Yajana so he calls Aravasu and tell him that the father is killed by someone who misunderstood him for an animal because of the dark and tell him to do the cremation of his father's dead body.

Aravasu is the only character who is not driven by any negative type of thirst or desires and is the most innocent character of the story the *Fire and the Rain*. All he wants is to get married to the love of his life Nittilai. Aravasu wants to be an actor and wish to performer it but being a good person and as Brahmin who respects his elder brother, he decides not to indulge in such activities when Paravasu told him that a Brahmin cannot do such things. To marry Nittilai Aravasu has to go to her village of her and have to prove himself in front of the elders of the village, worthy of being her husband but because of the actions of Yavakri, Raibhaya, and his brother Paravasu he fails to reach to Nittilai's village on time. As a result of this delay, he loses her because Natalia's father decides to get her married to another man to save his respect in front of the villagers. Yavakri is dead, Raibhaya is dead, Vishakha has left the house and Paravasu has gone back to the Yajana meanwhile Aravasu is left alone who has lost the love of his life, his brother, his father, and nearly everything he had. so after the cremation of his father he goes to the Yajana place but shockingly Paravasu blames him for the murder of their father and calls him a Rakshasha who has come to destroy the Yajana as the Yajana is in its last stage and it is common that the Preta and the Rakshasha often come to destroy the Yajana when it is about to end. It shows how the thirst of revenge made Paravasu kill his father and to save his image and the desire to be the Maha Purohit for the rest of his life makes him blame his brother who always obeyed him for the act he didn't commit.

Duplex: Fire and Rain

Karnad tries to showcase that person who is being for their desires, self-centered personality and to fulfill their egoistic goals goes to any extent no matter what it costs. Sawing **Fire** and **Rain** the duplex of two different and important elements of human need, Karnad also saw the duplex of individual character and their desire. The thirst of humanity or the desire of revenge, lust, power, and position can lead to the destruction of not just a single person but a whole family or maybe a village or even of a nation. On the other side if a person tries to do the right thing leaving aside his ego and his thirst for proving himself or herself the right he or she can change a lot. Karnad showcases this by the character of Aravasu who respects his elders and tries to do the right thing even if it costs him a lot. In the climax, Paravasu has finally realized his mistakes by watching the drama presented by his own brother Aravasu and as a result of that, he redeems himself by killing himself, on the other hand, the brother and the husband of Nittilai kill her because she has run away with Aravasu. Losing his whole family and his love Aravasu become numb and has no idea or the power to do anything else. He's crying, trying to wake up Nittilai but she goes into vain as she is already dead. Soon **Devraj Indra** appears in front of him and says that he is pleased with the play he presented and he can make his one wish come true and it can be anything that he desires. At first being in shock after losing Nittilai he asks for her revival but Indra says that the only way to make her alive again is by making the circle of time run backward when everyone else was alive as well. While this conversation is going on between Indra and Aravasu, the people of the village try to convince Aravasu to ask for the rain but he ignores them. The Brahmarakshas comes to him as well. The Brahmarakshas says that he is also a brother of Aravasu as Raibhaya gave him birth to kill Yavakri and now when Yavakri is dead and Raibhaya is dead; he cannot get the **Moksha** which was promised to him by Raibhaya. Aravasu must give Moksha to the Brahmarakshas and if Nittilai was alive she would have wanted the same. At first, Aravasu refuses but soon being the person who always wants to do the right; asks Indra to give Moksha to the Brahmarakshas, and this wish of Aravasu is fulfilled as Brahmarakshas gets the Moksha. Add as soon as Indra disappears the rain comes as well. Now the whole village is happy and the reason behind their happiness is Aravasu but he is not completely happy because he will never get to see Nittilai again.

Conclusion

Many writers started doing establishment of a cultural articulation with Indian myth and Literature sawing the belongingness. These things relate the relation of individual with the world of myth of particular culture and tradition. The art of sawing the different philosophy and ideologies extremely relate with the mythology. Veda, Purana Mahabharata, Ramayana are the best example of Indian tradition and its belongingness through mythology. In English literature Girish Karnad's *Fire and the Rain* become an extraordinary drama based on myth of Yavakri taken from chapter 135-138 of **Vana Parva** (forest canto) of the Mahabharata. It expresses the idea of different kind of thirst and appetite of humankind. In general sense each individual has desire and wishes to live. In these sense the characters have different kinds of thirst in a form of their desire to do or be something. Like Aravasu has a thirst of being a part of Nittilai's life, Paravasu has a thirst of being Chief priest instead of his father, Yavakri has thirst of revenge for his father's image, Raibhya has thirst of revenge to Yavakri for his relation with his daughter-in-law, Brahmarakshas has thirst to get Moksha. The story started with a thirst of water and then become the part of the characters. ***Fire and the Rain*** is an extreme example of Karnad's writing in which Human Thirst like love, care, jealousy, dissatisfaction, Incompetence, anger, lust, etc become the reason to kill others and them self too as a oblation. Researcher also thankful to Mr. Mayur Karkar, formar student of the department of English, BKNM University, Junagadh to give his views for this research.

Bibliography

Ansari, Arif. "Trope of Sacrifice: A Study of Girish Karnad's Fire and the Rain." *Epitome: International Journal of Multidisciplinary Research*, vol. 7, no. 1, Jan. 2021.

Babar, Ali Sk. "Girish Karnad S Treatment of the Issues of Caste and Gender in His Drama a Study of Yayati Hayavadana Tale Danda and the Fire and the Rain." *Shodhganga@INFLIBNET: Girish Karnad s Treatment of the Issues of Caste and Gender in His Drama a Study of Yayati Hayavadana Tale Danda and the Fire and the Rain*, Midnapore, 1 Jan. 1970, shodhganga.inflibnet.ac.in/handle/10603/303091.

Karnad, Girish. *The Fire and the Rain = Agni Mattu Malé*. Oxford University Press, 1999.

Kharabe, Ram Pundlikrao. "Tradition and Modernity in Karnad's Hayavadana, the Fire and the Rain and Rakesh's Halfway House, the Great Swans of the Waves: A Comparative Study." *Shodhganga@INFLIBNET: Tradition and Modernity in Karnad's Hayavadana, the Fire and the Rain and Rakesh's Halfway House, the Great Swans of the Waves: a Comparative Study*, Jhunjhunu, 18 July 2010, shodhganga.inflibnet.ac.in/handle/10603/13913.

M., Vomochana, and Bindu M. R. "Anger and Its Complication in Girish Karnad's The Fire and the Rain." *European Journal of Molecular and Clinical Medicine*, vol. 7, no. 3, 2020.

Manjula, M. "Effect of Fire on Plant Diversity Regeneration and Biomass in Southern Eastern Ghat Forests Andhra Pradesh India." *Shodhganga@INFLIBNET: Effect of Fire on Plant Diversity Regeneration and Biomass in Southern Eastern Ghat Forests Andhra Pradesh India*, Anantapur, 1 Jan. 1970, shodhganga.inflibnet.ac.in/handle/10603/67338.

Marx, T. "Brechtian Impact on Indian English Theatre with Special Reference to Girish Karnad." *Shodhganga@INFLIBNET: Brechtian Impact on Indian English Theatre with Special Reference to Girish Karnad*, Tirunelveli, 1 Jan. 1970, shodhganga.inflibnet.ac.in/handle/10603/64397.

Ojha, Kamak Kumar. "Search for Identity and Human Relationship in Girish karnads_the Fire and the Rain and Nagamandala." *Shodhganga@INFLIBNET: Search for Identity and Human Relationship in Girish Karnads_The Fire and the Rain and Nagamandala*, Bikaner, 1 Jan. 1970, shodhganga.inflibnet.ac.in/handle/10603/289517.

Peer, Dood S. "The Fire and the Rain: A Study of Symbolism ." *Veda's Journal of English Language and Litertature (JOELL)*, vol. 1, no. 1, 2014.

V., Sivaraman. "Metadrama in Girish Karnads Hayavadana Nagamandala and the Fire and the Rain." *Shodhganga@INFLIBNET: Metadrama In Girish Karnads Hayavadana Nagamandala And The Fire And The Rain*, Chennai, 4 Aug. 2006, shodhganga.inflibnet.ac.in/handle/10603/225597.

02

Duality: Representation of Ruined House and the death of Utopia in Virginia Woolf's *to the Lighthouse*

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Abstract:

Virginia Woolf was modernist writer and the pioneer of Stream of Consciousness. She has proved her excellences while working on ruined culture and the condition of females of her time. Woolf's concern was not to objection of vision but to find out the understanding of the readers. In the text *To the Lighthouse* she talked about the representation of Inter subjectivity which saw the death of Utopia. *To the Lighthouse* consists of three parts concern to the accurate sense of Woolf. First part is 'The Window', second is 'Time Passes' and the third one is 'The Lighthouse'. The house is the sacrificial of a time which witness of ruined life and hold the boundary of the Lighthouse as a portrait of the darkness. Ego and the Essentiality and sympathy of the characters symbolized the ruined state of mind, which lead the characters towards opposite of light. Woolf saw the duplex of diverse fundamentals in her text *To the Lighthouse.* Woolf surpasses her talent In the structural pattern of the lighthouse for showing opposite elements; hatred versus love, freedom versus bondage, passion against truth, fear versus bravery, husband against wife, life against death and dark against light.

Key Words: Virginia Woolf, *To the Lighthouse,* Feminism, Dark and the Light, Feminist Approach

Introduction

The structural outline of 'To the Lighthouse' centers on Ramsay's family and their ruined life. The novel consists of three parts, part one: Window, part two: Time passes, part three: The Lighthouse. Virginia Woolf's early life was in the St Ives, Cornawall, where she first time saw the Godrevy Lighthouse, which become significant influence in her novel *To the Lighthouse* (1927). The word Utopia is and imagined place of things in which everything is perfect. In the history first time the word used by Thomas More in his book *Utopia.*

The accidental life of Virginia Woolf influence the novel, the way in which her mother left and soon followed by the death of her stepsister and surrogate mother Stella Duckworth which revolve in the mental collapse of her life.

Woolf's second influence to write in relevance to her own life is her father who encouraged her to write something. Virginia Woolf also known for her famous work 'A Room of one's own' (1929) in which she quoted that female must have her money and her own room in which she can write or express through her writings.

The novel consist of many characters but Mrs. Ramsay is one of the important character who is beautiful and dutiful loving woman who also believes to satisfy her male guest's delicate ego and consummate their need, constant support and sympathy.

The aversion of the characters and the negligence construct the reason to vanish the state of Utopia.

To the Lighthouse somehow saw the collapse of many character's desire and because of that all of them have to suffer a lot. The book auspice the death of major characters surrounded by their unwilling problems that's why it's become 'The Book of the Dead'.

Methodology

Researcher has done this research through systematic method for finding the theme of duality in Virginia Woolf's *To the Lighthouse.* Researcher has used the MLA 8th edition as a citation style for this research paper.

Duality: Light versa Dark

The simple concern of middleclass person is to get life oriented needs and fulfil their desire with piece of joy. Here the novel concentrates on same idealistic journey of Ramsay's family and their visit to Isle of Skye in Scotland. The novel retain the childhood memories and experience and enlink the present it with present time. As the novel consist of three parts the first part strike up with home in the Hebrids, on the Isle of Skye. Mrs. Ramsay and her son James were talking and decide to visit the lighthouse but because of male dominance the whole plan was failed and refused by Mr. Ramsay. The story focuses on the marriage life of Mr. And Mrs. Ramsay. As the social norms are concern the marriage life explains the optional role of husband and wife. Mr Ramsay protected his family and friends to but somehow he can't manage everything and he failed being as father and husband al well.

In the very begging relations of both character Mr. Ramsay and Mrs. Ramsay saw the dual and opposite desire. Woolf has portrait both Husband and wife sawing the male dominance and

Mrs. Ramsay who always try to fulfil the needs of her family but what about her dreams? With this question mark Woolf saw the death of Utopia in concern with the desire of main character of the novel.

The Ramsay family consist of total eight children, one of them is painter named Lily Briscoe who did an effort to make a sketch of her mother and brother James. Woolf put one guest character who believes that female cannot paint or write anything. Here two different ideologies of characters saw the duality with reference to feminism. The first part ends up with a dinner party in which the nature of male characters simultaneously switches and urges the dominance and breakdown the state of Utopia.

Looking towards the title of second part 'Time Passes' researcher get an idea of time passing in relevance with the present but it's not only limited to it but it relate the sense of absence, dearth, aversion and death of the characters.

The implicated relationship of Mr and Mrs. Ramsay saw their everyday life approaches with each other but not the real interactions. The third part entitled 'The Lighthouse' begins with Mr. Ramsay's desire for a trip with his daughter Cam(illa) and son James but that was not happened well because of his immature children, this scene also refer the death of Utopia and reflect Mr Ramsay's ruined state of mind. Also one other character Lily Briscoe recall her past life memory meanwhile she also remember that vision and the desire of her life is more important than leaving some sort of legacy in her work as painter. In the first two parts Lily Briscoe as a young painter begins a portrait of Mrs Ramsay but not finished till the end of the novel because of many troubles. Her desire of make a painting of Mrs Ramsay refers the perfect pleasure but that also can't end well, this also saw the death of Utopia. She also faced frighten opinions from Charles Tensley like 'women cannot paint' (Woolf) which makes her confidence down.

Conclusion

To conclude this research, Virginia Woolf's *To the Lighthouse* represents the two major ideas- first is Ruined House and the second one is Death of Utopia in the text. In this research the researcher has mention the two major concepts of the text titled, *To the Lighthouse* with what the idea of ruined life and the death of Utopia concern. Virginia Woolf was always in a favour of feminist perspective. Another text by Woolf, *A Room of Once Own (1929)* also reflects the idea that women must have her own place to express her feelings and ideas. But with reference to the text *The Lighthouse* Woolf surpasses the idea of perfection in the life. The complexity of the characters in the text saw that anyone can transcend the immortality via physical world. Virginia Woolf express the idea about after death life that one can live after the death also, example is the influence of Mrs. Ramsay's on the character Lily Briscoe. Through this research the Researcher has explore that in the text *To the Lighthouse* Woolf has mention the idea that we can transcend this physical world and continue to exist as a soul.

Bibliography

- **Primary sources**

Woolf, Virginia, et al. *To the Lighthouse*. Penguin, 2020.

- **Secondary sources**

Batchelor, John. *The Art of Literary Biography*. Clarendon Press, 2003.

Beauvoir, Simone de, et al. *Extracts from the Second Sex*. Vintage Books, 2015.

Bell, Quentin. *Virginia Woolf; a Biography*. Harcourt Brace Jovanovich, 1974.

Bishop, Edward L. *A Virginia Woolf Chronology*. G.K. Hall, 1988.

Bond, Alma Halbert. *Who Killed Virginia Woolf?: A Psychobiography*. IUniverse.com, 2000.

Dally, Peter. *Virginia Woolf: The Marriage of Heaven and Hell*. Robson Books, 1999.

Dalsimer, Katherine. *Virginia Woolf Becoming a Writer*. Yale University Press, 2001.

Davies, Stevie. *To the Lighthouse*. Penguin, 1989.

Eudora, Welty. "Book Detail." *Steven Temple Books*, Harcourt Brace Jovanovich, (c1981), 1 Jan. 1981, www.steventemplebooks.com/book/51742/woolf-virginia/to-the-lighthouse-foreword-by-eudora-welty/.

Henke, Suzette A., and David Eberly. *Virginia Woolf and Trauma: Embodied Texts*. Pace University Press, 2007.

Mann, Susan Archer, and Ashly Suzanne Patterson. *Reading Feminist Theory: From Modernity to Postmodernity*. Oxford University Press, 2016.

Panken, Shirley. "Virginia Woolf and the Lust of Creation: A Psychoanalytic Exploration ." *Goodreads*, Goodreads, 1 July 1987, www.goodreads.com/book/show/2437489.Virginia_Woolf_and_the_Lust_of_Creation.

Rosenman, Ellen Bayuk. *The Invisible Presence: Virginia Woolf and the Mother-Daughter Relationship*. Louisiana State University Press, 1986.

Susan, Dick, and Mark Hussey. "To the Lighthouse : The Original Holograph Draft (1983 Edition)." *Open Library*, Hogarth Press, 1 Jan. 1983, openlibrary.org/books/OL18972370M/To_the_lighthouse_the_original_holograph_draft.

W., Davies J K. *Computer Simulation of Flame Propagation in an Open-Ended Gallery of Finite Length*. Department of Energy, Safety in Mines Research Establishment, 1974.

Woolf, Virginia, and Nicola Bradbury. *To the Lighthouse*. Wordsworth Editions, 2002.

Woolf, Virginia, et al. *The Diary of Virginia Woolf*. HogarthPress, 1980.

Woolf, Virginia. *The Years*. Alma Classics, 2021.

03

Impact of GST on pharmaceutical industry

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ABSTRACT

Tax duty is an obligatory commitment to state income, imposed by the administration on labourers pay and business benefits, or added to the expense of certain merchandise, administrations, and exchanges. Tax is crucial to a country's economy but if there is really high taxation it will lead to a recession as manufacturers ability to produce product decreases cause of the high cost of production and reduce in numbers of buyers which indirectly impacts the overall growth of the country. Goods and Services Tax is a value-added tax which was recently implemented in India. Hence it is necessary to understand its significant impact in Indian Economy. We have done this research to find out the impact of GST application on OTC products in the pharmaceutical sector. This study is done in order to havea better understanding of the impact of this taxation system. It is an indirect tax. It takes account of expenditure done through the sale, manufacture, and consumption of goods & services at a national level. It involves companies, industries and services. GST will decrease the manufacturing price which will result in a positive impact on the Indian Pharmaceutical Industries. National Pharmaceutical Price Authority has issued necessary instructions to fix drug prices for the vital medicines to make it affordable for everyone.

Key words: GST, Pharma and Drug

Introduction

Goods & Services Tax Law in India is a complete, multistage, destination-based tax that is levied on every charge addition. Many indirect tax laws has been replaced that earlier existed in India by GST Law. The tax came into consequence from July 1st, 2017 during the implementation of 101st Amendment of the Constitution of India by the Prime Minister Narendra Modi. GST an meandering tax system which takes financial credit expenditure prepared through sale, manufacture, and consumption of goods & services at a national level which mainly involves companies, industries and services area. The main idea behind it is to eliminate the tax levied of state and central government.

It involves three stages:

1) State GST (SGST) levied by state

2) Central GST (CGST) levied by centre

3) Integrated GST (IGST) levied by central government on inter-state supply of goods and service.

Under the Essential Commodities Act, a Drug Price Control Order is issued to ensure that the costs of crucial medicines which are required in large amounts are set in such a way that they are reasonable for each person. The order has its roots in 1970 when the government realized the sick effects of the high profitability of medical drugs and the companies which made them. The GST Rates for medicines were decided by the GST Council in the meeting held on 3rd June, 2017. GST is levied in 5 different rates, specifically NIL, 5%, 12%, 18% and 28% based on the HSN (Harmonized System of Nomenclature) code of the article. Medicines and pharmaceuticals are classified under 37th chapter of the HSN Code. The following types of medicines and pharmaceutical products are free from GST:

lHuman Blood and its components lAll types of contraceptives Goods under the subsequent HSN categories are taxed

at 5% GST rate: lAnimal or Human Blood Vaccines lDiagnostic kits for detection of all types of hepatitis lDesferrioxamine injection or deferiprone lCyclosporin lMedicaments (including veterinary medicaments) used in bio-chemic systems and not bearing a brand name.

Twelve percent GST Rate The Subsequent Types of Medicines and Pharmaceutical Goods are Taxed at 12% GST Rate

lOrgans for organo-therapeutic uses; lextracts of glands or other organs or of their secretions for organo-therapeutic uses; lheparin and its salts; other human or animal substances prepared for therapeutic or prophylactic uses, not elsewhere specified or included lAnimal blood prepared for curative, prophylactic or diagnostic uses; lantisera and other blood fractions and customized immunological products, whether or not obtained by means of biotechnological processes; lToxins, cultures of microorganisms (not including yeasts) and similar products. lMedicaments consisting of two or more constituents, who have been mixed together for therapeutic or prophylactic uses, not put up in measured doses or in forms or packings for retail sale, including Ayurvaedic, Unani, Siddha, homoeopathic or Biochemic systems medicaments. lMedicaments consisting of mixed or unmixed products for curative or prophylactic uses, put up in measured doses (as well as those in the form of transdermal administration systems) or in forms or packings for retail sale, including Ayurvaedic, Unani, homoeopathic siddha or Biochemic systems medicaments, put up for retail sale. lWadding, gauze, bandages and similar goods (for example, dressings, adhesive plasters, poultices), impregnated or layered with pharmaceutical substances or put up in forms or packings for retail sale for medical, surgical, dental or veterinary purposes.

Pharmaceutical goods such as Sterile surgical catgut, similar sterile suture materials (including sterile labsorbable surgical or dental yarns) and sterile tissue adhesives for surgicalcut closure; sterile laminaria and lsterile laminaria tents; sterile absorbable surgical or dental haemostatics; sterile surgical or denatal ladhesion barriers, whether or not absorbable, etc.,

Review of Literature

Ajit Kumar and Prof (Dr.) Jeevan Kumar Chaudhary (2019) studied, "GST and Its Impact on Pharmaceutical Industry." Concluded that GST has both positive as well as negative effects on the pharmaceutical business, but the quantum of positive impact is more, and the government is still working towards the changes to reduce the negative effect and such activity is an ongoing process for further improvement.

Sandip Kumar De (2016) studied, "GST and the Effects on Pharmaceutical Industry" in this paper, RSM explores at a broad level, the impact that GST has had on impact on the pharmaceutical industry. It was concluded that the inverted duty structure could result in a significant loss of input tax credit in the pharmaceutical industry. There is burnout as a result of the inability to reclaim input tax paid on capital goods. Furthermore, disbursements due to budgetary support are expected to be delayed, potentially leading to further working capital constraints. All of these impediments raise the cost of working capital and are likely to harm pharmaceutical product prices.

Dr. Priyanka Jain (2017) studied, "Impact of GST in Various Indian Industries." This paper explains the concept of GST with the pros and cons of implementing GST in India along with their impacts on various sectors. It also highlights comparative details between the proposed GST scenario and the current tax scenario. Concluded that there will be problems and challenges in implementing GST in India. Its pros for one industry can become the challenges of other industries. So it is very imperative to be proactive measures for the upcoming challenges. There should be all-around equal development.

Bhawana Khanna and Pavneet Kaur (2017) studied, "A Research Paper on an Impactof Goods and Services Tax (GST) on Various Sectors of Economy." The finding shows that tax rates have significantly impacted various sectors of the economy but still it has reduced the burden of tax on the final consumer by removing the cascading effect onconsumers. The paper elaborates that no doubt the current GST system is a multistage, destination-based effect on goods and services but it will be a major source of revenue for Govt. as it shows a significant impact on each sector of the economy.

Ranjana Upashi (2017) studied, "Study on Effect of Goods and Services Tax on Different Sectors in India." Also discuss the concept and framework of GST, benefits of GST, the impact of GST on different sectors like Automobile, FMCG, Banking, Insurance, Financial Services, Pharmaceutical Sector, Agriculture, Real Estate, Oil and Gas, Cement, Telecom, Airlines and, Gold. Concluded that GST impact is neutral and positive on different sectors of the economy.

Dr. R. Vasanthagopal (2011-April2nd)studied,"GST in India: A Big Leap in the Indirect Taxation System". InternationalJournal of Trade, Economics and Finance, Vol. 2,and concluded that switching to smooth and continuous GST from current complicated indirect tax system in India will be a positive step in thriving Indian economy. Success of GST will lead to its acceptance by more than 130 countries in world and a new preferred form of indirect tax system in Asia also.

GST on healthcare will make Medicare unaffordable: ASSOCHAM-TechSci studyWednesday, (January 25, 2017) concluded like, Under GST, the cascading effect of tax on goods and services would be reduced. Thus, making Indian healthcare market a seamless uniform market, demolishing fiscal barriers between the states. The inverted duty structure which is adversely affecting the domestic manufacturers would be reduced by GST, thereby resulting in reducing the cost of inputs, thus boosting the investments in healthcare sector. However, certain tax exemptions that reduce cost of services for customers might be overridden with introduction of GST. This would pose a negative impact on healthcare sector from consumer's point of view.

MarksmanHealthcare (june27-2017)"Impact of GST on Indian Healthcare sector" said the impact of GST on the healthcare segment is still indeterminate. Some industry specialists have confidence that post implementation of this bill, customers and industry players will be in a win-win situation. The healthcare industry would benefit from passing of the GST bill as it would reduce the complexities and various obstacles to the growth of business to a large extent. On the other hand, patients/consumers are going to be burdened with the increased medicine costs.

OBJECTIVE OF THE STUDY:

- To know the Advantages and disadvantages of GST on service sectorwith respect tohealth care.
- To know the opinion of patients or consumers towards the GST.
- To know that whether the GST implementations in India towards the health care ishaving success or failure.

IMPACT OF GST ON PHARMACEUTICAL INDUSTRY

GST levy on pharmaceutical products can range between different tax rates, i.e. Nil, 5%, 12% and 18%. GST on medicines has left the prices of the same unaffected when compared to the previous regime. This article covers the GST implications for pharmaceutical products and the sector in detail.

(Goods and Services Tax) has grabbed the attention across all the industries in the country. It would benefit most of the sectors and make the taxation process easier as it will replace a number of different taxes and duties. The Indian Healthcare Industry is now among of the major sectors with respect to revenue and to employment. As the expenditure on the Healthcare increases, so do revenues from taxes.

GST subsumes various taxes of the complex tax system in the country into one uniform tax system. GST would have a constructive effect on the Healthcare Industry particularly the Pharma sector. It would help the industries by streamlining the taxation structure since 8 different types of taxes were imposed on the Pharmaceutical Industry previously.

An amalgamation of all the taxes into one uniform tax will ease the way of doing business in the country, as well as minimising the cascading effects of manifold taxes that is applied to one product. Moreover, GST would also improve the operational efficiency by rationalising the supply chain that could alone add 2 percent to the country’s Pharmaceutical industry. GST would help the Pharmaceutical companies in rationalising their supply chain; the companies would need to review their strategy and distribution networks.

Furthermore, GST implementation would also enable a flow of seamless tax credit, improvement the overall compliance create an equal level playing field forthe Pharmaceutical companies in the country. The biggest advantage for the companieswould be the reduction in the overall transaction costs with the withdrawal of CST (Central Sales Tax). GST may lower the manufacturing cost.

One more benefit due to GST is the reduction in the overall cost of technology. Previously, the technical machinery and equipment which are imported into the country by the healthcare sector were very costly. Also, the duty which is levied is not allowed as a tax credit under the previous tax regulations.

The passing of the GST (Goods and Services Tax) Bill has grabbed the attention across all the industries in the country. It would benefit most of the sectors and make the taxation process easier as it will replace a number of different taxes and duties.

The Indian Healthcare Industry is now among of the major sectors with respect to revenue and to employment. As the expenditure on the Healthcare increases, so do revenues from taxes. Recently, the Government of India decided for the implementation of GST, which would subsume various taxes of the complex tax system in the country into one uniform tax system.

It is expected that GST would have a constructive effect on the Healthcare Industry particularly the Pharma sector. It would help the industries by streamlining the taxation structure since 8 different types of taxes are imposed on the Pharmaceutical Industry today. An amalgamation of all the taxes into one uniform tax will ease the way of doing business in the country, as well as minimising the cascading effects of manifold taxes that is applied to one product. Moreover, GST would also improve the operational efficiency by rationalising the supply chain that could alone add 2 percent to the country's Pharmaceutical industry. GST would help the Pharmaceutical companies in rationalising their supply chain; the companies would need to review their strategy and distribution networks. Furthermore, GST implementation would also enable a flow of seamless tax credit, improvement the overall compliance create an equal level playing field for the Pharmaceutical companies in the country. The biggest advantage for the companies would be the reduction in the overall transaction costs with the withdrawal of CST (Central Sales Tax). GST is also expected to lower the manufacturing cost.

One more benefit likely to accrue due to GST is the reduction in the overall cost of technology. Currently, the technical machinery and equipment which are imported into the country by the healthcare sector are very costly. Also, the duty which is levied is not allowed as a tax credit under the present tax regulations. However, with GST this scenario might change. Under GST, duty charged on the import of such equipment and machinery would be allowed as a credit.

There is an uncertainty if the life-saving drugs, Healthcare services, and medical devices would continue to be tax-free once GST comes into force. Till now, life-saving drugs are exempted from the Excise and Customs Duties. Some of the States charge 5 percent taxes on the medicines; it might change once GST comes to play. The Government must continue the duty and tax incentives which are in place already. As the Goods and Services Tax is applicable on all the stages of the supply chain, it is still unclear how this would influence the bonus schemes, free drug samples and the inter-state movement of the expired products or the stock transfers.

One of the prime concerns for the healthcare sector is the inverted duty structure thatadversely impacts the domestic manufacturers. The cost of inputs is much higher than output, i.e., the raw materials are more costly in terms of duty than the finished product itself hence depressing investments from the manufacturers. For addressing this issue, the GST structure proposes either to dispose of the inverted duty structure or bring in a refund of the accrued credit. If this is implemented, it would prove to be the biggest advantage for the healthcare sector and would act as a booster for the growth of healthcare industry.

Positive Implications of GST on Pharma Industry

Eliminates Cascading Effect on Medicines:

GST on medicines eliminates the cascading effect of tax which involved multiple taxes which are applied on to a single product. The GST framework would create a common pharma market with equal opportunities towards growth across several states.

Efficiency in Supply Chain:

Due to the uniform tax structure provided by the GST framework, the traditional cost and distribution Model would be replaced by supply chain efficiencies and tax would become neutral. Pharmaceuticals companies would find freedom in exploring various strategic supply chain and distribution channel and bring overall logistics cost down.

Refund in case of Inverted Tax structure:

The cost of inputs is much higher than output, i.e., the raw materials are more costly in terms of duty than the finished product itself hence depressing investments from the manufacturers. For addressing this issue, the GST structure has a law in place for inverted duty structure and brings in a refund of the accrued credit. It proves to be the biggest advantage for thehealthcare sector and would act as a booster for the growth of the healthcare industry.

Lower Tax Rate for Life saving Drugs:

Under the GST framework, the life-saving essential drugs such as Oral re- hydration salts, diagnostic kits for hepatitis and such other life-saving injections fall under the tax bracket of 5 percent.

Increase in Compliance:

Now under GST, various distribution channels will now be required to obtain registration and file returns. Earlier they were not required to obtain registration since they were not involved in the payment of taxes and filing of returns. This will increase compliance and would curb practices of non-issuance of invoice.

Negative Implications of GST on Pharma Industry:

Increase in Manufacturing cost:

Goods and Service Tax is having a constructive impact on the Indian Pharmaceutical Industries as it has increased the manufacturing cost. Most drugs mentioned in 5% tax bracket under GST were previously covered in 4% tax bracket under VAT.

Destruction of Expired Medicine:

Manufacturer is required to reverse the ITC availed on the return supply as per the provisions of Section 17(5) of the CGST Act, 2017if the time expired goods which have been returned by the retailer/wholesaler are destroyed by him. The ITC which is required to be reversed in such scenario is the ITC availed on the return supply and not the ITC that is attributable to the manufacture of such time expired goods.

Ayurvedic Medicines:

Under GST, Ayurvedic medicines could get costlier as they would be taxed at the rate of 12% which were earlier covered by 4% tax bracket under VAT regime. Because of this hike in the tax rates, MRP must be revised to absorb overall effect.

Taxability of Free Supplies:

Supply of goods between persons without consideration is deemed to be a ‘supply’. Accordingly, stock transfer of promotion materials/ free samples will be subject to GST. Subsequent supply of the said promotion materials to stockists / end customers will also attract GST.

Conclusion

Under the GST regime, seamless availability of input tax credit even on inter-state transactions makes it possible for many companies to employ a hub and spoke mode. The thrust that GST gives to supply chain coincides with the move that pharmaceutical companies are making to continuous manufacturing and industrial automation. Thus, the supply chain aspects should be looked at a serious cost optimisation exercise that would further enhance competitiveness of the businesses.

One of the sectors expected to benefit from the same is the Indian Healthcare Industry regarding revenue and employment. It only makes sense for the government to help this industry with the assistance of the newly-enforced GST regime. As the expenditure on healthcare products and development in the field in question increases, so does the revenues from the taxes coming in from a budding industry like that.

It is believed that GST will have a positive effect on Healthcare and Pharmaceutical industries. Analysts believe that it will help the industry reduce costs and carry out taxation practices more effectively and in a time-efficient manner as eight different forms of taxes that used to be levied onto the pharmaceutical industry have been subsumed into one for that very same purpose.

References

Jain NK (2013) pharmaceutical jurisprudence, vallabh prakashan, 4th revised (Edn.) 2015, drug price

Agarwal SP, Khanna Rajesh (2015) Pharmaceutical Jurisprudence and ethics, Birla publication pvt ltd 5th Volume.

Jayashree R, Kotnal. GST In India: An enrichment of indirect taxation system, International Journal of applied Research. 2016; 2(4):735-738.

Vaghasiya K, Parry P.A, Somani N. Impact of GST on Pharmaceuticals:An Overview, International Journal of Trend in Scientific Research and Development (IJTSRD).ISSN No:2456-6470.

Jayashree R, Kotnal. GST In India: An enrichment of indirect taxation system, International Journal of applied Research. 2016; 2(4):735-738.

http://www.pha rmanet.in/impact -gst - pharmaceutical-industry/ #sthash. Cekdp4hv.dpuf
http://www.paxhealthcare.com/effect-of-gst-onpharma- industry/

https://www.gktoday.in/gk/drug-price-controlorders- dpco

04

કુંભારિયાના કલામય જૈન પ્રાસાદો-એક અધ્યયન

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- **પ્રસ્તાવના**

ભારતીય સંસ્કૃતિના પુરાતત્વ, સંસ્કૃતિ, શિલ્પ અને સ્થાપત્યના વિકાસમાં ગુજરાતનું પ્રદાન અનેરું છે. આપણા ભૂતકાળની સાક્ષી પૂરી આપતાં અનેક પ્રમાણો ગુજરાત રાજ્યમાંથી ઠેરઠેર પ્રાપ્ત થાય છે. ઇતિહાસના પાના વાંચતા જાણવા મળે છે કે, હમેશા ચારાવાર ટોળાઓ અને નિર્વાસિતોએ ગુજરાતને પોતાનું આશ્રય સ્થાન બનાવ્યું છે. છેક પ્રાગ ઐતિહાસિક કાળથી અર્વાચીન કાળ સુધી આ પ્રકિયા ચાલુ રહેવા પામી છે, જેને કારણે ગુજરાતમાં એક અનોખી સંસ્કૃતિનું નિર્માણ થયેલું જોવા મળે છે. તેમાં કેટલીક સંસ્કૃતિઓનો સુમેળ ગુજરાત રાજ્યમાં થયેલો છે.તેના પરિણામે ઈતિહાસ, ભૂગોળ, ધર્મ, રીત-રિવાજોની ઘેરી અસર ગુજરાતની પ્રજા પર જોવા મળે છે. ભારતીય સંસ્કૃતિમાં ગુજરાતના રંગીન લોકનૃત્યો, કળા સભર નિવાસો, સરસ અને સાલસ રીતે રિવાજો, હસ્તકલાઓનો ગુજરાતની સંસ્કૃતિના વિકાસમાં અનેરું પ્રદાન છે. દેશના અન્ય પ્રદેશોની જેમ ગુજરાતમાં પણ સંસ્કાર ધર્મ સાથે ગાઢ રીતે સંકળાયેલ છે. સાહિત્ય, સ્થાપત્ય, ચિત્રકલા અને સંગીત જેવાં વિવિધ સાંસ્કૃતિક ક્ષેત્રો આપણા સંસ્કાર વારસાની ધરોહર છે. આમ તો સમગ્ર ગુજરાત પ્રાચીન અને અર્વાચીન બન્ને ક્ષેત્રે દેશભરમાં આગવું સ્થાન ધરાવે છે. અમદાવાદ નજીક લોથલ અને કચ્છના વાગડ વિસ્તારમાં આવેલુ ધોળાવીરાની ૫૦૦૦ વર્ષ જુની હડપ્પીય સંસ્કૃતિએ ગુજરાતને વિશ્વભરમાં ખ્યાતિ અપાવી છે. ગુજરાતના પુરાતન વારસમાં સમ્રાટ અશોકના ત્રીજી સદીના શિલાલેખો, કચ્છના ખડીર વિસ્તારમાંથી મળતા ક્ષત્રપના બીજી ત્રીજી સદીના શિલાલેખો પણ મોર્ય, ગુપ્ત અને ક્ષત્રપ વારસાની ઝાંખી કરાવે છે. તો તારંગા, મોઢેરા, કુંભારિયા, ગિરનાર અને પાલિતાણાના જૈન મંદિરોનું શિલ્પ સ્થાપત્ય આપણા ભવ્ય સાંસ્કૃતિક વારસાનું સ્મરણ કરાવે છે. ગુજરાતના મુસ્લિમ સ્થાપત્યનો વારસો પણ ભારતીય અને આરબ કલાનું મિશ્રણ ધરાવતી ભવ્ય ઇમારતોમાં સચવાયો છે. જો કે ગુજરાતનું સ્થાપત્ય મોગલ સ્થાપત્યથી જુદું પડે છે. ગુજરાતની ઈમારતો વિશાળ નથી પણ તેનું શિલ્પ, કોતરકામની કારીગરી ઉચ્ચ કક્ષાની છે. આ ગરવી ગુજરાતની આપણી આ ધરોહર પૈકી કુંભારિયાના જૈન દેરાસરના સ્થાપત્યોમાં સચવાયેલી આપણા સંસ્કાર વારસાની ઝલક અહી મેળવીશું.

- **કુંભારિયાનો પરિચય**

અંબાજીથી બે ત્રણ કિ.મી. ના અંતરે આવેલ કુંભારિયા જૈન દેરાસરમાં ભગવાન નેમિનાથ, ભગવાન મહાવીર સ્વામી, ભગવાન પાશ્વનાથ, ભગવાન શાંતિનાથ અને ભગવાન સંભવનાથના પાંચ દેરાસરોના સમૂહ ધરાવતા મંદિર છે. આ માટે એવી દંતકથા છે કે ભીમદેવ સોલંકીના સમયમાં ચંદ્રાવતીના દંડનાયક જૈન વણિક વિમળશાએ વિજય અને સફળતા મેળવ્યા પછી તેની યાદ કાયમી કરવા સફેદ આરસના સુંદર દેરાસરોનો સમૂહ બાંધવાનો વિચાર કર્યો અને એ માટે મેવાડના રાણા કુંભાજીએ આરાસુરમાં માતાજીના મંદિર નજીક વસાવેલ કુંભારિયા ગામની જગ્યા પસંદ કરી હતી. આથી આ સ્થળ કુંભારિયા તરીકે જાણીતું બન્યું હતું. વિમળશાની પત્ની સુમંગલા અંબાજી માતાજીના પરમ ભક્ત હોઈ આ કામમાં માતાજીની કૃપા માટે તેઓએ પ્રાથના કરી. એક દિવસ માતાજીએ સ્વપ્નમાં આવી કહ્યુ કે તારી બધી ઈચ્છા પૂરી થશે, નાણાની ખોટ નહિ પડે. વિમળશાએ સફેદ આરસના સુંદર કલા કૃતિવાળા ૩૬૦ જૈન દેરાસરો બંધાવ્યા. કામગીરી પૂર્ણ થતાં વિમળશા હર્ષવિભોર બની ગયા ત્યારે બાલિકા સ્વરૂપે માતાજીએ તેમની પાસે જઈને પૂછ્યુ કે કોની કૃપાથી મંદિરો બનાવ્યાં? વિમળશા માતાજીને ઓળખી શક્યા નહિ અને બોલ્યા મારા ધર્મગુરુના પ્રતાપે. માતાજીએ ફરી ફરી પૂછતાં આ જ જવાબ મળતાં માતાજી ક્રોધિત થયા અને વિમળશાને કહ્યું વિમળ, તમે અહી ના રોકાશો, નાસી છુટો વિમળશા. એટલે વિમળશાએ નાસીને આબુ જતાં રહ્યાં. ત્યાં ભયાનક આગે દેખા દીધી અને પાંચ દેરાસરો સિવાયના બાકીના નષ્ટ થઇ ગયા હતાં.

કુંભારીયાના મૂળ નાયક નેમિનાથની પ્રતિષ્ઠા વિક્રમ સંવત ૧૦૮૮માં વિમળશા મંત્રીએ કરી હતી. સંવત ૧૩૫૬માં અલ્લાઉદ્દીન ખીલજીએ ગુજરાત પર ચડાઈ કરી ત્યારે આ મંદિરોને પણ વ્યાપક નુકશાન કર્યું હતું. આ પછી તેનો જીર્ણોદ્ધાર અને જૈન પ્રસાદોની પ્રતિષ્ઠા વિજયસેનસુરીશ્વરજીએ માગસર વદ ૪ વિક્રમ સંવત ૧૬૭૫ના કરી હતી. અહીના જૈન પ્રસાદો માટે પુરાતત્વવિદ્દ જિનવિજયજીએ ભારતના પુરાતત્વીય સર્વેક્ષણ વિભાગની એક મોંજણીનો હવાલો આપતાં નોધ્યું છે તે મુજબ કુંભારિયાના મંદિરોના સ્થાપત્ય, બાંધણી, આકાર વગેરે આબુ, નાગદા અને કચ્છના ભદ્રેશ્વરના જૈન મંદિરો જેવું જ છે. જો કે આ પૈકી કચ્છના ભદ્રેશ્વર મંદિરોનું નવનિર્માણ થતાં તેનું સ્થાપત્ય હવે બદલાયું છે. કુંભારિયાના મંદિરોના સ્તંભો, દ્વારો અને છતમાં કરવામાં આવેલ કોતરકામ આબુના દેલવાડાને બિલકુલ મળતું આવે છે. આ મંદિરોનો વારંવાર જીર્ણોદ્ધાર થયો હોવાથી શિલ્પસૃષ્ટિમાં આવેલો તફાવત નોધી શકાય છે. મંદિરની છતનું કામ એટલું સૂક્ષ્મ અને કલા સૌષ્ઠવથી ભરેલું છે કે,

તેનું બારીક નિરીક્ષણ કરતાં કલાકો નીકળી જાય. કહેવાય છે અહી મંદિરોનો વિશાળ સમૂહ હતો જેની નોધ અહીના શિલાલેખોમાં પણ જોઈ શકાય છે, પરંતુ હવે કુંભારિયાના કલામય પ્રાસાદોમાં મુખ્યત્વે પાંચ મંદિરોનો સમાવેશ થાય છે. આ બધા મંદિરોમાં ભગવાન નેમીનાથનો સંગેમરમરનો પ્રાસાદ સૌથી મોટો છે. તેની પૂર્વ બાજુ સફેદ આરસપહાણનું મહાવીર સ્વામીનું મંદિર, તેની સામે પાશ્વનાથ, શાંતિનાથ અને સંભવનાથના દેરાસર આવેલા છે.

મંડપના સ્તંભો, તોરણો, ભીંતો, ઝરૂખા અને ઘુમ્મટ વગેરે કંડારવામાં આવેલી કોતરણી જોનારને અત્યંત વિસ્મયમાં નાખી દે છે. અહીના પ્રાંગણમાં આવેલા શિલાલેખો આરાસર નગરની પ્રાચીનતા દર્શાવે છે. ભક્તિ ભાવનાની સાથે શિલ્પ સ્થાપત્યના સમન્વયથી વિવિધ પાંસાઓ વ્યક્ત કરતા સામાજિક લોકજીવનના પણ અહી દર્શન થાય છે જે માનવતાના મૂલ્યાંકનોમાં અનેરો ભાવ જગાડે છે. અહી કંડારાયેલા શિલ્પોમાં સાહિત્ય, સંગીત અને કલાનું સાચું રસદર્શન આપણને થાય છે અને તે દ્વારા તત્કાલીન સમાજના ઉચ્ચ આદર્શની પણ પ્રતીતિ દર્શકને થાય છે. કુંભારિયાના પ્રાસાદો અનુપમ અને રમ્ય અભિનવ શિલ્પકળા વ્યક્ત કરતાં કલાનિકેતન છે એવું કહી શકાય. તે શિલ્પ, સ્થાપત્ય અને કારીગરીના અપૂર્વ સંયોજન ધરાવતા અદ્વિતીય બની રહ્યાં છે. એક માન્યતા એવી પણ છે કે કુંભાર્ક ઉપરથી કુંભારિયા નામે ધારણ કરનાર જુના આરાસર નગરના અવશેષરૂપ એવા આ કલામંદિરો તેના પ્રાચીન ઈતિહાસ અને ગૌરવગાથા કહેતા અહી તેનું સ્થાન સાચવી રહ્યાં છે.

- **કુંભારિયાના પાંચ સમૂહ મંદિરોનો પરિચય**

૧) નેમિનાથ ભગવાનનું મંદિર

આ બધાં મંદિરોમાં સૌથી મોટો નેમીનાથનો પ્રાસાદ છે. મુખ્યદ્વારથી રંગમંડપમાં જવા માટે પગથિયા બનવેલા છે. આ મંદિરમાં મુખ્ય પ્રતિમા નેમિનાથની છે, જે સં. ૧૬૭૫માં વિજયદેવસુરિએ પ્રતિષ્ઠા કરી હોવાનો તેના ઉપર લેખ છે. ઓસવાળ બહુરા(બહોરા) રાજ્યપાલે તે બિંબ કરાવેલ છે, હીરવિજયસૂરીના પટ્ટધર આચાર્ય વિજયસેનસૂરીના શિષ્ય વિજયદેવસુરિ પાસે તેની પ્રતિષ્ઠા કરાવી હતી, એમ તેમાં નોધ્યું છે. ધર્મસાગરની તપાગચ્છપટ્ટાવાલીમાં જણાવ્યા પ્રમાણે વાદિદેવસસૂરિએ વિ.સં.૧૧૭૪-૧૨૨૬માં આરાસણમાં નેમિનાથની સૌ પ્રથમ કરી હતી. આ પ્રાચીન મૂર્તિ ખંડિત થવાથી બહોરા રાજ્યપાલે નવીન બિંબ બનાવી પુનઃસ્થાપ્યું હોવાનું આથી સમજાય છે. ઉપદેશ સપ્તતિમાં પસિલ શ્રેષ્ઠીએ આ મંદિર બંધાવ્યાની વિસ્તૃત હકીકત આપેલી છે. આ મંદિરમાં કેટલીક પ્રાચીન

પ્રતિમાઓ, કાઉસગ્ગીયા, ઇન્દ્રો અને પરિકરો ખંડિત-અખંડિત મુકેલા છે. ૧૭૦ જિનનોએક સુંદર પટ ત્યાં મૂકેલો છે. જેના પર વિ.સં. ૧૩૧૦ નો લેખ છે. નવ ચોકીના બદલે અહી બે લાઈનોમાં થઇ કુલ દસ ચોકીઓ બનાવવામાં આવી છે. ત્યાં ડાબી બાજુ એક ગોખલામાં નંદીશ્વરદીપની રચના છે. જેના પર વિ.સં. ૧૩૨૩ નો લેખ કોતરવામાં આવેલો છે. જમણા હાથ તરફની એક દહેરીમાં અંબિકાની મોટી પ્રતિમા બેસાડેલી છે. દેવગૃહમાં એક દેવકુલિકા, ગૂઢમંડપ અને પ્રતિશાલા(પરસાલ) આવેલાં છે. તેનું શિખર તારંગાના જૈન મંદિર જેવું બનાવ્યું હોઈ આમલસારાની નીચે ચારેબાજુ મોઢાં બનાવેલ છે. આ મંદિરમાં મુખ્ય મંડપના સ્તંભો આબુ ઉપર આવેલ વિમલવસહી જેવી શિલ્પકલા વ્યક્ત કરે છે. જયારે દેવકુલિકાઓ અને પરસાળના સ્તંભો સદા બનાવેલા છે. આ પૈકી એક સ્તંભ શ્રેષ્ઠી આસપાલે સં. ૧૩૧૦માં બંધાવ્યાનો લેખ છે.મંડપના સ્તંભો ઉપર મકરમુખો જોવામાં આવે છે. એક સ્થળે સુંદર તોરણ મકરમુખથી શરૂ કરી બનાવેલું છે, આથી રંગમંડપના બધા સ્તંભો ઉપર મકરતોરણો પહેલા બનાવવામાં આવ્યા હશે એમ ચોક્કસ લાગે છે.

મૂળ ગભારો, મોટા ગૂઢમંડપ, દસચોકી, સભામંડપ, શૃંગારચોકી બંનેબાજુ બે મોટા ગભારા, અને ૨૪ દહેરીઓ આ મંદિરમાં આવેલ છે. મૂળ ગર્ભગૃહની પાછળ ભીંતમાં સુંદર કોતરકામ કરેલું છે. મંદિરની પાછળ ભમતીમાં અનેક ખંડિત-અખંડિત મૂર્તિઓ છે. ત્યાં સ્તંભો સહિત એક સુંદર તોરણ પણ મૂકેલ છે, જે મંદિરના કોઈ ભાગ ઉપરથી કાઢી નાખ્યું હોવું જોઈએ. આ સિવાય ત્યાં જિન માતૃપટ્ટો, ચોવીશીના પટ્ટો પણ છે, જે પૈકી એક ઉપર સં. ૧૨૦૪નો શિલાલેખ કોતરવામાં આવેલ છે. તેમાં આરાસણના અરિષ્ટનેમિ ચૈત્યનો ઉલ્લેખ હોવાથી આ મંદિર તે અગાઉ બંધાયું હશે એમ લાગે છે. આ મંદિરમાં વધુ ધ્યાન ખેંચે તેવો પટ્ટ સમળી વિહારનો છે. જો કે તે અરધોજ અહી દેખાય છે, પરંતુ તે સંપૂર્ણ અને સુશોભિત બનાવવામાં આવ્યો હતો એમ તેના શિલાલેખના આધારે કહી શકાય તેમ છે. તે લેખમાં જણાવ્યા પ્રમાણે આ પટ્ટ આરાસણના રહેવાસી પોરવાડ ગોનાના વંશમાં થયેલા તુલાહારી આસપાલે-આસિણી વગેરે વિસ્તૃત કુટુંબ સહિત શ્રીમુનિસવંતએ સ્વામિબિંબ અને અશ્વાવબોધસમલીકા વિહારનો પટ્ટ કરાવ્યો, તેમજ યશોધરસૂરિ સંતાનીય શ્રીવર્ધમાનસુરિ પાસે વિક્રમ સં. ૧૩૩૮ના જેઠ સુદી ચૌદશ શુક્રવારે શ્રી નેમિનાથ ભગવાનના મંદિરમાં તેની પ્રતિષ્ઠા કરાવી. આ પટ્ટનો અર્ધો ભાગ ભમતીમાં બીજા અવશેષો પાસે મૂકવામાં આવેલ છે.

આ પટ્ટમાં લંકાનો રાજા, તેમના ખોળામાં રાજકુમારી, ભેટ ધરતા જૈન ગૃહસ્થો અને અશ્વ વગેરે આરસમાં આબેહૂબ કોતરેલા છે. બાકીનો ભાગ જે દેરી પાસે મૂક્યો, તેમાં સમુદ્ર, નર્મદા નદી, ઝાડી,

સમળી, પારધી, જૈન સાધુમહારાજ અને વહાણ કોતરેલા દેખાય છે. આ મંદિરમાં ૯૪ સ્તંભો છે, તે પૈકી ૨૨ રૂપકામ કોતરણીવાળા છે, જેમાં દેવદેવીઓ, વિદ્યાધરીઓના રેખાંકનો ઉપસાવેલા બતાવેલ છે. રંગમંડપમાં ઉત્સવો પ્રસંગે સ્ત્રીઓને બેસવા માટે ઝરૂખા બનાવ્યાં છે. મંદિરની બાંધણી શિલ્પના નિયમે અત્યુતમ બનાવેલી બનેવેલી હોઈ, બહારથી પણ ભગવાનના દર્શન થઇ શકે તેવો પ્રબંધ કરેલ છે. મંદિરની બહારની ભીંતમાં શિલ્પના નિયમે ગજ્થર, નરથર અને ઝધામાં દેવદેવીઓ, દીકપાળો અને યજ્ઞો અને યક્ષિણીઓના શિલ્પો કંડારેલા છે. કોઈક સ્થળેથી ભોગાસનના શિલ્પો પણ મળે છે.

આ મંદિરમાં સેંકડો શિલાલેખો પરિકરો, મૂર્તિઓ, સ્તંભો અને પટ્ટો ઉપરથી મળે છે, જે બારમાં-તેરમાં સૈકાની કેટલીક અનન્ય હકીકતો આપી જાય છે. સં. ૧૩૩૮ના એક લેખમાં શ્રેષ્ઠી બાહડની આખી વંશાવલી રજુ કરતાં, તેની પાંચ પેઢીના પુરુષો અને સ્ત્રીઓનાં નામ આપેલ છે. તેટલું જ નહિ પણ તે લોકોએ બંધાવેલ મંદિરો, પ્રતિમાઓ, અને દેવકુલિકાઓની પણ નોધ તેમાંથી મળે છે. આ વંશાવલી ઉપરથી જૈનોમાં રાવણ, બ્રહ્મદેવ, શરણદેવ, વગેરેનામો તે કાળે પુરુષોના રાખવામાં આવતાં હતાં. તેવી જ રીતે સ્ત્રીઓના સુષમિણી, અભયસિરિ, કામલ, લુણા, નાગઉરદેવી વગેરે નામો સમાજમાં પ્રચલીત બનેલા. આવો જ એક લેખ સં. ૧૩૪૪નો ભીંતમાં કોતરેલ છે, જેમાં સિધરના પુત્ર ચાંગદેવે વિસલપ્રિય ૧૨૦ દ્રમ્મ નેમિનાથ ભગવાનની પૂજા માટે આપેલા જેના વ્યાજમાંથી ત્રણ દ્રમ્મ દર માસે પૂજા માટે ચઢાવાતા. ચાલુક્યકાલીન કોઈ સિક્કા આજે પ્રાપ્ત થતા નથી પરંતુ તે સમયે ચાલતા સિક્કાનાં નામો મળે છે. આ લેખમાંથી 'વિસલપ્રિય' દ્રમ્મની નોધ મળે સે જેના આધારે વિસલપુરિયા ચાંદીના સિક્કાઓ તે વખતે ચાલતા હતા.

૨) મહાવીર સ્વામીનું મંદિર

નેમિનાથ ભગવાનના મંદિરની પૂર્વ બાજુ મહાવીરસ્વામીનું મંદિર છે. તેમાં મૂળ નાયક તરીકે મુખ્ય ગર્ભગૃહમાં મહાવીરસ્વામીની પ્રતિમા બેસાડેલી છે. તેની એક બાજુ યક્ષ અને બીજી તરફ અંબિકાની પ્રતિમા છે. મુખ્ય પ્રતિમા ઉપર સં. ૧૬૭૫નો લેખ છે. જેના ઉપરથી તે પ્રતિમા વિજયદેવ સૂરીએ આરાસણ નગરના આ મંદિરમાં પ્રતિષ્ઠા કરી હોવાનું સૂચવે છે. આ પ્રતિમાની ગાદી નીચે સં.૧૧૨૨૦નો પ્રાચીન લીપીમાં લખાયેલ બીજો એક લેખ છે, જેના આધારે આરાસણ નગરની પ્રાચીનતા નાવમાં-દસમાં સૈકા સુધી લઇ જઈ શકાય તેમ છે. તેવી જ રીતે ત્યાના મંદિરોની પ્રાચીનતા પણ બારમાં સૈકા જેટલી હોવાનું તે લેખો કહે છે. આ મંદિરની કારીગીરી ઉત્તમ પ્રકારની છે. એના ઘુમ્મટમાં અદ્દભૂત કોતરણી કરેલી હોઈ, તેમાં લટકતા ઝુમ્મરો અને બીજા રેખાંકનો દર્શકને વિસ્મય

પમાડે તેવા છે. ગૂઢમંડપ, છ ચોકી, સભામંડપ, ઘૂમટ, ગૂઢમંડપનો મુખ્ય દરવાજો, સભામંડપના સ્તંભો અને એક તોરણમાં કલામય નકસી તેના વિદ્વાન સ્થપતિએ પ્રદશિત કરી છે. આબુના વિમળવસહિ અને વસ્તુપાળના મંદિરો જેવી જ કોતરણી આ મંદિરમાંથી જોવા મળે છે. આ મંદિરની છતમાં ૧૪ ખંડોની અંદર એટલું કોતરકામ ઠાંસીઠાંસીને ભર્યું છે કે જોનારને તેમાંથી વૈવિધ્યપૂર્ણ અનેકવિધ હકીકતો પ્રાપ્ત થાય છે. આબુની માફક તેના પાંચ ખંડોમાંતો જૈનકથાઓ રજુ કરતા ભાવો અભિનવકલા શિલ્પમાં વ્યક્ત કરેલ છે. તદ્દઉપરાંત ગુજરાતના સામાજિક ઈતિહાસ માટે આમાંથી અનેકવિધ સાહિત્ય પ્રાપ્ત થઇ શકે છે. સ્વ.પુરાતત્વવિદ રત્નમણીરાવભાઈના સબ્દોમાં કહીએ તો ‘કુંભારિયા અને આબુ ઉપર આવેલ વસ્તુપાલના મંદિરોની છતોમાં કોતરેલ એકેએક કલા શિલ્પોના ચિત્રોનું આલ્બમ બનાવવામાં આવે તો આજથી એકહજાર વર્ષ પહેલાંના ગુજરાતની સામાજિક પરિસ્થિતિનો સારો ખ્યાલ આવી શકે તેમ છે.’ આ છતોમાં દરેક ભાવનિદર્શન કરતી વિગતો દર્શકોને સમજી શકાય તે માટે કેટલેક સ્થળેનામો કોતરેલ છે. ભક્તિભાવની સાથે શિલ્પકલાના વિવિધ પાસાઓ વ્યક્ત કરતાં સામાજિક લોકજીવનના દ્રશ્યો માનવતાના મૂલ્યાંકનોમાંઅનેરો ભાવ જગાડે છે. શિલ્પ અને સ્થાપત્યમાં સંગ્રહાયેલ સાહિત્ય, સંગીત અને કલાના રસદર્શનો તાત્કાલીન સમાજમાં તેનો કેટલો ઉંચો આદર્શ હતો, તેની અભિવ્યક્તિ જગાવે છે. આ મંદિરમાં પણ ૨૪ દેરીઓ-દેવકુલિકાઓ તેને ફરતી બનાવી છે, તે પૈકી એકમાં પરિકર નથી, ત્રણ અધૂરા છે. બાકીની બધીમાં પંચતીર્થના આખા પરિકરો ચોડેલા છે. આ બધા પરિકરો ઉપર સં. ૧૧૪૦ થી ૧૧૪૫ સુધીના લેખો કોતરેલા હોવાનું જણાય છે. મંદિરના દક્ષિણ દરવાજા પાસે ડાબી બાજુ ચતુદ્વારવાળી એક દેરીમાં મકરાણા આરસમાં કંડારેલ ત્રણગઢ અને પર્ષદા બનાવતું સુંદર છત્ર સહિત સમોવસરણ છે. આ મંદિરના પૂર્વદ્વાર પાસે જે પ્રાચીન પરઘર મૂકેલું છે, તેની કોતરણી આજના જમાનામાં થવી અશક્ય છે. તેટલું તો નહિ પણ તેનું ચિત્ર કાગળ ઉપર ઉતારવાનું પણ મુશ્કેલ છે. તેના ઉપર સં. ૧૨૨૩નો લેખ છે. આ ઉપરથી આ મંદિરના શિલ્પ અને કલાવિધાનનો આછો ઘેરો પરિચય થઇ શકે તેમ છે.

૩) ભગવાન શ્રીપ્રાર્શ્વનાથનું મંદિર

મહાવીરસ્વામીના પૂર્વદ્વારથી નીકળતાંપેઢીના ચોકમાં થઇ આગળ જતાં સામે ભગવાન પ્રાર્શ્વનાથનું મંદિર છે. આ મંદિરના ગર્ભગૃહમાં ભગવાન પ્રાર્શ્વનાથની મનોહર પ્રતિમા બેસાડેલી છે, જેના ઉપર શ્રી વિજયદેવસૂરિએ તે સં. ૧૬૭૫માં પ્રતિષ્ઠા કર્યાનો લેખ છે. પરંતુ આ મંદિરના ગૂઢમંડપમાં, પ્રાર્શ્વનાથ ભગવાનના કાઉસગ્ગીયા ઉપર સં. ૧૧૭૬ના લેખો છે, જે આ મંદિર બારમાં

સૈકામાં બન્યું હોવાનું સૂચવે છે. અહી ગર્ભાગારને ફરતી ૨૪ દેવકુલિકાઓ બનાવી છે, અને ત્યાં એક ગોખલામાં આખું પરિકર, સ્તંભો સહિત તોરણોથી અલંકૃત અનન્ય કોતરણીવાળું બનાવેલ છે. મંદિરના સ્તંભો, મંડપના ચાર સ્તંભો, એક તોરણ, ઘુમ્મટો અને શિખરોમાં સારું એવું કોતરકામ કરેલું છે. ઉત્તરદ્વાર પાસે જમણી બાજુ મકરાણાના નક્સીદાર બે સ્તંભો ઉપર શિલ્પશાસ્ત્રના નિયમે કલામય તોરણ બનાવેલું છે. તે સ્તંભો પૈકી એક સ્તંભ ઉપર સં. ૧૧૮૧નો લેખ છે. આ મંદિરની દેવકુલિકાઓ ઉપર તેરમી શતાબ્દીના લેખો કોતરવામાં આવ્યા છે, જે પૈકી સં. ૧૨૫૯ના લેખમાં “”’’આરાસણના માંડલિક પારમાર ધરાવર્ષદેવનું વિજયી રાજ્ય’ લખેલ છે. આ મંદિરનું સ્થાપત્ય, બાંધણી, અને ગોઠવણ શિલ્પશાસ્ત્રના નિયમે બનાવેલ હોઈ, આ દેવ પ્રાસાદ સ્વચ્છ શ્વેત આરસનું રમ્ય કલાનિકેતન છે. એમ કહેવામાં જરાયે અતિશયોક્તિ નહિ ગણાય.

૪) ભગવાન શાંતિનાથનું મંદિર

મુખ્ય ગર્ભગૃહમાં ભગવાન શાંતિનાથનીપરિકર રહિત પ્રતિમા સ્થાપન કરેલી છે.ગૂઢ મંડપમાં પરીકરોના ૪ કાઉસગ્ગીયા, 2 ઇન્દ્રો અને એક શ્રાવકની મૂર્તિ નમસ્કાર કરતી છૂટી મુકેલ છે.મંદિરમાં કુલ ૧૬ દહેરીઓ અને ૧૦ ગોખલાઓ બનાવેલા છે. છ ચોકીઓમાં ગૂઢમંડપના મુખ્ય દરવાજાની બન્ને બાજુ બે સુંદર કોતરણીવાળા ગોખલા છે. છ ચોકી, સભામંડપના ઘુમ્મટો, અને સ્તમ્ભોમાં, આબુ ઉપર આવેલા દેલવાડાના મંદિરો જેવું જ રૂપકામ કરેલ છે. આ પૈકી ૬ સ્તંભો અને તોરણમાં કરેલ ઉત્કૃષ્ઠ કલાવિન્યાસ સૌથી વધુ ધ્યાન ખેંચે છે. ૬ ચોકી અને સભામંડપની બન્ને બાજુની છતોના ૧૨ ખંડોમાં દેલવાડાના મંદિરો જેવા જુદી જુદી જૈન કથાઓ વ્યક્ત કરતા ભાવદર્શનો આલેખેલ છે. અતિ પરિશ્રમ અને ભારે ચીવટપૂર્વક કંડારેલ, આ બધાંકલાદર્શનો ઉપર અજ્ઞાની વ્યવસ્થાપકો ચૂનો છંટાવ્યો હોવાથી, તેમાંથી સાચી કલા સમૃદ્ધિનેને પ્રચ્છન્ન બનાવી દીધી છે. આ દહેરીઓ પૈકી કેટલાકમાં પબાસણો, પરિકરો, અને પબાસણની ગાદીઓ ખંડિત-અખંડિત સ્વરૂપમાં છિન્નભિન્ન સ્વરૂપે ત્યાં પડેલી છે. આમાંથી કેટલીકમાં સં. ૧૧૩૮ના એટલે વિક્રમની બારમી સદીના લેખો કોતરેલા મળ્યા છે. આ હકીકત શાંતિનાથનું મંદિર બારમાં સૈકામાં વિદ્યમાન હોવાનું સૂચવે છે. મંદિરની ડાબી બાજુ એક ખૂણામાં ચતુદ્વારવાળી કુલિકામાં સમોવસરણના આકારમાં સુંદર કોતરણીવાળા પબાસણ ઉપર તથા નીચે બે ખંડમાં ચારે દિશામાં ત્રણ ત્રણ જિન મૂર્તિઓ કોતરેલી છે. તેના ઉપર એક જ પથ્થરમાંથી બનાવેલ ત્રણ ગઢવાળું ચતુર્મુખ બિંબ સહિત સમોવસરણ મૂકેલ છે. આ સમોવસરણ બીજેથી લાવી અહી મુક્યું હોય તેમ જણાય છે. આ મંદિરનું સ્થાપત્ય મહાવીરસ્વામિના મંદિર જેવું બનાવતા બન્ને

બાજુ ચાર ગોખલા બનાવવામાં આવ્યા છે. આ ગોખલાઓમાં સં. ૧૧૩૮-૧૧૪૬ના લેખો છે, જે ગોખલાઓ મંદિરના સર્જનકાળે બનાવ્યાની હકીકત રજુ કરે છે. મંડપના આઠે સ્તંભો અષ્ટકોણાકૃતિના બનાવતા, તેના ઉપર ચારે બાજુ ચાર અનુપમ તોરણોની રચના કરી હતી એમ સમજાય છે. આ બધાંતોરણો આજે વિદ્યમાન નથી, ફક્ત પ્રશ્ચિમનું એક જ બચવા પામ્યું છે.

શાંતિનાથનું મંદિર અને જૈન ધર્મશાળા વચ્ચે એક પિપળો છે, તેની નીચે સુરહીનીબે પાષાણ શીલાઓ ઊભી કરેલ છે. તેમાં સં. ૧૩૧૨ અને ૧૩૩૨ના લેખો છે, જેમાં આ નગરના મંદિરોની પૂજા માટે લોકો ઉપર, તેમ જ વ્યાપારની વસ્તુઓ ઉપર લેવાતા કરની નોધ છે. આ વ્યવસ્થા ઉપરથી એટલું ટો સ્પષ્ટ જાની શકાય છે કે, પૂર્વકાળમાં આ એક સમૃદ્ધ નગર હશે, જ્યાંના નાગરિકો સામાજિક કાર્ય અને ધાર્મિક બાબતોમાં પૂર્ણ શ્રદ્ધા, ભક્તિ સેવતા હોવા જોઈએ. વધુમાં અહી વ્યાપાર પણ મોટા પ્રમાણમાં ચાલતો હતો એમ જાણી શકીએ છીએ.

૫) સંભવનાથ ભગવાનનું જિનાલય

ઉપર જણાવેલ જૈન મંદિરોથી આશરે બસો વાર દૂર પાંચમું સંભવનાથનું મંદિર આવેલ છે. મંદિરમાં મૂળ નાયક સંભવનાથની પ્રતિમા સ્થાપિત કરેલી આજે જોવામાં આવે છે, પરંતુ મૂર્તિ ઉપર સિંહનું લાંછન હોવાથી તે મહાવીરસ્વામિની પણ પ્રતિમા હોય એમ કેટલાકનું માનવું છે, ગૂઢમંડપના દરેક ગોખલામાં, મૂર્તિ શિવાયના ખાલી ૧૦ પરિકરો મુકેલા દેખાય છે, આ શિવાયએક જિન ભક્ત શ્રાવક, અને શ્રવીકાની યુગલ પ્રતિમા પણ મૂકેલી છે. ગર્ભગૃહ, ગૂઢમંડપ, સભામંડપ, શૃંગારચોકી અને ફરતો કોટ બનાવતા મંદિરનું સ્થાપત્ય શાસ્ત્રીય રીતે બનાવેલ છે. જો કે બીજા મંદિરો કરતા કદમાં તે નાનું અને દેવકુલિકાઓ વિનાનું છે, છતાં દ્વારો અને શિખરમાં કેટલુક કોતરકામ કરેલું છે. આ બધાં મંદિરોમાં ખંડિત-અખંડિત સંખ્યાબંધ પરિકરો, કાઉસગ્ગીયા, ઇન્દ્રો અને જૈન પટ્ટો છૂટાછૂટા પડ્યા છે, જેના ઉપરથી એવો તર્ક કરવાને અવકાશ છે કે, આ મંદિરોનો વિનાશ કોઈ બિન હિંદુ વ્યક્તિએ કરેલો અને તેની પ્રતિમાઓ તથા પરિકરો વગેરેને તોડીફોડી નુકસાન કરેલું. આથી તે ભગ્નાવશેષો મંદિરોની અંદર આજે પણ જોવામાં આવે છે. જાની મંદિરો શિવાય ત્યાં એક ટેકરી ઉપર પ્રાચીન શિવાલય પણ આવેલુ છે. આમ કુંભારિયાના મંદિરો સામાન્ય મંદિરો નથી, પરંતુ આબુ ઉપર આવેલ દેલવાડાના ભારત વિખ્યાત દેવ પ્રાસાદો જેવા, અનન્ય કલાસમૃદ્ધિના ભંડારો જેવા અનુપમ અને રમ્ય અભિનવ શિલ્પકલા વ્યક્ત કરતા નાગરજાતિના અદ્રિતીય કલાનિકેતનો છે. એમાં શક નહિ. જોકે તેને દેલવાડાના મંદિરો જેવી પ્રતિષ્ઠા પ્રાપ્ત કરી નથી, છતાં તેનું કલાવિધાન દેલવાડાના મંદિરો કરતાં

જરાએ ઊતરતીકોટિનું માની શકાય તેમ નથી. આરાસણ નગરનો નાશ થયા બાદ આ મંદિરો નિર્જન અરણ્યમાં, એકાંત જગ્યા ઉપર આવેલ હોવાના કારણે તે મંદિરો, તેમ જ તેની ભવ્ય શિલ્પકલા, કલાવીવેચકોથી અજાણ જ રહી. ધૂળ, વરસાદ અને જ્વાળામુખી જેવા ભયંકર ઝંઝવાતોથી મંદિરોની કલામાં કેટલીક વિકૃતિઓ આવી. પક્ષીઓના માળાઓ અને ચૂનાના લેપડાથી તેમાંના સુરુચિપૂર્ણ સુંદર રેખાંકનો સમજવા પણ અશક્ય બન્યાં, અને વાયુથી મંદિરોના શિખરો તેમજ છતોમાં ચિરાડો પડી પાણી ગળવા માંડ્યું, અને જે અનુપમ કલાવૈભવ તેમાં કંડાર્યો હતો, તેના ઉપર લીલ, જાળાઝાંખરા અને ધૂળના મિશ્રણથી કાળાશ આવી. આમ અનેકવિધ કારણો, અને વિકૃતીઓના કારણે મધ્યકાળમાં આ મંદિરો જનતાના હૃદયમાંથી વિસરાયા તેથી આબુના મંદિરો જેવી કલાસમૃદ્ધિ ધરવતાંછતાં આ મંદિરો વધુ પ્રસિદ્ધિ મેળવી શક્યા નહિ. શ્રદ્ધેય જૈનસમાજના ખ્યાલમાં આ હકીકત આવી. ત્યારે મંદિરોની વ્યવસ્થા હાથ ધરતા તે ભવ્ય પ્રાસાદોમાં રહેલ કલાવૈભવના દર્શન થયા, જેને વિદ્વાન અને કલાના રસિક મહાનુભાવોએ અંજલિ અર્પતા તેના મુક્તકંઠે યશોગાન ગયા છે.

- **સમાપન**

આમ સોલંકી-વાઘેલા સમયમાં બનેલ કુંભારિયા જૈન મંદિરો આબુના દેલવાડાના જૈન મંદિરો જેટલા વિખ્યાત ના બની શક્યા પરંતુ તેનાથી પ્રમાણમાં ઓછા ઊતરે એમ પણ નથી. આબુ અને અંબાજીની મુલાકાતે જનારા પ્રવાસીઓ અને રસિકજનો આ કુંભારિયાના મંદિરોની પણ અચૂક મુલાકાત લે છે. અંબાજીથી કુંભારિયાના પ્રાસાદોની મુલાકાતે જઈ શકાય છે.

અંબાજી, આબુરોડ અને આબુમાં આવાસ તથા ભોજનની વ્યવસ્થા જુદા જુદા પ્રકારની દરેક પ્રવાસીઓને પરવડી શકે તેવી ઉત્તમ સુવિધાઓ મળી રહે છે. કુંભારિયાની નજીકનું રેલ્વે મથક આબુરોડ છે જે અહીંથી ૨૩ કિલોમીટર છે. જયારે પાલનપુર ૬૪ કિલોમીટર છે. કુંભારિયા જવા અંબાજીથી એસ ટી બસ મળી રહે છે તેમજ ખાનગી બસ સેવા અને ભાડાના વાહનો પણ મળી રહે છે. કુંભારિયા અમદાવાદથી ૧૯૮, મહેસાણાથી ૧૨૮ કિલોમીટર છે.

આમ, આબુ અંબાજીની મુલાકાતે જવાનું થાય ત્યારે કુમ્ભારિયાની પણ અચૂક મુલાકાત લેવા જેવી છે.

- **સંદર્ભ સૂચી**

૧) "ગુજરાત: એટ-અ-ગ્લાન્સ", માહિતી નિયામક, ગુજરાત રાજ્ય, ગાંધીનગર, ૨૦૧૯

2) અંતાણી નરેશ."ગુજરાતની અમૂલ્ય ધરોહર", કલાપ્રતિષ્ઠાન, પ્રથમ આવૃતિ, સુરત, ૨૦૧૯.

૩) "અતુલ્ય વરસો",ઓકટોબર થી ડિસેમ્બર. ૨૦૨૧

૪) દવે કનૈયાલાલ ભાઈશંકર,"અંબિકા, કોટેશ્વર અને કુંભારિયા", પ્રાચ્ય વિદ્યામંદિર, મહારાજા સયાજીરાવ યુનિવર્સિટી, પ્રથમ આવૃતિ, વડોદરા. ૧૯૬૩.

૫) આચાર્ય નવીનચંદ્ર. "ગુજરાતનો સોલંકીકાલીન ઈતિહાસ",યુનિવર્સિટી ગ્રંથ નિર્માણ બોર્ડ, દ્વિતીય આવૃતિ, અમદાવાદ. ૨૦૨૦

૬) શાસ્ત્રી હરિપ્રસાદ."ગુજરાતનો ઈતિહાસ પ્રાચીનકાળ", યુનિવર્સિટી ગ્રંથ નિર્માણ બોર્ડ, ચોથી આવૃતિ,અમદાવાદ. ૨૦૧૫

૭) શાસ્ત્રી હરીપ્રસાદ અને પરીખ પ્રવિણચંદ્ર. "ગુજરાતનો રાજકીય અને સાંસ્કૃતિક ઈતિહાસ. ગ્રંથ -૪ સોલંકી કાળ", ભો.જે. અધ્યયન વિધાભવન, અમદાવાદ. ૨૦૦૫

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1991ના આર્થિક સુધારા અંગેના મહત્ત્વના કારણો : એક આર્થિક અભ્યાસ

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1) સારાંશ

ભારત સરકાર દ્વારા અપનાવાયેલ આર્થિક સુધારણા કાર્યક્રમનો આરંભ જુલાઈ 1991થી થયેલ છે. ભારત માટે આર્થિક કટોકટીની ઘટના આમ તો નવી નથી, પરંતુ 1980ના દસકાના અંતમાં અને 1990ના દસકાના આરંભના વર્ષોમાં જે તિવ્ર કટોકટી પેદા થઈ હતી તે કદાચ અભૂતપુર્વ કહી શકાય તેવી હતી. 1990-91 ના સમયગાળામાં લેણદેણની તુલાની વિકટ પરિસ્થિતિ ઉદભવેલી. ખાડી યુદ્ધના કારણે પેટ્રોલિયમ પેદાશોના ભાવોમાં વધારો થતા આયાતબિલમાં જંગી વધારો થતો હતો. જ્યારે બીજી તરફ નિકાસવૃદ્ધિમાં નહિવત સુધારાને કારણે વેપારતુલાની ખાધ સતત વધતી રહી. ભારત સરકારનું વિદેશોમાંથી ઊંચા વ્યાજના દરે મેળવેલ ધીરાણ પરનું વધતું જતું પરાવલંબન તથા બિનનિવાસી ભારતીયો તરફથી આવતી પરવાનગીઓના પ્રવાહમાં આવેલી ઓટના કારણે સમસ્યા વધુ વિકટ બનવા પામી હતી. વધતી જતી વેપાર ખાધને કારણે કેટલીક ક્રેડિટ રેટિંગ એજન્સીઓ દ્વારા ભારતની ઋણ ચુકવવાની ક્ષમતા માટે અપાતા રેટિંગ આંકમાં ઘટાડો કરવામાં આવ્યો હતો. આમ, ભારતે આર્થિક સુધારા અપનાવવા પાછળ ના ઘણા કારણો હતા જેની વિગતવાર ચર્ચા કરવામાં આવી છે.

2) ચાવીરૂપ શબ્દો : વિદેશી અનામતો, સરકારનું દેવું, ફુગાવો, ખર્ચ

3) પ્રસ્તાવના

1947 થી 1990 ના ગાળામાં ભારતે અપનાવેલ આયોજિત વિકાસની વ્યૂહરચના અને અર્થતંત્ર પર રાજ્યના વધારે પડતા અંકુશોને લીધે આપણાં આર્થિક ધ્યેયોને પ્રાપ્ત કરવામાં મુશ્કેલી પડી તેમ ઘણા આર્થિક નિષ્ણાતો દ્વારા જાણવા મળ્યું હતું. ભારતના વેપારની તુલામાં ઊંચી ખાધ રહી એટલે કે આયાતની સરખામણીમાં નિકાસો નીચી રહેતાં વિદેશી હૂંડિયામણની કમાણીમાં ખાધ વરતાઈ અને ભારતે વિદેશી સંસ્થાઓ પાસે મદદ લેવી પડતી હતી. દુનિયાના વિકસિત દેશો તથા આંતરરાષ્ટ્રીય નાણા સંસ્થાઓએ પણ ભારતને નાણાકીય સહાય આપવા માટે પૂર્વ શરત મૂકી કે ભારત પોતાની

આર્થિકનીતિઓમાં પરિવર્તન કરે અને અર્થતંત્રને રાજ્યના અંકુશોમાંથી મુક્ત કરે . માટે ભારતે આર્થિકનીતિઓમાં પરિવર્તન કર્યું તથા તે માટે જરૂરી સંસ્થાગત અને કાયદાકીય ફેરફારો કર્યા હતા. પરંતુ આ ફેરફાર કે પરિવર્તનો કરવા અંગેના કારણો ક્યાં ક્યાં હોય શકે તેની અહી વિગતવાર ચર્ચા કરવામાં આવી છે.

4) સાહિત્ય સર્વેક્ષણ

Fiscal defit and it's Trends in india (2016) Prof. kalpana singh

રાજકોષીય ખાધ એ વધતી જતી રકમને માપે છે જે સરકારોએ તેમના બજેટની ખામીઓને નાણા આપવા માટે ઉધાર લેવાની જરૂર છે. તાજેતરના સમયમાં IMF દ્વારા કડક નિયંત્રણો લાદવામાં આવતા અને રાજકોષીય ખાધના સ્તર પર દેખરેખ રાખવાથી આ ખ્યાલને મહત્વ મળ્યું છે કે જો તેઓ IMF પાસેથી સમર્થનની વિનંતી કરવા જઈ રહ્યા હોય તો અર્થતંત્રો ચાલી શકે છે. ભારતે પણ 1991 ની ચુકવણી સંતુલન કટોકટીનો ઉકેલ લાવવા માટે IMF પાસેથી ટેકો મેળવવો પડ્યો હતો તે પછી રાજકોષીય ખાધ પર દેખરેખ રાખવાનું શરૂ કર્યું. આ અભ્યાસ 1980-81 થી ભારતની નાણાકીય નીતિમાં 1991ની ચૂકવણીની સંતુલન કટોકટી દ્વારા મોટા ફેરફારોને કેન્દ્રિત કરે છે. આર્થિક ઉદારીકરણ પછી ઉચ્ચ વૃદ્ધિનો સમયગાળો 2003માં FRBM એક્ટની રજૂઆત થઈ હતી. 2008ની વૈશ્વિક નાણાકીય કટોકટી અને તાજેતરની કટોકટી પછીના ફેરફારો રાજકોષીય એકત્રીકરણના માર્ગ પર પાછા ફરવા માટેનું સમાયોજન અંગેના અભ્યાસમાં જાણવા મળ્યું છે કે 1980-81 પછી 2002-03 કટોકટીનો સમયગાળો ખાધને ટકાઉ સ્તરે વધવા તરફ દોરી ગયો અને ખાધ વધુ વાજબી સ્તરે રહે તે પ્રયાસ કરવા માટે સરકારને આર્થિક સુધારા અપનાવવા જરૂરી બન્યા. જો કે 2003-04 થી સરકાર આ બાબતે વધુ સક્રિય રહી છે અને વધુ સ્થિતિસ્થાપક અર્થતંત્ર તરફ દોરીને જીડીપીની ટકાવારી તરીકે રાજકોષીય ખાધમાં સતત ઘટાડો કરવા અંગેના પ્રયત્નો કરતી રહી છે. આ માટે રાજકોષીય નીતિ માં પણ સુધારાઓ જોવા મળ્યા હતા.

LPG policy of india and its effects (2010) Dr. Pervez wahab

1990ના દાયકાની શરૂઆતમાં ભારતની અર્થવ્યવસ્થામાં નોંધપાત્ર નીતિ પરિવર્તન થયું હતું. આર્થિક સુધારાના આ નવા મોડલને સામાન્ય રીતે LPG અથવા ઉદારીકરણ, ખાનગીકરણ અને વૈશ્વિકીકરણ મોડલ તરીકે ઓળખવામાં આવે છે. આ મૉડલનો પ્રાથમિક ઉદ્દેશ્ય ભારતની અર્થવ્યવસ્થાને વિશ્વની સૌથી ઝડપી વિકાસશીલ અર્થવ્યવસ્થા બનાવવાનો હતો જે તેને વિશ્વની સૌથી

મોટી અર્થવ્યવસ્થાઓ સાથે બંધ બેસે તેવા પ્રયત્નો કરવામાં આવે છે. ઉદારીકરણ, વૈશ્વિકીકરણ અને ખાનગીકરણની વિભાવનાઓ વાસ્તવમાં એકબીજા સાથે ગાઢ રીતે સંકળાયેલા છે. ભારતીય અર્થવ્યવસ્થામાં આ LPGની ઘટના સૌપ્રથમ 1990 માં શરૂ કરવામાં આવી હતી જ્યારે ભારતીય અર્થવ્યવસ્થાએ ગંભીર કટોકટીનો અનુભવ કર્યો હતો. તે સમયે સરકારે ભારતીય અર્થતંત્રને ઉદાર બનાવવાનું શરૂ કરવા માટે 1991 માં નવી ઔદ્યોગિક નીતિ (NIP) લાવવાનું નક્કી કર્યું હતું. દેશની અર્થવ્યવસ્થાને વધુ નિપુણ સ્તરે લઈ જવા માટે લક્ષિત વ્યવસાય, ઉત્પાદન અને નાણાકીય સેવાઓના સંદર્ભમાં થયેલા સુધારાઓની બાબતો પણ મહત્વની રહી છે. આ આર્થિક સુધારાઓએ દેશની એકંદર આર્થિક વૃદ્ધિ કરવા અંગેના પ્રયાસો કરવા અંગેની બાબતોની સાબિતી આપી હતી.

વૈશ્વિક હરીફાઈમાં ભારતની સ્થિતી (2016) પ્રો. એમ. સી. પટેલ

ભારતમાં વેપાર અને વિકાસમાં મુખ્ય અવરોધક પરિબળોમાં ભ્રષ્ટાચાર મુખ્ય પરિબળ છે. આ ઉપરાંત રાજકીય અસ્થિરતા ફુગાવાનો ઉંચો દર , નાણાની અગવડતા, અપૂરતી માળખાકીય સુવિધાઓ , જટિલ કર માળખું અને વહીવટી માળખાની બિનકાર્યક્ષમતા મુખ્ય છે. આ ઉપરાંત ભારતની સ્થિતિને વધુ મજબુત બનાવવા વિરૂધ્ધની દલીલોને હકારત્મક બનાવવી જોઇએ તોજ આપણે Making India સાચા અર્થમાં બનાવી શકીશું.

ભારતમાં આર્થિક સુધારા (2021) yuva pablication અજય પટેલ,al etc.

24 જુલાઈ 1991થી ભારતે ઊંચી રાજકોષીય ખાદ્ય અને ચુકવણી સમતુલાનાં સંકટની પ્રતિક્રિયા રૂપે આર્થિક સુધારાઓની પ્રક્રિયાનો પ્રારંભ કર્યો હતો. 7મી પંચવર્ષીય યોજના (1985 થી 1990)માં નિકાસને પ્રોત્સાહન આપવામાં આવ્યું. જેના માટે વિદેશોમાંથી ખૂબ વધુ ઋણ લેવામાં આવ્યું . જેણે 1991 નાં ચૂકવણી સમતુલા સંકટમાં મુખ્ય ભૂમિકા ભજવી. આ સંકટ પછી તરત જ ખાડી યુદ્ધો (Gulf Wars) થયા. જેને કારણે ભારતીય વિનિમય દર પર બે દીર્ઘકાલીન નકારાત્મક પ્રભાવ પડયા હતા. પ્રથમ યુદ્ધનાં કારણે તેલની કિંમતોમાં ખૂબ વૃદ્ધિ થઈ જેના કારણે ભારતે ઓછા સમયમાં પોતાના વિદેશી હુંડિયામણનો વધુ ખર્ચ કરવો પડયો. બીજું ખાડીક્ષેત્રોમાં કાર્યરત ભારતીયોએ ત્યાંથી આપાતકાલીન સ્થિતિમાં પાછુ આવવું પડયું. જેના પરિણામરૂપે વિદેશી ઋણ વધ્યું , રાજકોષીય ખાધ GDP નાં 8 % બરાબર થઈ ગઈ અને ફુગાવો વધી ગયો. અર્થાત હાઈપર ઈન્ફ્લેશન (ખૂબ વધુ ફુગાવો) ની સ્થિતિ સર્જાઈ હતી. કોઈ પણ રાષ્ટ્ર ભારતને ઋણ આપવા તૈયાર ન હતુ અને સોવિયેત

યુનિયન પણ વિઘટિત થઈ ચૂકયું હતું. તત્કાલીન નાણામંત્રી ડો.મનમોહન સિંઘે આંતરરાષ્ટ્રીય મુદ્રાકોષ (IMF) સાથે વાતચીત કરી (SAP- Structural Adjustment Programme) હેઠળ ભારતને 100 બિલિયન ડોલરની લોન મળી અને બદલામાં ભારતે પોતાની આર્થિક નીતિમાં પરિવર્તન કરી LPG (ઉદારીકરણ , ખાનગીકરણ , વૈશ્વિકીકરણ) મોડેલ અપનાવ્યું હતું. 1991થી આર્થિક નીતિના પરિવર્તનથી ભારતીય અર્થતંત્ર આજે પણ સક્ષમ છે.

5) સંશોધનના હેતુઓ

1. આર્થિક સુધારા માટેના કારણો જાણવા.
2. આર્થિક સુધારા લાવવા અંગેની નિષ્ફળતા છતી કરવી.
3. આર્થિક સુધારા માટેના કારણો અંગેની આંકડાકીય માહિતીની રજૂઆત કરવી.

6) સંશોધન પદ્ધતિ

પ્રસ્તુત સંશોધન પત્રમાં વર્ણનાત્મક સંશોધન પદ્ધતિ અને ગૌણ મહિતીનો ઉપયોગ કરવામાં આવ્યો છે.

7) 1991ના આર્થિક સુધારા અંગેના મહત્ત્વના કારણો

1. ફુગાવાનું દબાણ

1950 થી 1990 સુધી ફુગાવાના દરોમાં વધારો થયો હતો. ભારતમાં સામાન્ય રીતે ફુગાવાનો દર 2 - 6 ટકાના દર જોવા મળે છે. જે 1950 થી 1990 સુધીના વર્ષોમાં 6 ટકા કરતાં પણ વધુ જોવા મળ્યા છે. જે નીચે મુજબ છે

Year's	Inflation Rate
1961 to 1970	6.3
1971 to 1980	10.3
1981 to 1990	7.2
1990 to 1991	7.9

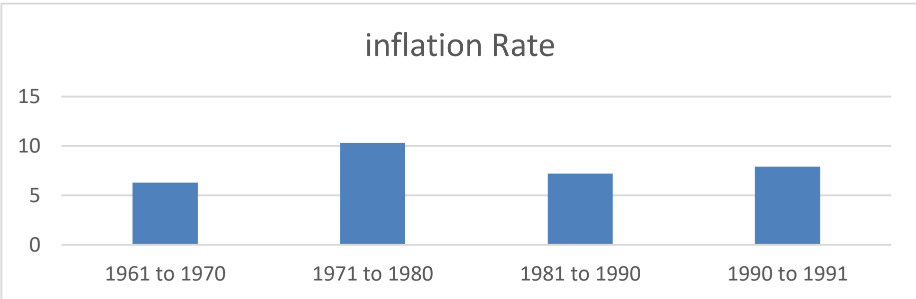
Source: world bank, 2001

અર્થઘટન

ઉપરોક્ત કોષ્ટકમાં જોઈ શકાય છે કે 1961 થી 1970 માં ફુગાવાનો દર 6.3 હતો જે સમય જતાં 1990 થી 1991મા વધીને 7.9 ટકા નો વધતો જોવા મળે છે આં રીતે આર્થિક સુધારા માટે આ પણ એક કારણ છે કે વસ્તુના ભાવો સતત વધતા જતા હતા.

2. પ્રતિકૂળ લેણદેણની તુલા

આર્થિક સુધારા માટેના કારણની બાબતમાં આપણા દેશની લેણદેણની તુલા પણ એક જવાબદાર કારણ કહી શકાય છે. જેની સાબિતી નીચેના માહિતી દ્વારા મળી રહે છે.



Year's	Export	Import
1970	3.5	4.2
1980	6.2	9.5
1990	7.3	10.0

Source: world bank, 2001

અર્થઘટન

લેણદેણની તુલામાં પ્રતિકૂળતા પણ આર્થિક સુધારા માટેનું કારણ ગણવામાં આવે છે કારણ કે 1970 થી 1990 સુધીમાં આપણી નિકાસ કમાણી કરતા આપણી આયાત ચૂકવણી વધુ રહી છે તેથી આવક કરતા ખર્ચ વધુ થાય તેવા સંજોગો જોવા મળ્યા હતા. જેની સમજૂતી નીચે મુજબ આપી શકાય.

Year's	Exports	Imports
1950 - 51	606 crore	608 crore
1960 - 61	642 crore	1,122 crore
1970 - 71	1,535 crore	1,634 crore
1980 - 81	6,711 crore	12,549 crore
1990 - 91	32,553 crore	43,198 crore

Source : Economic survey, 2020 - 21

અર્થઘટન

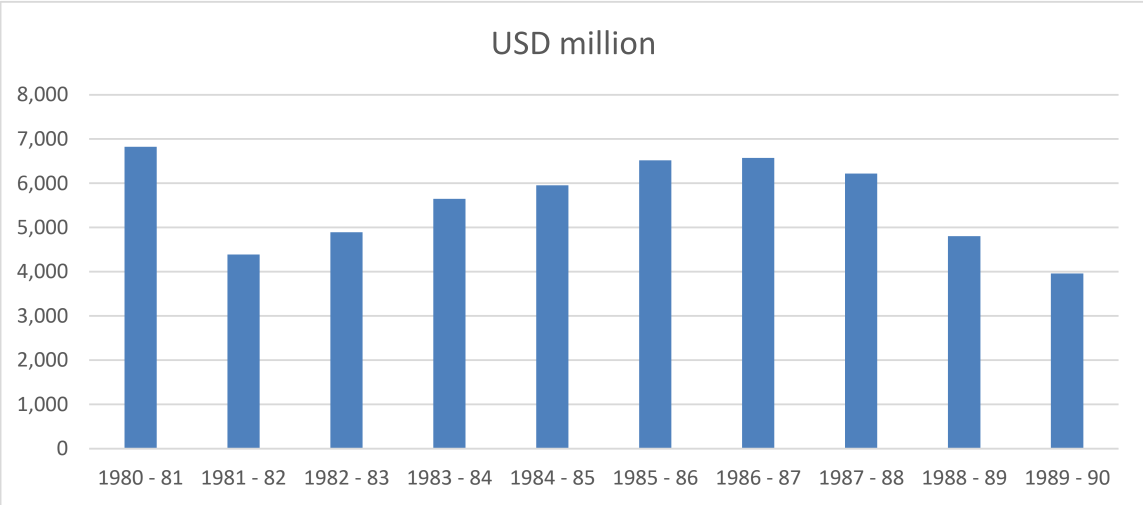
ઉપરોક્ત કોષ્ટકમાં આપણી નિકાસ કમાણી અને આયાત ચૂકવણી દર્શાવવામાં આવેલ છે. આ માહિતી ઉપરથી જોય શકાય છે કે આપણી નિકાસ કમાણી જે 1950 - 51 માં 606 કરોડ હતી તેની સામે આયાત ચૂકવણી 608 કરોડ જોવા મળે છે. તેવી જ રીતે 1990 - 91 માં આપણી નિકાસ કમાણી 32,553 કરોડ હતી તેની સામે આયાત ચૂકવણી 43,198 કરોડની જોવા મળે છે. આમ, લેણદેણની તુલાની અસમતુલા પણ આર્થિક સુધારા માટેનું એક મહત્વનું કારણ ગણવામાં આવે છે.

3. વિદેશી અનામતોમાં ઘટાડો

આર્થિક સુધારા માટેનું એક કારણ આપણી વિદેશી અનામતોમાં સતત ઘટાડો જોવા મળ્યો હતો તે પણ છે. 1980 થી 1990 સુધીના સમગાળા દરમિયાન આપણી વિદેશી અનામતમાં સતત ઘટાડો જોવા મળ્યો હતો. જે નીચે મુજબ જોય શકાય છે.

Year's	USD million
1980 - 81	6,823
1981 - 82	4,390
1982 - 83	4,896
1983 - 84	5,649
1984 - 85	5,952
1985 - 86	6,520
1986 - 87	6,574
1987 - 88	6,223
1988 - 89	4,802
1989 - 90	3,962

Source : (CIER) , Economic Survey 2013-14 - Table 6.1(B)



અર્થઘટન

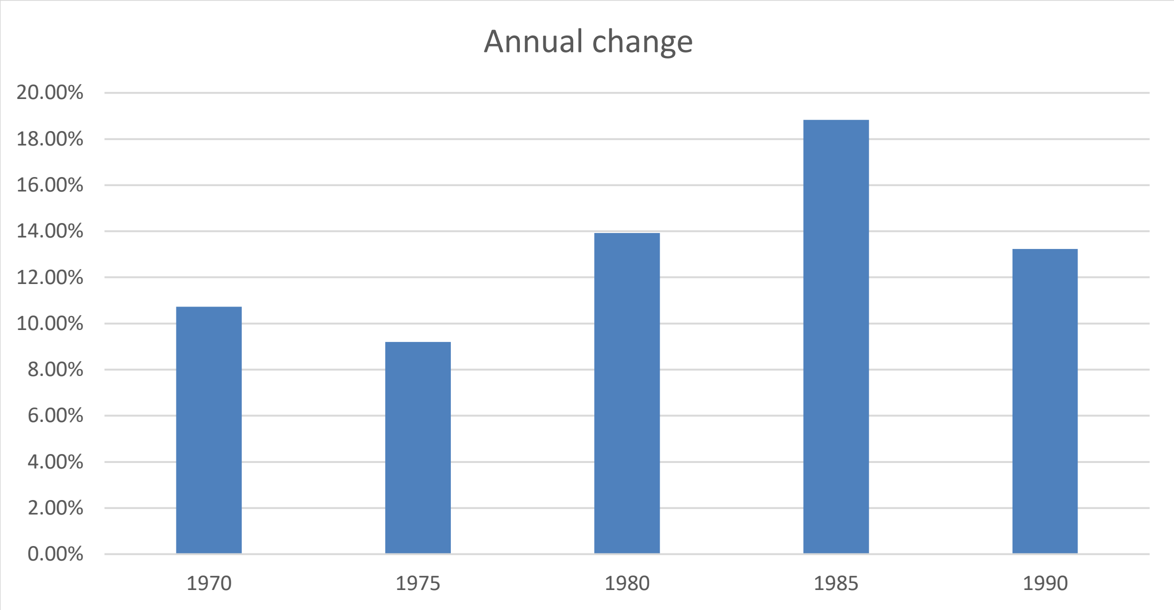
ઉપરોક્ત કોષ્ટક પરથી કહી શકાય કે આપણી વિદેશી અનામતમાં 1980 થી 1990 દરમિયાન સતત ઘટાડો જોવા મળ્યો હતો જેમકે 1980 - 1981 મા જે વિદેશી અનામતો 6,823 USD હતી તે ઘટીને 1989 - 90માં 3,962 USD જોવા મળ્યું હતું. કહેવાય છે કે માત્ર 13 દિવસ માટેનું જ વિદેશી હૂંડિયામણ ભારત પાસે હતું. જે આર્થિક સુધારા અપનાવવા માટેનું કારણ ગણવામાં આવે છે.

4. સરકારનું વધતું જતું દેવું

સરકારનું વધતું જતું દેવું પણ આર્થિક સુધારા માટેનું એક કારણ છે. સરકારના તમામ એકમો ખોટ કરતા હતા અને મૂડીરોકાણના પ્રમાણ જેટલી આવક પ્રાપ્ત થતી ન હતી અને દેવનો બોજો સતત વધતો હતો. જેની સાબિતી નીચે મુજબ મળી રહે છે.

Year's	**Government dept as % of GDP**	**Annual change**
1970	$ 8,425,121,119	10.73 %
1975	$ 13,865,614,019	09.20 %
1980	$ 20,723,360,696	13.92 %
1985	$ 38,934,813,159	18.83 %
1990	$ 83,471,522,909	13.23 %

Source : macro Trends, 1970 – 1990



અર્થઘટન

ઉપરોક્ત કોષ્ટક પરથી કહી શકાય કે ભારતનું દેવું કે 1970 માં 8,425,121,119 ડોલર હતી જે 1990માં વધીને 83,471,522,909 ડોલર થયું હતું. જે પણ આર્થિક સુધારા માટેનું કારણ બન્યું હતું.

5. સરકારનો વધતો જતો ખર્ચ

સરકારનો વધતો જતો ખર્ચ પણ આર્થિક સુધારા માટેનું કારણ માનવામાં આવે છે. એક બાજુ સરકારના ખર્ચમાં વધારો અને બીજી બાજુ સરકારના દેવું પણ વધવાનું વલણ રાખતું હતું. જે નીચે પ્રમાણે જોય શકાય છે.

Year's	Government costs
1947 - 48	₹ 197 crore
1950 - 51	₹ 504 crore
1960 - 61	₹ 1,806 crore
1970 - 71	₹ 5,557 crore
1980 - 81	₹ 22,768 crore
1990 - 91	₹ 1,05,298 crore

Source : RBI , 1947 to 1991

અર્થઘટન

ઉપરોક્ત 1947 થી 1991 સુધીના સમગાળા દરમિયાન સરકારના ખર્ચમાં સતત વધારો જોવા મળે છે. અને દેવાનો બોજો પણ વધતો જતો હતો આથી સરકારે ફરજિયાતપણે IMF પાસેથી ધિરાણ લેવાની જરૂર પડી હતી.

8) તારણો

1. પ્રસ્તુત સંશોધન પરથી કહી શકાય કે અર્થતંત્રના મુખ્ય ક્ષેત્રોના હિસ્સોમાં પરિવર્તન થવા છતાં કોઇ આર્થિક લાભ થતો નથી.
2. પ્રસ્તુત સંશોધનમાં આર્થિક પરિવર્તનો સાથે ફુગાવાનો દર વધવાનું વલણ રાખે છે.
3. પ્રસ્તુત સંશોધનમાં મૂડીરોકણ અંગેના વલણો દર્શાવે છે કે જેટલા પ્રમાણમાં મૂડીરોકાણ થયું છે તેટલા પ્રમાણમાં આવક પ્રાપ્ત થતી ન હતી અને દેવાનો બોજો સતત વધતો હતો.
4. પ્રસ્તુત સંશોધનમાં દેશની નિકાસ કમાણી કરતા આયાતની ચુકવણી વધુ જોવા મળે છે. તેવી બાબત સ્પષ્ટપ થાય છે.

9) ઉપસંહાર

આમ, આર્થિક સુધારા અપનાવવા અંગેના કારણોની વિગત વાર ચર્ચા કરતા જણાય છે કે ભારતમાં ફુગાવાના દબાણો, વિદેશી હૂંડિયામણની કટોકટી, વિદેશી દેવાનો બોજો, આયાત - નિકાસમાં અસમતુલા વગેરે જવાબદાર કારણો હતા. તેથી ભારતે આર્થિક સુધારા અપનાવવા પાછળ ભારતીય અર્થતંત્રનો સુદઢ વિકાસ કરવાનો અને આર્થિક સમસ્યાને હળવી કરવા અંગેનો એક પ્રયાસ કર્યો છે તેમ કહી શકાય.

સંદર્ભસૂચિ

1. ગુજરાત રાજ્ય શાળા પાઠ્યપુસ્તક મંડળ 2016,2019,2020
2. world bank, 2001
3. RBI , 1947 to 1991
4. RBI, 2019 - 20
5. macro Trends, 1970 - 1990
6. Economic survey, 2020 - 21
7. Economic survey, 2019 - 20
8. Methods of research, Dr. R.s.patel (2017)
9. Maddison (2006)
10. Planning commission (2001)

06

DISEASE TRANSMISSION OF *XANTHOMONAS CAMPESTRIS* PV. *CUCURBITAE* IN SPONGE GOURD IN RAJASTHAN

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ABSTRACT – This study aims to know the disease symptoms, incidence & transmission of the seed-borne bacterium *Xanthomonas campestris* pv. *cucurbitae* in sponge gourd (*Luffa cylindrica* L.) of family cucurbitaceae. Total 68 seeds and 50 fruit samples were collected by a major and minor survey from various districts of Rajasthan (India) to know diseases incidence of sponge gourd. The seed tests were categorized in asymptomatic, moderately and heavily discoloured in dry seed examination. The pathogen was reported in 61, 53 and 63 seed samples out of 68 samples of sponge gourd seeds in untreated, pretreated on standard blotter method and on YDC (agar medium) with incidence (10-78%), (8-68%) and (10-100%) respectively. The bacterium was identified based on morphological, physiological, LOPAT, molecular, and pathogenicity tests find to be *Xanthomonas campestris* pv. *cucurbitae*. These bacterial colonies were identified off-white to yellowish in colour, smooth, irregular having undulated margins with raised elevation. As the disease progress, the whole leaf collapses due to the reduction of photosynthesis capacity reduced the yield of a crop by bacterial leaf spot and fruit rot infection.

KEYWORDS: sponge gourd (***Luffa cylindrica*** **L.**), ***Xanthomonas campestris*** **pv.** ***cucurbitae***, disease transmission, bacterial leaf spot, fruit rot

1. INTRODUCTION

Sponge gourd (*Luffa cylindrica* Linn.) belongs to family cucurbitaceae (Susithra *et al*, 2010). The fruit has a network of fibers which contain a great number of flat blackish seeds. Sponge gourd is a specific crop known in Canada as Chinese Okra (Oboh and Aluyor, 2009). Sponge gourd too is believed to be originated from India like cucumber (Stephens, 2003; 2018). The plant is grown in many places across the globe. In the world where luffa is found in China, Korea, India, Japan and Central America (Bal *et al.*, 2004). Sponge gourd is a rich source of carbohydrates, vitamin C, and several minerals (Mg, Ca, Na, K, Fe, Cu, Zn, and Mn) Phytic acid, tannin, oxalate, and phytin phosphorus (Azeez, 2013; Dairo, 2007). It has antiviral, antitumor, antioxidant, anti-inflammatory, and immune modulatory properties (Tannin *et al.,* 2007; Felix *et al.,* 2018). The fruits are used as carminative, purified, moisturising, expectorant, anthelmenthic, laxative useful in case of fever, syphilis, bronchitis and leprosy. Seed kernel is used in dysentery. Seed oil is used for leprosy and skin disorders (Muthumani *et al.,* 2010; Kou *et al*., 2001; Kang *et al*., 1993).

The total area under pumpkin, squash and gourds cultivation in India is reported to be around 1714 MT in 78 ha area in 2017-18, whereas 2030 MT production in 55 ha area in 2018-19. In India, Uttar Pradesh, Punjab, Bihar, Jharkhand, Gujarat Rajasthan, Haryana and Delhi are high production states (Anonymous, 2019). In Rajasthan, sponge gourd is grown in Jaipur, Udaipur, Sikar, Jodhpur, Ajmer, Nagaur, Tonk, Bundi, Hanumangarh, Alwar, Dausa and Rajasamand. The annual production of sponge gourd during 2016-17 and 2017-18 was 4525 and 5893 MT cultivated on 1161 and 1219 ha/area respectively (Anonymous, 2017).

A new bacterial pathogen was isolated and identified from China that also resemble for leaf spot on *Luffa cylinderica.* Li *et al*., (2011) detected bacterial leaf spot on sponge gourd [*Luffa cylindrica* (*L. aegyptiaca*)]. Approax 20-30% of luffa plants were affected, resulting in significant economic loss. Water-soaked, irregularly formed, black lesions on the surface and margins of cotyledons were the only symptoms seen on seedlings. This disease was first identified as bacterial leaf spot on squash 'Hubbard' in 1926, New York (Bryan, 1930). Subsequently, it have been reported on cucumber, pumpkin, squash, and watermelon in cucurbit-growing region Asia, Australia, Europe, North America and New Zealand (Babadoost *et al*., 2012; Babadoost and Zitter, 2009; Babadoost and Ravanlou, 2012).

Host range

Almost all cucurbits, including cucumber, watermelon, pumpkin, squash, and bottle gourd, have been shown to be susceptible to the bacteria (Robbs *et al*., 1972; Taketani *et al*., 1976; Takikawa and Tsuyumu, 1987; Sinha, 1989; El Hendawy, 1999; Pruvost *et al*., 2008; and Babadoost and Zitter, 2009; Jarial *et al*., 2011; Babadoost *et al*., 2012). According to Babadoost (2013), symptoms and pathogen isolation were achieved by artificially inoculating a variety of cucurbits, including acorn squash (*Cucurbita pepo*), burcucumber (*Sicyos angulatus*), butternut squash (*Cucurbita moschata*), cantaloupe (*Cucumis melo*), carving pumpkin (*Cucurbita maxima*), cucumber (*Cucumis sativus*), gourd (*Lagenaria siceraria*) pumpkin (*Cucurbita pepo*). Until now, the disease has been known to be limited to the family cucurbitaceae (Babadoost, 2013). Numerous workers have found that a bacterial solution containing 105 to 108 cfu/ml may elicit a pathogenic response in a variety of cucurbit hosts (Pruvost *et al*., 2009;

Jarial *et al*., 2011; Babadoost and Ravanlou, 2012; Dutta *et al*. 2013; Trueman *et al*., 2014). Jarial *et al*. (2011) reported an incubation time of 3–5 days on infected leaves and 5–8 days on inoculated fruits of bottle gourd, cucumber, pumpkin, and squash plants, whereas Trueman *et al*. (2014) reported an incubation period of 10 days on inoculated leaves of pumpkin plants. On fruits, symptoms have been observed to emerge two days later than on leaves (Jarial *et al*., 2011).

2. MATERIAL AND METHODS

2.1 Incidence of Pathogen

All 68 seeds, 50 fruits samples, and various infected plant parts of sponge gourd collected from market and farmers field of 15 districts of Rajasthan, brought to the laboratory to know the disease symptoms on various plant parts. The seed samples and other plant parts were surface-sterilized incubated on the Petri plate and Nutrient Agar medium under aseptic conditions to isolate the pathogen. All the seed samples of sponge gourd were exposed to dry seed examination and incubated on moist blotting papers (ISTA 1985) to isolate the pathogen. The pure bacterial provinces were incubated at 30°C for 48 hours, were used for different tests viz. KOH solubility test, gram's staining, LOPAT (Kovacs 1956; Hildebrand and Schroth 1972;) and pathogenicity test (Bryan, 1926) for the recognition of bacterial species. The bacterial separates distinguished by different strategies were exposed to pathogen testing on host plants and another plant species. The disease fruit and other plant parts are subjected to incubate on NA and moistened blotter papers to know the characterization of pathogen (Lamichhane *et al*., 2010).

2.2 Disease Transmission

Two seed samples of sponge gourd ac. nos. Lc-1628 and Lc-1634 carrying 88 and 92% infection naturally infected with *X. campetris* pv. *cucurbitae* respectively were taken for disease transmission studies. The 100 seeds for each category per sample were planted on moistened blotting paper (10 seeds per plate) and water agar medium 1% in test tubes (1 seed for every test tube) placed at 25 ± 2^{0}C for 12/12 hours rotating patterns of light and dark up to 7 & 14 days, individually. 100 seeds for each category per sample were planted in a pot (2 seeds per pot) and data for indications per cent seed germination and mortality were recorded. The pathogen was isolated from the contaminated plant part at various phases of plant development.

2.3 Pathogenicity Test

Artificial inoculation of bacterium was done by using methods like smothering of seeds, stab inoculation of the seedlings at 3-4 leaf phase and other plant parts. The pathogenicity was tested on the host and other plants like cucumber, ridge gourd and bottle gourd.

Susceptible seeds of sponge gourd to XCC were planted into plastic pots loaded up with sanitized soil and place them in standard development chamber at 22°C in dark and 25°C in light, with brightening for the 16 hours from sodium lanterns (Olczak-Woltman 2008). The bacterial inoculum yielded for 24 hrs on YDC medium at 28°C was used. The aqueous suspension in sterile distilled water, adjusted of concentration 1·107 colony-forming unit (CFU) ml, evaluated by plate count method (Klement et al. 1990) to be equivalent to an optical density (OD 600) of 0·050.

3-4 leaf stage of sponge gourd plant was inoculated the lower leaf (Klement et al. 1990). The plants inoculated in triplicate were kept in obscurity above 90% relative humidity for 6 days in the chamber. The leaves expressed symptoms and severity of the disease after 7 days.

3. RESULTS AND DISCUSSION

3.1 Identification

Grams and KOH solubility tests reveal that the bacterium is gram-negative. Colonies on nutrient medium are smooth, circular and butyrous or viscoid usually yellow, but a few non-pigmented strains occur (Fig. 2). The yellow pigment xanthomonadins is produced. They are catalase positive, Kovac's oxidase negative or weak, don't denitrify or reduce nitrate (Bryan, 1926; Lamichhane *et al*., 2010).

3.2 Incidence of Pathogen:

The pathogen was reported in 61, 53 and 63 seed samples out of 68 samples of sponge gourd seeds in untreated, pretreated on standard blotter method and on YDC (agar medium) with incidence (10-78%), (8-68%) and (10-100%) respectively. In the seed samples of Ajmer, Alwar, Barmer, Bundi, Chittorgarh, Dausa, Hanumangarh, Jodhpur, Kota, Sikar and Tonk (Table 1; Fig. 1).The seed samples of Chittorgarh, Hanumangarh, Jodhpur, Kota, Sikar and Tonk showed more than 80% disease incidence. The incidence of *Xanthomonas campestris* pv. *cucurbitae* was highest in Barmer (30-100%), Chittorgarh (20-100%), Kota (40-100%) and

Tonk (30-100%) districts. Seeds of sponge gourd and other cucurbits have also been found to have same negative effects (Shila *et al*., 2013; Mortenson and Fatmi, 2019).

3.3 Disease Transmission

1. Petri Plate Method

Radicle emergence started after 24 hrs of sowing. The maximum seed germination on 7th day of incubation was 92% in asymptomatic, 58 in moderately discoloured and 48 in heavily infected seeds in sample ac. nos. Lc-1628 (Fig. 3 A).

The ungerminated seeds showed browning and oozing on and around the seeds. In sample ac no. Lc-1628, ungerminated seeds were 8, 25 and 38% for the three seed categories. Symptomatic seeds showed browning and shriveling. The symptoms initiated as water-soaked brown to black patches oozing on cotyledons and hypocotyls parts which followed to rot (Fig. 3 B). The symptomatic seedlings were 5, 46 and 88% in ac no. Lc-1628 in three categories. The shriveled seedlings showed mortality 39% in moderately discoloured seeds and 4% in non-infected seed samples of ac no. Lc-1628. The total loss due to pathogen was 1, 35 and 75% in the three seed categories.

2. Test Tube Seedling Symptoms Test

On water agar, the radicle emergence began after 36 hrs of incubation on the 15th day, the seed germination was 86, 64 and 18% in ac. no. Lc-1628 on 15th day.

The heavily infected seed couldn't germinate due to dense growth of the pathogen on and around the seeds. The percentage of ungerminated seeds with pathogen was 8, 15 and 39% in ac. no. Lc-1628 of three categories of seeds (Fig. 3 C, D).

3. Pot Experiment

The radicle emergence started on 4th day of sowing and continued up to 20 days. After 25 days the germination was 97, 80 and 56% in ac. no. Lc-1628 in the three categories of sponge gourd seeds (Fig. 3 E, F). Observations were taken regularly and data were recorded up to 30 days of sowing.

Initially symptoms were seen as brown, small irregular necrotic spots on upper surface of leaves. The spots on leaves collapsed and showed burning like appearance. Inwardly rolling of leaves and wilting symptoms were observed in leaves on high severity of disease (Fig. 3). Similar results observed by Pruvost *et al.,* 2009; Goldberg (2012) and Salamanca (2014) in pumpkin. Symptoms of bacterial spot in pumpkin may develop on both the foliage and the fruit. Findings of present study correlate with the findings of Jarial *et al.,* 2011, the symptoms found on almost every part of the bottle gourd plant due to *Xanthomonas campestris* pv. *cucurbitae*. The symptoms appear on leaves as small marginal chlorotic patches that grow in size as they approach the leaf's core. Later, necrotic patches emerge in the chlorotic zone, which grow in size. The necrotic lesions penetrate deeply into the leaf lamina.

Babadoost and Ravanlou (2012) have detailed the symptoms of pumpkin. On pumpkin leaves, the symptoms show as small (1-2 mm) black lesions. Lesions on the leaf edges may combine to create bigger necrotic regions. Bacterial penetration into the flesh of the fruit may cause severe fruit rot in the field or later in storage.

References

1. Susithra, E., Mallikarjuna, R. K., Ramseshu, K. V., Saraswathy and A. (2010). Evaluation of anti-inflammatory activity of seeds extract of *Luffa cylindrica*. Journal of Pharmacy Research, 3(7):1496-1498.
2. Oboh, I. O. and Aluyor, E. O. (2009). *Luffa cylindrica*—an emerging cash crop. Afr. J. Agr. Res., 4: 684–688).
3. Stephens, J. M. Gourd, Luffa-*Luffa cylindrica* (L.) Roem. *Luffa aegyptica* Mill., and *Luffa acutangula* (L.) Roxb. IFAS, Florida: U.S. Department of Agriculture, Horticultural Sciences Department, UF/IFAS Extension Service, University of Florida. 2018. p. HS604.
4. Stephens, J.M. (2003). Gourd Luffa-*Luffa cylindrica, Luffa aegyptica* and *Luffa acutangula*. J. Hortic. Sci.Univ.Florida, 3: 19-21.
5. Bal, K. E., Bal, Y. and Lallam, A. (2004). Gross morphology and absorption capacity of cell-fibers from the fibrous vascular system of Loofa (*Luffa cylindrica*). *Textile Research Journal* 74: 241.
6. Azeez, M. A., Bello, O. S. and Adedeji, A. O. (2013). Traditional and medicinal uses of *Luffa cylindrica*: a review. J. Med. Plants Stud. 5:102–111.
7. Dairo, F. A. S., Aye, P. A. and Oluwasola, T. A. (2007). Some functional properties of loofah gourd (*Luffa cylindrica* L., M. J. Roem) seed. J. Food, Agric. Environ. 5:97–101
8. Tannin S., Bergman, T. and Grossman, M. (2007). Cucurbitacin glucosides : Antioxidant and free-radical scavenging activities. Biochemical and Biophysical Research Communications, 364, , 181 – 186.
9. Felix, A., Chigozie, I., Chidimma, R., Blessing, O. and Peter, M. (2018). Evaluation of antioxidant, anti-inflammatory, and antimicrobial activities of the leaf extracts of *Luffa cylindrica.* Journal of Health Sciences*,* 8(2):101-109.
10. Muthumani, P, Meera, R, Subin, M, Jenna, M, Devi, P. (2010). Phytochemical screening and anti-inflammatory bronchodilator and antimicrobial activities of the seeds of *Luffa cylindrical*. Res. J. Pharm. Biol. Chem. Sci., 1:11-22.
11. Kou, J. P., Zhuang, S. F., Tang, X. J., Tong, C.N. and Yan. Y. Q. (2001). *J China Pharm Univ*; 32(4): 293- 296.
12. Kang, B., Zhang, Y.J. and Li, G.Z. (1993). *Chinese J Pracl Chinese with Modern Med*, 6(4): 227-228.
13. Anonymous, 2019. Pocket book of agricultural statistics. Government of India ministry of agriculture & farmers welfare department of agriculture, cooperation & farmers welfare directorate of economics & statistics New Delhi, pp-138

14. Anonymous (2017). Rajasthan horticulture statistics. Directorate of Horticulture, Pant KrishiBhawan, Jaipur.
15. Li, R.Y., Yang, L., Chang, H., Liu, W., Yan, S. P. and Gao, F. X. (2011). Effect of dry-heat treatment of different temperature on germination of vegetable seed China Vegetables, 16: 67-71.
16. Babadoost, M. and Ravanlou, A. (2012). Outbreak of Bacterial Spot (*Xanthomonas cucurbitae*) in Pumpkin Fields in Illinois. Plant Disease, 96: 1222.
17. Babadoost M. and Zitter T. A., 2009. Fruit rots of pumpkin: A serious threat to the pumpkin industry. Plant Disease 93: 772-782.
18. Robbs, C. F., Kumura, D. and Barbosa G.A.A. (1972). Bacterial blight of squash, a disease new to Brazil. Arquivos do Universidade federal Rural do Rio de Janeiro., 2(2): 105-106.
19. Pruvost, O., Robene-Soustrade, I., Ah You, N., Jouen, E., Boyer, C., Waller, F. and Hostachy, B. (2008). First report of *Xanthomonas campestris* pv. *cucurbitae* causing bacterial leaf spot of pumpkin in Reunion Island. Plant Disease, 92(11): 1591.
20. Pruvost, O., Robène-Soustrade, I., Ah-You, N., Jouen, E., Boyer, C., Wuster, G., Hostachy, B., Napoles, C. and Dogley W. (2009). First report of *Xanthomonas cucurbitae* causing bacterial leaf spot of watermelon in the Seychelles. Plant disease, 93 (6): 671.
21. Jarial, K., Dogra, B.S., Mandradia, R.K., Kumar, S., Sharma, D. and Gupta, A. K. (2011). Investigations on a new bacterial disease of bottle gourd in sub-tropical zone of Himachal Pradesh. Plant Dis Res. 26 (1): 68-75.
22. Dutta. B., Gitaitis, R. D., Lewis, K. J. and Langston, D. B. (2013). A new report of *Xanthomonas cucurbitae* causing bacterial leaf spot of watermelon in Georgia, USA. Plant Disease, 97: 556.
23. Taketani K, Tamura M and Wakimoto S. (1976). Studies on fruit spot of prince melon III: Scab like spots caused by *Xanthomonas cucurbitae* (Bryan) Dowson. Proceedings of the Associationfor Plant Protection of Hokuriku 24:63-67.
24. Takikawa Y. and Tsuyumu S. (1987). Bacterial brown spot of cucumber caused by *Xanthomonas campestris* pv. *cucurbitae*. Proceedings of the Kansai-Plant Protection Society. 29: 11-15.
25. Trueman, C. L., Roddy, E. and Goodwin, P. H. (2014). First report of bacterial spot (*Xanthomonas cucurbitae*) of pumpkin in Ontario, Canada. New Disease Reports, 30.
26. Babadoost M. 2013. Disease management of cucurbits: University of Illinois. https://web.extension.illinois.edu/mms/downloads/47273.pdf
27. Babadoost M and Zitter TA. 2009. Fruit rots of pumpkin: a serious threat to the pumpkin industry. Plant Disease 93(8): 772-782.
28. Bryan, M.K. 1926. Bacterial leaf spot on hubbard squash. Science, 63: 165.
29. Lamichhane JR, Varvaro L and Balestra GM. (2010). Bacterial leaf spot caused by *Xanthomonas cucurbitae* reported on pumpkin in Nepal. New Disease Reports 22: Article 20.
30. Anonymous, 1985. International rulers for seed testing. International Seed Testing Association (ISTA). Seed Sci. & Tech., 4: 3-49, 50-177.
31. Kovac, N. 1956. Identification of *Pseudomonas pyocyanea* the oxidase reaction. Nature, London, 178: 703.
32. Hildebrand, D. C. and Schroth, M. N., 1972. Identification of fluorescent *Pseudomonas*. In: proceedings of the 3rd International conference on plant pathogenic bacteria, Wageningen. Centre for Agri. Puiblishing and Documentaion: 281-287.

33. Olczak-Woltman, H, Schollenberger M, Ma̧dry W and Niemirowicz-Szczytt K. 2008. "Evaluation of cucumber (*Cucumis sativus*) cultivars grown in Eastern Europe and progress in breeding for resistance to angular leaf spot *Pseudomonas syringae* pv. *lachrymans*". Eur. J. Plant Pathol 122, 385–393.
34. Klement, Z., Mavridis, A., Rudolph, K. and Vidaver, A. 1990. "Inoculation of plant tissues". In: Klement Z, Rudolph K, Sands DS, eds. Methods in Phytobacteriology. Budapest, Hungary: Akademiai Kiado, 94–124.
35. Shila, J. S., Islam, M. R., Ahmed, N. N., Dastogeer, K. M. G. and Meah, M. B. (2013). Detection of *Pseudomonas syringae* pv. *lachrymans* Associated with the Seeds of Cucurbits. Universal Journal of Agricultural Research, 1(1):1-8.

36. Mortenson, C.N. and Fatmi M. (2019). "Detection of *Pseudomonas syringae* pv. *lachrymans* in cucumber seeds", ISBN: 9780890545416, Pages: 189-193.
37. Goldberg, N. (2012). Bacterial leaf spot of cucurbits fact sheet, Plant Pathology: The news you can use. New Mexico State University Extension Bulletin, October, 2012. http://aces.nmsu.edu.
38. Salamanca L R. (2014). Bacterial Diseases of pumpkins: an old enemy and an emerging bacterial disease. Michigan State University Extension Bulletin. http://msue.anr.msu.edu

Table 1: District Wise Per Cent Range of Various Seed Categories in Seed Samples of Sponge Gourd in Dry Seed Examination

S.No.	Districts	No. of samples studied	Seed categories (400 seeds/category)			
			Asymptomatic seeds	Moderately Discolored (shrivilled)	Heavily Discolored	Cracked and shining appearance seeds
1	AJMER	6	6(42.75-73.75)	6(13.75-29.25)	6(11.25-26.25)	0
2	ALWAR	6	6(33.0-46.25)	6(27.75-37.25)	6(22.0-24.75)	0
3	BARAN	4	4(23.50-50.75)	4(24.75-50.0)	4(16.25-22.75)	0
4	BARMER	2	2(24.50,50.75)	2(23.50,44.0)	2(20.0,30.5)	0
5	BHARATPUR	3	3(27.0-73.25)	3(13.5-40.75)	3(11.25-29.75)	2(1.0, 2.25)
6	BUNDI	2	2(19.25, 58.50)	2(20.75, 45.75)	2(15.75, 37.75)	2(1.25, 2.00)
7	CHITTORGARH	2	2(20.75, 67.5)	2(16.0, 33.5)	2(13.5, 30.75)	2(3.0, 4.25)
8	DAUSA	8	8(23.0-84.25)	8(10.75-50)	8(4.25–32.25)	2(2,5)
9	HANUMANGARH	7	7(29.0-82.25)	7(10.25–42.50)	7(8.5–35.75)	2(1.5, 2.25)
10	JAIPUR	8	8(22.75–80.25)	8(10.75–38.5)	8(5.25–21.75)	2(1.5, 3.0)
11	JODHPUR	4	4(23.25-75.25)	4(12.75– 43.75)	4(9.5- 34.25)	2(2.5, 5.75)
12	KOTA	2	2(37.25, 66)	2(22, 59.25)	2(17.5, 36.75)	0
13	NAGAUR	2	2(28.75, 63.75)	2(22.75, 59.25)	2(8.5, 35.75)	2(2.5, 3.25)
14	SIKAR	7	7(25.75-78.25)	7(15.75–61.25)	7(10.5–39.25)	2(1.75, 4.0)
15	TONK	5	5(23.0–64.25)	5(17.25–54.0)	5(18.25–50.25)	2(1.5, 6)
	TOTAL	**68**	**68(27.75–84.25)**	**68(10.25–59.25)**	**68(2–50.25)**	**18(1.25–5.75)**

*The figures in parenthesis are the percentage incidence range.

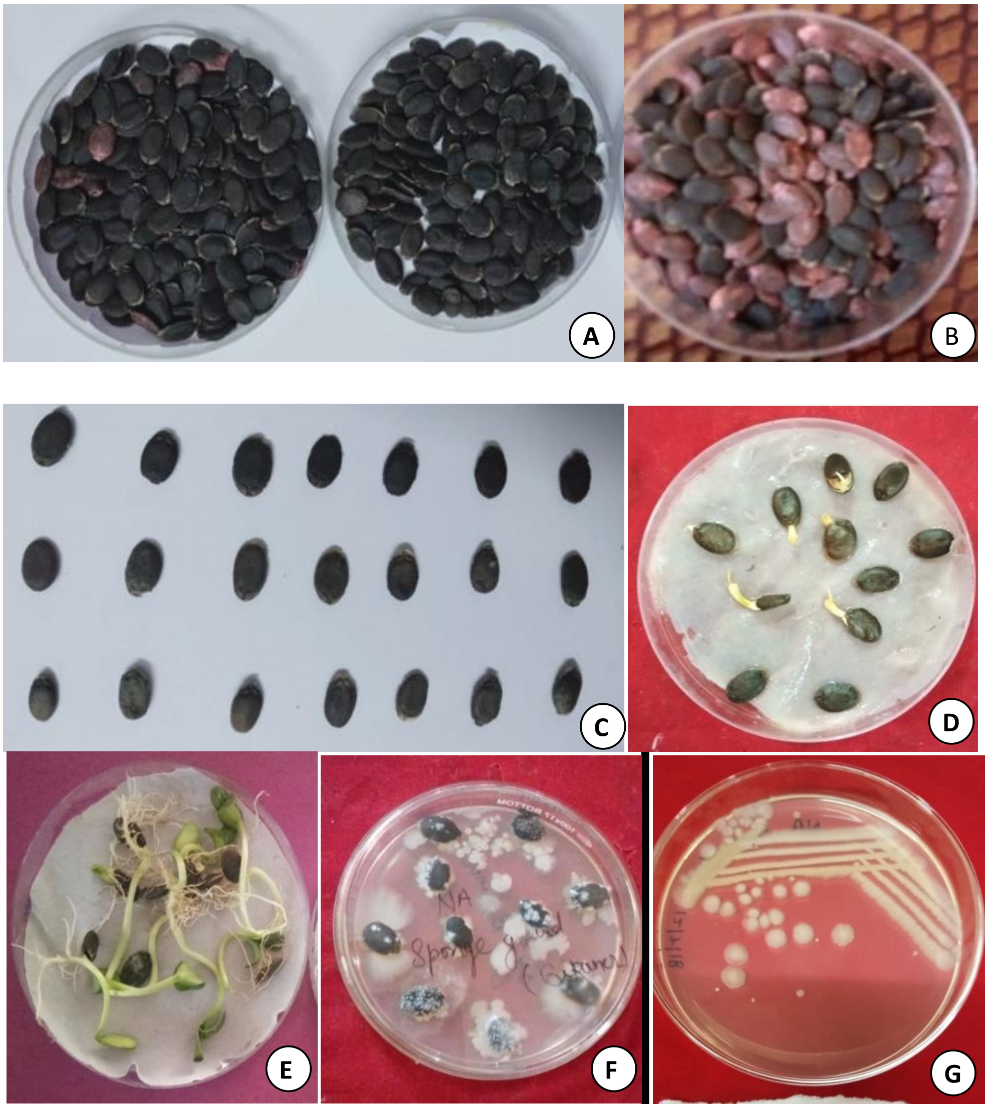

Fig. 1: Dry seed examination of sponge gourd showing various discolourations

A, B. Seeds of cucumber are categorized into asymptomatic, moderately discoloured and heavily discoloured.

C. General seed lots of sponge gourd: asymatomatic seeds (upper row), moderately discoloured (middle row), heavily discoloured (lower row) seeds on incubation yielded the growth of *Xanthomonas campestris* pv. *cucurbitae*.

D, E. Seedlings of sponge gourd sample (ac. no. Lc-1628) showing rotting and browning in SBM as compared to check (E).

F. Mucoid colonies of bacteria around the sponge gourd seeds on NA medium. Note the characteristics pattern of growth, entire margin and flat colonies.

G. Streaked yellow mucoid colonies on YDC medium.

Fig. 2 Phytopathological effects and disease transmission of natural seed-borne infection of *Xanthomonas campestris* pv. *cucurbitae* in sponge gourd.

A. Symptoms on seedlings in Petri plate method**.**

B. Seedlings showing disease symptoms. Note the **ne**ecrosis, browning at hypocotyls and mortality of seedling.

C. Ungerminated seeds and seedlings showing oozing, puffing and blighting of cotyledons in TTSST.

D. Healthy seedling in TTSST.

E, F. Sponge gourd plantlets infected plant showing burning of apical shoot and chlorosis. Note the symptoms of wilting of leaf apex as compared to healthy plant (extreme right).

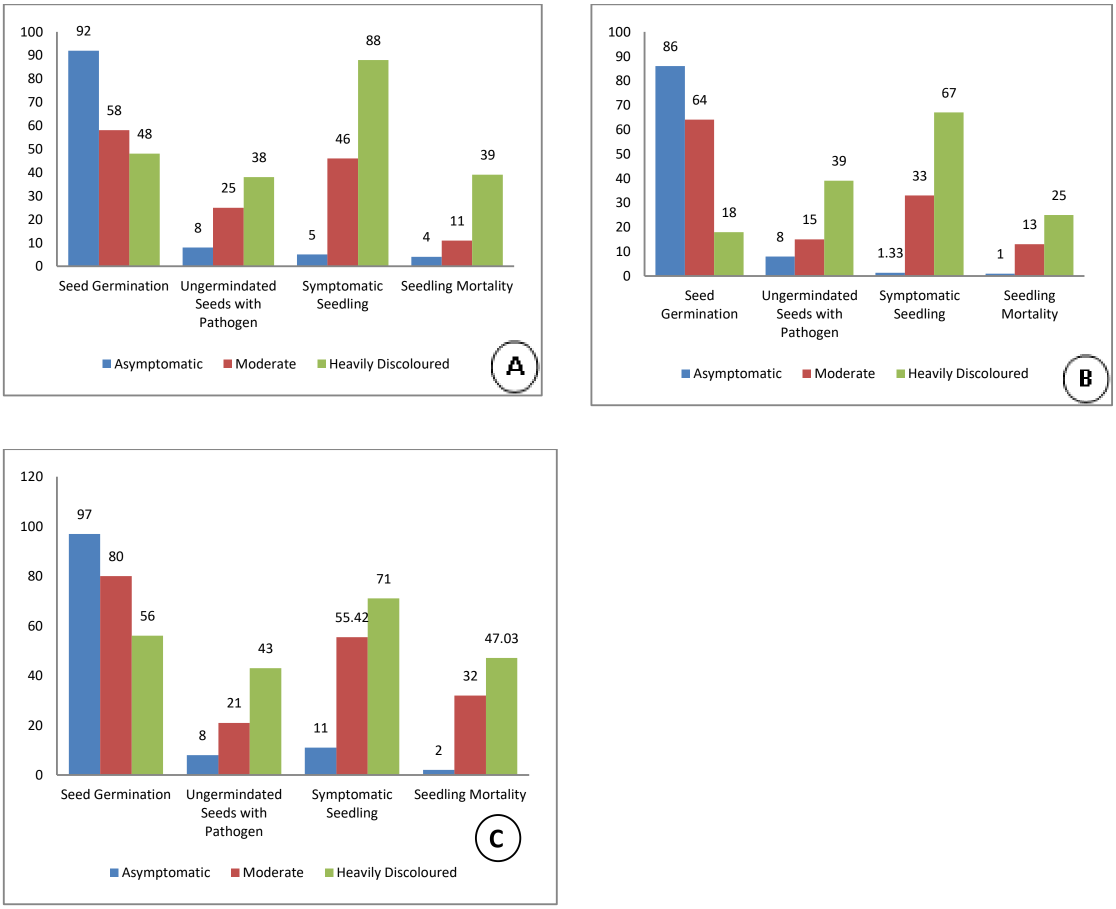

Fig. 3 Effect of *Xanthomonas campestris* pv. *cucurbitae* on natural seed infection by (A) petri plate method, (B) water agar test tube seedling test and (C) Pot Experiment.

07

Challenges faced in Virtual Practicum Orientation and Demonstration in English Medium B.Ed. Colleges and role of teacher in reformation

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Abstract:

Due to ongoing pandemic, the E-learning method use and application in the teaching and learning process is adopted. Practicum is core part of B.Ed. Now days as teaching learning is shifted to online mode, so B.Ed. teachers are facing some technical problems in practicum orientation and demonstration to the students . The study developed is qualitative nature. The study was conducted on B.Ed. College of Nashik city of Maharashtra. Five colleges were selected on random basis for data. Data was collected with the help of semi structured interview and focus group discussions with B.Ed. College teachers. The teachers discussed about problems that they faced while virtual practicum orientation and demonstration.

Key words: Practicum, B. Ed, Virtual, Orientation and Demonstration

Introduction

Especially for the preparation of teachers' clinicians, Practicum a course of study is designed. It is an essential strategy for preparing would-be teachers to be competent teachers. It is a pre-service teacher education program in which a student teacher learns about teaching and about how to teach. The aim of teacher- education is to develop student teacher to a qualified teacher. An opportunity for the student teachers to apply the important concepts, principles and educational theories in real teaching situations at school is provided by Practicum. This helps student teacher to acquire the required educational competencies. But in today's scenario, teachers are finding it hard to give practicum orientation and demonstration to student teachers online. In this virtual world, teacher are facing technical problems, limitations on use of teaching aids etc, while practicum orientation and demonstration.

Objective of study:

- To study about the problems faced by teachers of English medium B.Ed. colleges of Nasik city for Virtual practicum orientation and demonstration.

- To find the solution on the problem.

Methodology:

It is a qualitative research method. The data was collected through semi structured interview and group discussion with the B.Ed. colleges of Nashik City of Maharashtra.

The Sample:

The study was conducted in the English medium B.Ed colleges of Nashik City of Maharashtra. All the B.Ed. teachers of the same college served the sample of the study.

Tools of the study:

Data was collected with the help of semi structured interview schedule and group discussion with the B.Ed College's teachers.

Data Collection:

For data collection interview model was chosen. This enabled and facilitated asking questions, elicit answers, uncover perspectives and notions, and give the subjects the opportunity in which to give meaning to their respective roles.

Need and Significance of the Study:

Teacher education is an integral part of education as the quality of education depends on the quality of education of teachers. In order to develop the quality in various dimensions of teacher, teacher training is very much necessary. Particularly, secondary level teachers training (In service and Pre service) play a vital role in India. The bachelor of Education (B.Ed.) programme prepares quality teachers who in turn improve the quality of school education and also enhance the learning level of children. It means quality of teacher depends on B.Ed. programme. So suggestions from teachers of different B.Ed college of Nashik are taken into consideration for implementing the various recommendations.

The significance of this study emerges from the importance of practicum experience itself, its role in teacher preparation programs which aims to develop the educational competencies of student-teachers, and its ability to diagnose the challenges faced by teachers during Virtual practicum orientation and demonstration. The study would be helpful for the improvement of B.Ed. Practicum among the teachers of Nashik district. Different B.Ed.

Colleges of Nashik would get the idea of the effective Virtual practicum orientation and demonstration. Thus, the study about the problems faced by teachers of B.Ed. colleges of Nashik city for Virtual practicum orientation and demonstration helps to unravel the problem which renders the implementation of proper methods of practicum orientation and demonstration in different B.Ed. Colleges.

Limitations:

The study was restricted to the teachers in B.Ed. colleges

The investigation was delimited to only to B.Ed Colleges of Nashik City.

Analysis and Discussion:

After conducting interviews and taking field notes, a number of issues emerged during virtual orientation was lighten. Amongst them the prominent one is that the plan and strategy as may be observed at the grassroots level are deficient and considerably erratic. All the teachers said that Students find it difficult to adapt to an online execution environment immediately after traditional classroom learning and executing lessons. Due to the sudden change, they are not able to adapt to the computer based execution their lesson plan. Students who have been always giving execution in the traditional classroom mindset are not able to focus on online platforms. It becomes difficult for teachers to adjust to a new platform for Orientation and demonstration of practicum online. It becomes difficult to engage students for longer periods of time. They are gets distracted and lose concentration during live sessions.

Teacher of one of the school admitted that they faced network/ internet issues in teaching learning process. Some time he was disconnected automatically from lecture which makes distraction in his teaching. Students too face his problem which creates very bad impact on their learning.

Out of 5 college teachers 3 teachers told that the virtual teaching of orientation is very challenging as compare to offline teaching. Other 2 college teachers enjoyed online mode of teaching. All the B.Ed. teachers from this 5 schools pointed that online mode of teaching is time consuming mode. While teaching demonstration skill and models of teaching they are unable to manage time period of lecture and this affect on effectiveness of teaching learning process. Students couldn’t understand whole practicum as teacher uses PPT more and as teaching aids less to explain the whole lesson. For orientation of geometry lessons they used digital board mobile apps. The teachers confessed that virtual teaching makes student a passive learner.

Sometimes teachers are not given enough time for the preparation of content for their students.

Online teaching is like communicating without body language, so students might misunderstand and can result in their poor performance.

According to teachers, the incident opportunities that happen face to face communication fail in online learning. One teacher raises a very important point that the course content was designed earlier with respect to traditional classrooms. But with the shift to online learning, it requires redesigning of course which can take a considerable amount of time and energy. It would have been successful when it started well in advance for better learning outcomes. Most of the cases, these courses work well in traditional classrooms but go flat in online learning. It happens when there are no content-related activities, assignments or projects that can be done online.

Recommendations and Suggestions:

Based on the previous results, researcher advises the following to those in charge of practicum program of B.Ed College at Nashik:

- **Preparing before the online orientation**

During offline orientations, students gain a lot from their environment on campus. Such connections are unlikely to happen in a hybrid or virtual campus. So plan for every possibility to give best experience to students. An online orientation can be daunting for students. Allow them to access everything they need — registration forms, login information, video meeting links, timing etc. Sending regular and personalized notifications can improve student engagement significantly.

- Convey the agenda before hand

Let students know what they can expect at the orientation. Invite student responses to the agenda. Use it as an opportunity to identify common concerns and address them in the virtual program. Simple pointers like joining 15 minutes before the meeting, renaming with roll numbers, keeping mics switched off etc. can ensure that the whole program goes smoothly.

Identify a process with rules suitable to your university and communicate them to students clearly.

- **Holding training Workshop**

Workshop for teachers of B.Ed College must be arranged to enhance their abilities in good planning and practicing modern teaching method. Also the study of these challenges should be discussed with technical experts from order to be more comprehensive.

- Test the tools before the actual program

By conducting a trial run avoid both technical and practical issues like faulty mics, incompatible systems, low lighting, background noise etc. During this, review the program from the point of view of the student such as can students see the speakers clearly, are the slides legible etc.

- Strengthen the online community

Form the student community to jot down the problem or quarries of students, if any, related to orientation. Coordination with various parties participating and involved in practicum training process

- Take questions and address concerns

Address the students concerns and doubts related to subject. Interact with students in on gong session and also ask and clear their doubts.

- Make the program available for later use

Keep the recording of session as it may not possible for all students to join the orientation live. Make presentations, contact lists, documentation etc. available for download.

- **After a successful orientation** collect feedback

A good feedback mechanism helps both you and your students. By asking them about their experience at the orientation, you can hear what worked and what didn't, helping you make your next sessions better. Students, on the other hand, feel heard and included, which plays a key role in making them feel like they belong. Set up a quick survey or an online form to collect quantitative feedback. Also invite students to email their concerns and suggestions.

Conclusion:

What emerges from meetings and discussions with B.Ed. teachers of colleges is that there are lots of challenges for practicum orientation and execution on online mode from teachers as well as students sides but we also have solution on these problems. Teachers need to implement these recommendation and solutions in teaching virtually the practicum subject. It will help to reform the practicum program virtually.

References

- https://www.involvio.com/blog/18-tips-to-make-your-virtual-orientation-program-effective-and-impactful
- https://www.platformqedu.com/2018/05/04/8-steps-to-a-successful-online-orientation
- Research Article Open Access Attitude of B.Ed. Student-Teachers towards Practicum Ankur Mahato1, Dr. Santosh Kumar Behera
- https://www.researchgate.net/publication/331562710_Challenges_of_Practicum_at_College_of_Education_Supervisors_Students%27_Teachers_Perspective

08

THE ECONOMIC CRISIS IS DEVELOPMENTAL OBSTACLE

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Abstract:

Economic crises not only affect the level of economic activities but can also causes financial panic, which lowers monetary policy efficiency with more damaging effects on the economy. Every country has its ups and downs, unfortunately, countries having to deal which tend to causes a tremendous effect on the nation as a whole. Financial crisis plays a hug role in countries going into a recession, and being unable to meet the demand for money. Sadly, developing countries are facing financial crisis the hardest, for example, countries such as Asian crisis, USA, India are just some of the countries who have trouble with financial issues for decades. Bruno Gurtner simply states, “the crisis was transmitted primarily by trade and financial flows forcing millions back into poverty”(Gurtner,2008). The present paper tries to present the economic crisis is developmental obstacle for global level. In the second part, definition of economic crisis, causes, types, effect of people and remedies are presented in this paper.

Key Words:- *Economic crisis, developmental countries, obstacle, causes, types, effect and remedies.*

INTRODUCTION:

Economic crisis is a situation in which the economy of a country experiences a sudden downturn brought on by a financial crisis. An economy facing an economic crisis will most likely experience a falling GDP, a drying up of liquidity and rising/falling prices due to inflation/deflation. An economic can take the form of a recession or a depression. a crisis is an unforeseen event that causes restlessness among the people of an organization. Different types of crisis can happen to an organization, all of which require adept management to keep the company working toward its goals. A crisis is a sudden and unplanned event that results in the instability of an organization and can be caused by internal or external factors. To prevent serious damage to your company, it is important to address the factors that instigated the crisis and prevent further escalation. Furthermore, developing countries are more than likely to face financial crisis due to not making enough trades, which depends on the amount of income that comes in and out countries. Today, financial crisis has gotten worse in many developing countries. Due to developing countries not being able to make any trades, countries then being to see a dramatic change in the economy. The article “the Financial and Economic Crisis and Developing Countries” by Bruno Gurtner, explained the main Causes of why developing countries are still going through the financial crisis phase. Gurtner discovered, sincee the financial crisis has been hitting developing countries hard, it being to cause a regression in economic growth in those poor countries. Gurtner found that “Marco-economically the crisis manifested…in trade and payment balance, dwindling currency reserves, currency devaluations, increasing rates of inflation, higher indebtedness and soaring public budget deficits”(Gurtner,2008).

What is crisis:

A crisis is any event or period that will lead, or may lead, to an unstable and dangerous situation affecting an individual, group, or all of society. Crisis are negative changes in the human or environmental affairs, especially when they occurs abruptly, with little or no warning. More loosely, a crisis is a testing time for an emergency.

The Term ‘financial crisis’ can describe a variety of situation associated in general with a limited supply of money/financial resource, compared with the demand for money/ financial resources, while liquidity becomes a problem for all the actors in the market.

Types of crisis:

1) **Financial crisis:**

A financial crisis can be describe as a specific situation in which a company, business or production firm lose the value of its asserts rapidly and enormously leading to low cost of the assets. In additional, during a financial crisis the value of financial institutions also becomes relatively low in such a way that they cannot efficiently carry out their financial roles within an economy. “stijn Claessens and Ayhan Kose have different beliefs about financial crisis. claessens and Kose simply explain ”financial crisis is often associated…substantial changes in credit volume and asset prices; severe disruptions in financial intermediation financing to various actors in the financial crisis. Nobaly, when a financial crisis emerges, the liquidity rate for money reduces to a level where saving cannot help in salvaging the already worsened money situation. For instance, one of the most prevalent financial crises took place in 2008 when the global money market went through a massive recession period thus creating a huge economic fuss across the globe. In any situation of financial crisis, companies and businesses are often faced by the problem of ethical dilemma on how to react to the financial crisis at hand. In financial crisis are included @Banking crisis @currency crisis @speculative bubbles and crashes @International Financial crisis @Wider economic crisis etc…

2) **Personal crisis:**

Personal crisis means an unexpected event or series of events in an eligible youth's life that prevent or impedes participation in scheduled services or activities.

3) **Technological Crisis:**

Technological crisis arises as a result of failure in technology. Problems in overall systems lead to technological crisis. Breakdown of machine, corrupted software and so on give rise to technological crisis.

4) **Organizational crisis:**

Crisis of organizational misdeeds arise when management takes certain decisions knowing the harmful consequences of the same towards the stakeholders and external parties. In such cases, superiors ignore the after effects of strategies and implement the same for quick results.

5) **Natural crisis:**

Disturbances in the environment and nature lead to natural crisis. such events are generally beyond Drought the control of human beings. Tornadoes, Earthquakes, hurricanes, Landslides, Tsunamis, flood, all result in natural disaster.

6) **Confrontational crisis:**

Confrontation crisis arise when employees fight amongst themselves. Individuals do not agree to each other and eventually depend on non-productive acts like boycotts, strikes for indefinite periods and so on. In such type of crisis, employees disobey superiors; give them ultimatums and force them to accept their demands. Internal disputes, ineffective communication and lack of coordination give rise to confrontation crisis.

Causes of the crisis:

- Cause of the current crisis Today's economic and financial crisis originated in the rich world particularly in the USA. It has called a financial meltdown, storm or credit crunch. Credit crunch is an economic condition in which investment capital is difficult to obtain. It means that there was hardly any credit available for investors. Of course this condition is a chronic problem in poor countries and this is why when we speak about the current global financial crisis. For the rich countries, it created panic and was seen as the worst in recent years and was compared to the 1930 great depression. In other words it was a big crash or a bust.
- For starters, the **global economic crisis carries a distinct "Made in the USA" tag which means that the origins of the crisis are to found in the reckless leading and risky banking practices of wall street.**
- The next aspect is the fact that Americans and much of the rest of the world were deeply in debt(personal, corporate and governmental) which was unsustainable
- The forth aspect of the crisis is that growth cannot proceed and infinitum in a world of finite resource.
- To sum up, there was a convergence of different forces (economic, social and political) Which resulted in a "perfect storm" of economic and social calamity. Hopefully, the crisis should serve as a warning to policymakers to promote sustainable business practices and for individuals and families to not live beyond their means. The bottom line for any debt based economic system is that one can only postpone the day of reckoning but go on forever in the expectation that the debts would not come cue.

Biggest Financial Crisis in the world:-

The credit crisis of 1772, Boston Tea party:

The Boston tea party, which involved the willful destruction of 342 crates of British tea, proved a significant development on the path to the American Revolution. The Boston tea party, which occurred on December 16, 1773 and was known to contemporaries as the Destruction of the Tea, was a direct response to British taxation policies in the North American colonies. After the conclusion of the Seven Years' War in 1763, the British Empire was in financial Distress. Though the British had won the war, they has spent vast amounts of blood and treasure in the process.

Effect: Intolerable Acts also implemented the Massachusetts Government act, the administration of justice act, the quartering act, and the Quebec Act.

The Great Depression of 1929-39 (The Great Breadline):

Four factors played roles of varying importance. (1) **The stock market crash of 1929** shattered confidence in the American economy, resulting in sharp reductions in spending and investment. (2) **Banking panics in the early 1930s caused many banks to fail, decreasing the pool of money available for loans**. (3) The **gold standard** required foreign **central banks** to raise interest rates to counteract trade imbalances with the United States, depressing spending and investment in those countries. (4) The **Smoot-Hawley Tariff Act** (1930) imposed steep **tariffs** on many industrial and agricultural goods, inviting retaliatory measures that ultimately reduced output and caused global trade to contract.

Effect: In the United States, where the Depression was generally worst, industrial production between 1929 and 1933 fell by nearly 47 percent, gross domestic product (GDP) declined by 30 percent, and unemployment reached more than 20 percent.The Great Depression had devastating effects in both rich and poor countries. Personal income, tax revenue, profits and prices dropped, while international trade fell by more than 50%. Unemployment in the U.S. rose to 23% and in some countries rose as high as 33.

The OPEC Oil price shock of 1973:

The OPEC oil embargo (1973) was precipitated by the yom kippur war. The United State was the first country to be sanctioned by Saudi Arabia, Libya and other Arab countries on October19, 1973 for its political and military support for Israel (Particularly through the delivery of military equipment and arms, which played a key role in Israel's was against neighboring countries). The 1973 Oil Embargo put a strain on a United States economy that has become increasingly reliant on foreign oil. 12 OPEC members agreed to the embargo on October 19, 1973. Oil prices tripled in the next six months. Even when embargo expired in March 1974, prices remained higher. The 1973-1975 recession was generally attributed to the oil embargo. The 1973-74 oil crisis, in the eyes of Federal Reserve Policymakers, tended to significantly complicate the macroeconomic situation, notably in term of inflation.

Effect: The 1970s were a decade of pessimism for many people. In 1970, it began with a recession and the bitter end of the Vietnam War. Because of memories of the Great Depression, policymakers were hesitant to deploy restrictive monetary and fiscal policies to control inflation, fearing that the resulting increase in unemployment would be unacceptably high. Any other effect on unemployment rate, inflation, food and energy prices, trends in labor unit costs etc…

The Asian Crisis of 1997:

The 19971998 Asian financial crisis is considered the third international financial crisis in modern history (Gard, et al.,1999). According to Ardiansyah (2002), the first sign of the financial crisis was the declaration made by the Thai real estate developer Somprasong Land on February 5, 1997, that it had defaulted on a 3.1 dollar million interest payment for a 80 dollar billion Euro- convertible bond. In his book The Asian financial Crisis, Lee (1998) argues that the Asian financial crisis of 1997-1998 was caused by a combination of equally important factors, and cannot be adequately explained by a single, unequivocal cause.

Effect: The origin of the Asian financial crisis were identifying its major causes as crony capitalism, fixed exchange rates, moral hazard and the contagion effect. The developing countries in Asian have many lessons to learn from the 1997-1998 financial crisis, and should be harness this knowledge to better position themselves in the 21st century world economy.

The financial crisis of 2007-08:

Usually, a crisis is anticipated by the existence of a speculative bubble in one sector or several connected sector of the economy, generated usually by the hard behavior or investors. The climax of the crisis is perceived when the negative effects of the lack of liquidity generated the collapse of financial institution and a general mistrust in the financial system (until 2007-2008 now at national or regional levels). The financial crisis of 2007-2008-due to its extent and the way it was transmitted, revealing the complex and hidden connections between the financial institutions at the whole level-brought the mistrust in the financial system at global level.

Effect: The 2007-2009 financial crisis began years earlier with cheap credit and lax leading standards that fueled a housing bubble. When the bubble burst, financial institutions were left holding trillions of dollars worth of near worthless investments in subprime mortgages.

Current financial Crisis in India:

The economic impact of the COVID-19 pandemic in India has been largely disruptive. India's growth in the forth quarter of the fiscal year 2020 went down to according to the ministry of statistics. The world bank and rating agencies had initially revised India's growth for FY2021 with the lowest figure India has seen in three decades since India's economic liberalization in the 1990s. The Indian economy was expected to lose over 32,000 crore every day during the first 21 days of complete lockdown, which was declared following the coronavirus outbreak. Major companies in India such as Larsen & Toubro, Bharat forge, Ultra Tech Cement, Grasim Industries, Aditya Birla Group, BHEL and Tata Motors temporarily suspended or significantly reduced operation. Some Indian states are in debt like Punjab, West Bengal, Andhra Pradesh, Gujarat, Maharashtra, Uttar Pradesh. Other like Jammu and Kashmir, Chhattisgarh, Madhya Pradesh and Himachal Pradesh had relatively fiscal deficits in 2021-2022. While elevated debt levels have played a huge role in precipitating the SRI LANKAN Economic crisis, it is important to keep in mind the nature of this debt: foreign. Sri Lanka's foreign debt at the end of 2021 was 50.7 billion dollar. According to Soumya kanti Ghosh, State Bank of India's group chief economic adviser, the freebies offered were "ECONOMICALLY UNSUSTAINABLE" and some states are "Living beyond their means".

Effect: Largest GDP contraction ever in Q2 (April-June) FY2020-2021 at -24%, sharp rise in unemployment, stress on supply chains, decreases in government income, collapse of the hospitality industry, reduced consumer activity, plunge in fuel consumption. Rise in LPG sales, trade tensions with china,

Effect of the Economical Crisis on the **People**:

- People in a crisis tend to have more unexplained physical symptoms. Stress caused by a crisis situation will give some people physical symptoms, such as headaches, muscle aches, stomach upsets, and low-grade fevers.
- Increased unemployment, loss of income and increased vulnerability have been among the dominant social impact of the crisis.
- While an economic downturn is quantifiable, it is not an easy task with mental health.
- The cognitive, social and emotional deficits to children growing up in extreme poverty are crucial in child psychiatry and resonate in behavioral disorders.
- The increases in psychological disorders during an economic crisis is manifold.
- One of the most contentious points is the causality between economic insecurity and suicide rates.

Recommendation:

- World Economic Outlook Reports: The IMF releases this report usually twice a year and its analyzes and predicts global economic developments during the near and medium term.
- Some high frequency economic indicators in the report are showing robust signs of economic growth of India while the others are bringing out implicit risks to growth from the second wave of the pandemic.
- India's economic growth: As per the report findings, India economic is expected to growth by 12.5% in 2021 and 6.9% in 2022.
- Global Economic Growth: The IMF predicted stronger recovery in 2021 and 2022 with growth projected to be 6% in 2021 and 4.4% in 2022. In 2020, the global economic contracted by 3.3.
- The modern financial sectors of the type found in the Untied State (and in other developed countries) in no longer seen as a general model to be copied by other countries.

- Developing countries need more policy space for macroeconomic policy-making, for monetary as well as fiscal and exchange rate policy. Their macroeconomic and development strategies need be better tailored to their specific needs, and should go beyond simply ensuring price stability and budgetary discipline as advocated by the Washington Consensus.
- Many countries have adopted narrow, constantly tight macroeconomic policies, along with liberalization of trade and privatization programmers, which have tended of growth and employment creation.

Conclusion:

In conclusion, this paper provided a detailed description of the factors that caused the global economic crisis and subsequent articles would look at the various causal factors, types of crises, biggest economic crisis in the global world, effect on the people along with recommendations how to resolve the crisis. we can see that crisis had an enormous impact from various angles such as economic, political, social, psychological, and impact on the relationship between two countries. Government policymakers are also seen to have succeeded in helping the government overcome this problem by establishing several new acts.

References:

Brue, S. L. Flynn, S. M.,& McConneell, C. R. (2011)., Economic principle, problems and policies. (19ed.), New York, NY: McGraw-Hill Lrwin.

Isidore, C. (2008, December 1). It’s official: Recession since Dec. ’07. CNNMoney. Retrieved March 4,2014.

IMF, 2006, Global Financial Stability Report, September 2006, www.imf.org.

IMF, 2007, Global Financial Stability Report, October 2007, www.imf.org.

IMF, 2009, Global Financial Stability Report, April 2009, www.imf.org.

The Financial crisis of 2007-2008., A Review of the Timeline and of its Causes.

Sebastian D & Detlef J. & Alejandro M & Jan P.,(December 2010)., “The financial and economic crisis of 2008-2009 and developing countries”., United Nations publication (CH-1211), New York and Geneva.

Willis, B. (2009, august 9). U.S. Recession Worst Since Great Depression, Revised Data Show. Bloomberg.com.

09

English: Succession of Language to the World of Communication

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Abstract

Let's imagine that a foreigner has arrived to our native and we meet the person accidently. The foreigner isn't aware of any local languages, still we manage to communicate with him in English. The global acceptance of this language helps us to communicate with the foreigner. The beauty of the language is its usage with different kinds of sounds and pronunciation all over the world. Though, we use standard English all over, the way of expression changes with different countries due to the reason that the mode of teaching differs with easiness of the language. It matters about how oneis taught and how one's accessibility to the language is.

English is one of the most widely used languages all across the globe for different purposes such as English is vital in the technical fields such as business, a virtual mode of communication, the methodology of teaching, improvement of science and technology, systematic method of organization and the mode of command. In India we also call English as British language. The reason behind this may be that the English was introduced in India after Britishers had conquered India. Since then, English has become one of the better modes of propagation in India for different kinds of purposes that serve in different fields.

The main objective of the paper is to know about how English as a language plays a vital role in the communication for new generation. The article mainly focuses on the importance of English, meaning of communication, the succession of the language and English as a bridge to the world of communication.

Key Words: English Language, Succession, World of Communication.

Introduction

English is one of the well-known languages having a history of thousand years. We know so many poets, literates, script writers etc. who enriched the beauty of the language through their work. Among them, shakesphere, one of the oldest English playwrights, poets and actors, is the one who has inspired the world with his famous plays such as Hamlet, Romeo and Juliet, Tempest, The Merchant of Venice and so on. The mention of shakesphere brings out to the context that English has been glorified since ages and the language and it is continuously being updated and upgraded. Moreover the language is found to be easier to glorify the content and the characters which have provided the scope to English which is also a part of consideration. There is a large contribution on whole to the field of English literature marking the language as more successful in recent times.

Importance of English

Certainly when someone asks what's the importance of English? We definitely would say that its one of the most used languages across the globe. But we don't speak about the language on whole neither its history nor the reason behind. This is because it has been just taught as a language regardless of its importance or its benefits in future. The main reason is that we focus on teaching and completing the syllabus. We should see that it shall be taught based on its importance.

Teaching English should not be only of knowledge but it should be from whole to part (i.e. in action) making people learn through action which has following benefits:

- Builds up the personality.
- The way of communication can be implemented at an young age.
- Cultivation of gestures during conversation can be developed.
- The accent can be improved.
- The command of language can help people to be more approachable towards oneself.

What is the success of the language?

The real world we are living in is the best example of success of the language. It is a question of how it began. It is the earliest poets and playwrights who made this possible. They enquoted their thoughts through writing small poems, sonnets, plays etc. This made a remarkable change. As the technology began to improve all over the world, the poems, sonnets and article started to cross the country border and people started to read these overseas. Then began the era of new world to the communicaton. Though in the initial stage the analization was quite difficult but the introduction of dictionaries made it possible.

The success of the language can be explained as follows:

- ✓ It is one of the most widely used languages and quoted as "Global Language".
- ✓ Provides the scope of attraction towards idea in easier way.
- ✓ Helps people to understand the basic things in a helpful way.
- ✓ Builds up a strong base towards the communication in establishing projects.
- ✓ Helped people who travel across to know a common language to communicate.
- ✓ Now-a-days area of interest is the Robotics communication that is making a huge difference in the field in the linguistics.

English as a bridge to the world of communication

English enables a very important role in today's generation. It has increased the efficiency of changing technology by several times.

It could be said by the following reasons that:

- Access of the language as given a wider opportunity in the space of technology and science.
- It is the standard language used in the hiring process.
- Helps to put up your thoughts in front of the world.
- It is a better way to express emotions, ideas, communicate and bring about a change.
- Improvement in the space of the international communication that brings up different nations together to build up strong business community.
- Inter and Intra billing of import and export of goods is made possible.
- Establishing the relationships between countries is more enjoyable.

Conclusion

It finds very difficult to glue up the subject since, language is never ending part of the life style of people and the speeding up the usage of language in different fields has been increasing. The findings could be:

- ➢ The task to boost up communication in English should be made effective.
- ➢ Special training to the local people who aren't aware of the language should be given a special preference about teaching a language.

- It provides a scope for the development of a nation by educating people.
- Provides people with basic turn up on the language and this might also lead to even new start ups.
- Supports aid systems in a company to motivate workers with a new approach towards learning standard pronunciation and speeding up the vocabulary.

References

1. en.m.wikipedia.org.
2. www.jlet.org
3. Teaching English language- T.N.Raju
4. www.gosa.georgia.gov
5. Internet source, Articles by Dr.G.R.Sinha
6. www.thedigitalteacher.com
7. Roberts; J. 1998, language teacher education, London, Arnold.

10

‘અતરાપી’ નવલકથામાંથી નિષ્પન્ન થતાં મૂલ્યો

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સારાંશ

પ્રસ્તુત અભ્યાસમાં ‘અતરાપી’ નવલકથામાંથી મૂલ્યો નિષ્પન્ન કરવામાં આવ્યા છે. ઉપકરણ તરીકે કાર્યપત્રકની રચના કરવામાં આવી હતી. અભ્યાસનું વ્યાપવિશ્વ ‘અતરાપી’ નવલકથા હતું અને આ નવલકથાનાં તમામ પ્રકરણો નમૂના તરીકે લીધેલા છે. સંશોધન ક્ષેત્ર તરીકે ‘શિક્ષણનું તત્વજ્ઞાન’ અને ‘મૂલ્યશિક્ષણ’ હતું. સંશોધનનો પ્રકાર ગુણાત્મક સંશોધન હતો તેમજ સંશોધન પધ્ધતિ તરીકે વર્ણનાત્મક સંશોધનના પેટા પ્રકાર તરીકે વિષયવસ્તુ પૃથક્કરણ પ્રયુક્તિ તેમજ ગુણાત્મક સંશોધન પધ્ધતિનો ઉપયોગ થયો હતો. ‘અતરાપી’ નવલકથાના 24 પ્રકરણમાંથી કાર્યપત્રકો તૈયાર કરી તજ્જ્ઞોની મુલાકાત લીધી હતી. તજજ્ઞીય અભિપ્રાય દ્વારા સૂચવેલા સૂચનો પ્રમાણે જરૂરી સુધારા કર્યા હતા અને વિષયવસ્તુ એકમ માટે સંદર્ભ સાહિત્ય દ્વારા માહિતી મેળવવામાં આવી હતી. ‘અતરાપી’ નવલકથા માંથી નિષ્પન્ન થતાં મૂલ્યોનું વર્ગીકરણના અંતે આધ્યાત્મિક મૂલ્ય, નૈતિક મૂલ્ય, સામાજિક મૂલ્ય, વ્યક્તિગત મૂલ્ય, રાષ્ટ્રીય મૂલ્ય જેવા પાંચ મૂલ્યો નિષ્પન્ન થયા હતા.

૧.૦ પ્રસ્તાવના

શિક્ષણ કે જે સાર્વત્રિક, સહજ અને પોતાના અનુભવોમાંથી પ્રાપ્ત થતી પ્રક્રિયા છે. વિશાળતા તેનો એક ગુણધર્મ છે. “સોટી વાગે ચમ-ચમ વિદ્યા આવે ધમ-ધમ” આ સોટીના પરિણામે ઘણા વિદ્યાર્થીઓ પ્રતિભાશાળિ બન્યા છે. જેમ લાદેલું શિસ્ત ફરજિયાત હોય છે, તેમ આ સોટી વાળું ભણતર પણ આગ્રહપૂર્વકનું હોય તેવું લાગે છે. તેનાથી તદ્દન અલગ એવું અનુભવોનું શિક્ષણ છે. વિશ્વના કણ-કણ મા જ્ઞાન રહેલું છે. કઇંક જાણ્યા પછી પણ કઇંક જાણવાનું રહી જાય છે. એટલેકે બધુ ભેગું કરવા છતાં પણ કઇંક છૂટી જ જાય છે. “અતરાપી” નવલકથા કે જેમાં સુવ્યવસ્થિત ઢબનું શિક્ષણ અને તેની સામે રોજ-બરોજના અનુભવોથી મેળવેલા શિક્ષણનો આદર્શ ખ્યાલ રજૂ કર્યો છે.

એવું કહી શકાય કે બાળકને જો સમાજનું અભિન્ન અંગ બનાવવું હોય તો તેને સમાજને જ સોંપી દેવું. સમાજ જ તેનો ઉછેર કરશે. આપણે સૈધ્ધાંતિક રીતે વ્યવહારલક્ષી શિક્ષણને મૂલવીએ છીયે, પરંતુ જો તેને વાસ્તવિક સ્થાન મળે તો ખરા અર્થમાં શિક્ષણ દ્વારા વ્યક્તિ શિક્ષિત થાય. શિક્ષણ એવું કે જે

વિદ્યાર્થીને મુક્ત થતાં શીખવે. પ્રકૃતિ જ પ્રત્યેકના મૂળમાં છે. માટે જ્ઞાન શોધવા ન જતાં તેની અનુભૂતિ થાય તેજ સાચું જ્ઞાનોપાર્જન છે.

૨.૦ અભ્યાસના હેતુઓ

પ્રસ્તુત સંશોધન અભ્યાસ પાછળના હેતુઓ આ પ્રમાંણે હતા.

૧. 'અતરાપી' નવલકથામાંથી નિષ્પન્ન થતાં મૂલ્યો જાણવા

૩.૦ શબ્દોની વ્યવહારુ વ્યાખ્યા

આ સંશોધનમાં જે ચલો કે પદોનો સમાંવેશ કરવામાં આવ્યો હતો, તેની વ્યાવહારિક વ્યાખ્યાઓ આ મુજબ છે.

- **મૂલ્ય.** મૂલ્ય એટલે કિંમત, ઉપયોગી, મહત્વનું, કે ગુણવત્તા. અહીં કિંમત શબ્દ આર્થિક કિંમતના સંદર્ભમાં નથી.
- **અતરાપી.** અતરાપી એ લેખક ધ્રુવભટ્ દ્વારા લખાયેલી નવલકથા છે. જેની પ્રથમ આવૃતિ 2001 માં થયેલી. 'અતરાપી' શબ્દનો અર્થ અજાણ્યું કે બહારનું એવો થાય છે.

૪.૦ ઉપકરણ

પ્રસ્તુત અભ્યાસમાં ઉપકરણ તરીકે કાર્યપત્રકની રચના કરવામાં આવી હતી. કાર્યપત્રકમાં સમાવિષ્ટ મુદ્દાઓ આ પ્રમાણે હતા.

1. 'અતરાપી' નવલકથાના પ્રકરણનો ક્રમાંક
2. આધારવકયો
3. અર્થઘટન
4. મૂલ્યો
5. નોંધ

૫.૦ વ્યાપવિશ્વ અને નમૂનો

કોઈપણ સંશોધન માહિતીના આધારે થાય છે. તેના માટે જીણવટ ભરી માહિતી મેળવવામાં આવે છે. નમૂનો કેટલો લેવો તે માટે વ્યાપવિશ્વ જાણવું આવશ્યક છે. પ્રસ્તુત અભ્યાસનું વ્યાપવિશ્વ 'અતરાપી' નવલકથા છે. આ નવલકથાનાં તમામ પ્રકરણો નમૂના તરીકે લીધેલા હતા.

૬.0 સંશોધનનું ક્ષેત્ર

પ્રસ્તુત સંશોધનનું ક્ષેત્ર મુખ્ય નિર્દેશ કાર્યનું હોવાથી પ્રસ્તુત સંશોધન ક્ષેત્ર 'શિક્ષણનું તત્વજ્ઞાન' અને 'મૂલ્યશિક્ષણ' હતું.

૭.0 સંશોધનનો પ્રકાર

પ્રસ્તુત સંશોધનનો પ્રકાર ગુણાત્મક સંશોધન હતો. કારણ કે અહીં સંશોધકે 'અતરાપી' નવલકથામાંથી નિષ્પન્ન થતાં મૂલ્યોની તારવણી કરેલ છે. જે શિક્ષકને અધ્યાપનકાર્ય દરમ્યાન શૈક્ષણિક સંદર્ભો તરીકે ઉપયોગી થશે.

૮.0 સંશોધન પધ્ધતિ

પ્રસ્તુત અભ્યાસમાં પ્રયોજકનો હેતુ 'અતરાપી' નવલકથા માંથી નિષ્પન્ન થતાં મૂલ્યોની તારવણી કરવાનો હતો. આથી અભ્યાસના હેતુ અને વ્યાપના સંદર્ભમાં સંશોધન પધ્ધતિ તરીકે વર્ણનાત્મક સંશોધનના પેટા પ્રકાર તરીકે વિષયવસ્તુ પૃથક્કરણ પ્રયુક્તિ તેમજ ગુણાત્મક સંશોધન પધ્ધતિનો ઉપયોગ થયો હતો.

૯.0 માહિતીનું એકત્રીકરણ

પ્રસ્તુત સંશોધનમાં સંશોધકે 'અતરાપી' નવલકથાનો અભ્યાસ કર્યો હતો. 'અતરાપી' નવલકથાના 24 પ્રકરણમાંથી કાર્યપત્રકો તૈયાર કરી તજ્જ્ઞોની મુલાકાત લીધી હતી. તજજ્ઞીય અભિપ્રાય દ્વારા સૂચવેલા સૂચનો પ્રમાણે જરૂરી સુધારા કર્યા હતા અને વિષયવસ્તુ એકમ માટે સંદર્ભ સાહિત્ય દ્વારા માહિતી મેળવવામાં આવી હતી.

૧૦.0 માહિતીનું પૃથક્કરણ

પ્રસ્તુત અભ્યાસમાં પ્રાપ્ત માહિતી આધાર સ્વરૂપે હતી. આ આધાર વકયોમાં વિષયવસ્તુ પૃથક્કરણ કરવા માટે માહિતીનું પૃથક્કરણ આ પ્રમાણેના તબક્કામાં કરવામાં આવ્યું હતું.

1. સૌ પ્રથમ નવલકથાનું વાંચન કરવામાં આવ્યું હતું.
2. ઉપકરણ તરીકે કાર્યપત્રકની રચના.
3. પ્રકરણોમાંથી આધારવાક્યોની તારવણી અને અભ્યાસ કર્યો.
4. કાર્યપત્રકમાં સમાવિષ્ટ આધાર વાક્યો, વકયોના અર્થઘટન દ્વારા વાક્યોમાંથી મૂલ્યોની તારવણી કરી તે અંગે તજ્જ્ઞો પાસેથી અભિપ્રાયો મેળવ્યા.
5. ગુણાત્મક સંશોધનની વિષયવસ્તુ પૃથક્કરણ પધ્ધતિનો ઉપયોગ કરી માહિતીનું વિશ્લેષણ કરવામાં આવ્યું હતું.

૧૧.૦ અર્થઘટન

મૂલ્ય નિર્દેશ હોય તેવા પસંદીત આધાર વાક્યો સારણીમાં રજૂ કરવામાં આવેલ છે.

સારણી - 1

પ્રકરણ ક્રમ	આધારવાક્યો	મૂલ્યો	પેટા મૂલ્ય
૧	હું તો રોજ કઇંકનું કઇંક નવું શીખું જ છું.	નૈતિક મૂલ્ય	નિખાલસતા
૨	બહાર આવડું મોટું વિશ્વ પથરાયેલું હશે તેની તેને કલ્પના પણ નહિ હોય.	આધ્યાત્મિક મૂલ્ય	પ્રકૃતિ ચિત્રણ
	એટલે જાણ્યા પછી પણ કઇંક જાણવાનું તો બાકીજ રેહતું હોય છે. કેવું મજાનું!	આધ્યાત્મિક મૂલ્ય	આનંદ
૪	પ્રશ્ન તો ચિત્તમાં થવા જોઈએ, જાગવા જોઈએ, મનમાં ઉઠવા જોઈએ, પ્રશ્ન તો ઠીક જવાબો પણ વાંચવા કે ન વાંચવા, કંઠસ્થ કરવા કે ન કરવા તે કોઈના પણ માટે ત્યારેજ મહત્વનુ બને જ્યારે તેને પ્રશ્ન થાય.	આધ્યાત્મિક મૂલ્ય	આધ્યાત્મિક ડાહપણ
	કોઈના બનવું કે કોઈના હોવું તે જીવના પોતાના નિર્ણયથી જ હોય છે. બીજાના નિર્ણયોથી નહિ.	નૈતિક મૂલ્ય	નૈતિક હિંમત
૫	નદી તો સતત વહેતી હોય. નદી અહી છે. એટલુ કહીએ તો ત્યાં નદી ચાલી ગઈ હોય. આજની નદી કાલ દરિયો બની ગઈ હોય પછી વાદળ...	આધ્યાત્મિક મૂલ્ય	પ્રકૃતિ ચિત્રણ
	જો નદી છે. તેવું માનું તો હું નાવિક છું. આ નાવ છે અને તેને ચલાવ્યા કરવી તે મારો ધર્મ છે.	વ્યક્તિગત મૂલ્ય	શ્રમનું ગૌરવ

	જો નદી નથી તે સ્વીકારું તો હું નાવિક પણ નથી અને નાવ પણ નથી. તેવું મારે સ્વીકારવું જોઈએ અને કઇં ન હોવા છતાં નાવ ચલાવ્યા કરવી મારો ધર્મ છે.	**નૈતિક મૂલ્ય**	**નીતિમય વ્યવહાર**
	જેને નદી કહેવાય તે ખરેખર શું છે? તે ઘડીથી આ નાવ નથી, હું નાવિક નથી, તું મુસાફર નથી. આ બધુ શું છે? તે મારે શોધવું છે.	**આધ્યાત્મિક મૂલ્ય**	**તપશ્ચર્યા**
૭	હું ધર્મ વિશે માણસોની રીત જાણતો નથી.	**નૈતિક મૂલ્ય**	**નિખાલસતા**
૮	આ અરણ્ય સિવાયનું જગત પણ છે. તે હજી ગલૂડિયાને ખબર નથી.	**આધ્યાત્મિક મૂલ્ય**	**પ્રકૃતિ ચિત્રણ**
	ગાડરમાં વરુ પડતો ત્યારેતો રણચંડી બની જતી.	**વ્યક્તિગત મૂલ્ય**	**જુસ્સો**
	એમ કરવું મને જરૂરી નથી લાગતું.	**વ્યક્તિગત મૂલ્ય**	**વ્યક્તિ સન્માન**
	તમામ જીવો જન્મથી મુક્ત જ હોય છે.	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક ડાહપણ**
૯	માણસો વિશે ક્યારેય પૂર્વધારણા ન બાંધવી.	**વ્યક્તિગત મૂલ્ય**	**વ્યક્તિ સન્માન**
	સ્વ નું શુધ્ધ સ્વરૂપ તે જ તો પરમતત્વ છે.	**આધ્યાત્મિક મૂલ્ય**	**બ્રમ્હનિષ્ઠા**
૧૦	પોતે જ્યાં રહેતો હોય ત્યાં કઈ ખોટું કામ ન થાય તેનું ધ્યાન રાખવાનું તો કુતરાનાં સ્વભાવમાં છે. અને તે જ હું અત્યારે કરી રહ્યો છું.	**નૈતિક મૂલ્ય**	**પ્રમાણિકતા**
૧૧	તળાવનો પાળો તૂટે એમ છે જો ખેતરમાં પાણી ભરાઈ જશે તો બહુ જીવો મરી જશે.	**સામાજિક મૂલ્ય**	**લોકસેવા**
૧૨	હારી જવું એ ચપળ અને બહાદૂર સરમાંનાં સ્વભાવમાં ન હતું.	**વ્યક્તિગત મૂલ્ય**	**જુસ્સો**
	સંસાર છોડવાનું એને કેહવાય જે સંસારમાં હોય આને હું શું કેહવાની? એનું મન કશાયમાં નથી.	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક ડાહપણ**
૧૩	બધા ગલૂડિયાને તેની ખૂબી અને ખામીઓથી પર જઈને એકસરખો પ્રેમ કર.	**સામાજિક મૂલ્ય**	**કરુણા**
	વિચાર ભાષા કે બોલી રૂપે પ્રગટે તે પેહલા તે તેના ઉદ્દગમનાં	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક**

	પ્રદેશોમાંથી વહીને સીધો જ પ્રકૃતિને પહોચી જતો હોય છે.		ડાહપણ
	આહિ જે મિલકત છે. તેમાં ખુલ્લી જમીન સિવાયના ભાગમાં કોઈ ફેરફાર ન કરવાની શરત જેને માન્ય હોય તેને આ મિલકત મળે. આપમેળે ન સુકાય ત્યાં સુધી અહીનું કોઈ વૃક્ષ કાપવું નહિ તે શરત જેને માન્ય હોય તેને આ મિલકત મળે.	**રાષ્ટ્રીય મૂલ્ય**	**પર્યાવરણની જાળવણી**
૧૪	ઘણા આવજોમાંથી જે સાંભળવા યોગ્ય લાગ્યું તે મે સાંભળ્યુ છે હું હંમેશા જે કહેવા ઇચ્છતો હતો તે જ બોલ્યો છું. દ્રષ્ટિ સામે આવેલું તમામ મે ધ્યાનપૂર્વક જોયું છે. અને મે જાણ્યું છે કે હું જાણતો નથી.	**નૈતિક મૂલ્ય**	**નિખાલસતા**
	કોઈ શીખવાડતું ન હોય ત્યારે પણ આપણે શિખતા હોઇએ છીયે.	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક ડાહપણ**
૧૬	તું હડકાયો થા અને તને હડકવા થાય તે બંને જુદી જ વાત છે. પણ આવું સમજવું માણસો માટે અઘરું ગણાય.	**સામાજિક મૂલ્ય**	**કરુણા**
	હું ઈચ્છું કે તને હડકવા થાય તો પણ આ વર્ણન જેવુ કશું જ તને ન થાઓ.	**નૈતિક મૂલ્ય**	**અંતગર્ત શુધ્ધતા**
૧૭	કોઈપણ દાતા એ આપેલી ચીજ પર આપણો કોઈ અધિકાર નથી. શી રીતે આપવું તે નક્કી કરવા જેટલો પણ નહિ. આપણે તો માત્ર સાધન બનીને કરવાનું રહે તે શ્રેષ્ઠ રીત ગણાય.	**નૈતિક મૂલ્ય**	**પ્રામાણિકતા**
૧૮	કંઈ પણ છોડવા કે નવું કરવા માટે અન્યની આજ્ઞા શા માટે લેવી પડે ?	**વ્યક્તિગત મૂલ્ય**	**સ્વશક્તિ**
૨૦	જીવવા માટે જરૂરી હોય તેથી વધુ કઈ પણ મારે ન ખપે	**વ્યક્તિગત મૂલ્ય**	**ઇન્દ્રિયો પર કાબૂ**
	પ્રકૃતિએ આપણને અલગ અલગ અસ્તિત્વ આપીને મોકલ્યા છે. સમાન રીતે વર્તવું આપણાં માટે શક્ય કેમ કરી બને ?	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક ડાહપણ**
૨૧	પટ્ટા વગર રેહવા માટે પટ્ટો ત્યાગવો જરૂરી નથી.	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક ડાહપણ**
૨૩	હું તો હંમેશા ચાર પગે જ ચાલ્યો છું. ભૂમિને સમાંતર. વળી હું સમજ્યો છું કે પૃથ્વીથી થોડે ઊંચે જતાં જ ઊર્ધ્વ કે અધ: જેવુ કશું હોતું નથી. બધુ સામે રહે છે.	**આધ્યાત્મિક મૂલ્ય**	**આધ્યાત્મિક ડાહપણ**

૧૨.૦ તારણો

પ્રાપ્ત પરિણામોની સમિક્ષા મુખ્યત્વે 'અતરાપી' નવલકથા માંથી પ્રાપ્ત મૂલ્યના સંદર્ભમાંથી કરવામાં આવ્યા હતા. પ્રસ્તુત અભ્યાસમાં 'અતરાપી' નવલકથા માંથી નિષ્પન્ન થતાં મૂલ્યોનું વર્ગીકરણ કરી કેવા પ્રકારના મૂલ્યોનું પ્રમાણ વધારે છે અને કેવા મૂલ્યો ઓછા પ્રમાણમાં જોવા મળે છે તે જાણવા મળ્યું હતું. મુખ્ય તારણો આ પ્રમાણે હતા.

1. 'અતરાપી' નવલકથા માંથી નિષ્પન્ન થતાં મૂલ્યોનું વર્ગીકરણના અંતે આધ્યાત્મિક મૂલ્ય, નૈતિક મૂલ્ય, સામાજિક મૂલ્ય, વ્યક્તિગત મૂલ્ય, રાષ્ટ્રીય મૂલ્ય જેવા પાંચ મૂલ્યો નિષ્પન્ન થયા હતા.
2. 'અતરાપી' નવલકથા માંથી નિષ્પન્ન થતાં મૂલ્યો અને તેના મૂલ્યોના પેટા મૂલ્યો પણ તારવવામાં આવ્યા હતા. જેમાં વ્યક્તિગત મૂલ્યના 7 , સામાજિક મૂલ્યના 3, રાષ્ટ્રીય મૂલ્યના 1, નૈતિક મૂલ્યના 8, આધ્યાત્મિક મૂલ્યના 14 પેટા મૂલ્યો પ્રાપ્ત થયા હતા.

૧૩.૦ શૈક્ષણિક ફલિતાર્થો

1. વિદ્યાર્થીઓને અનુભવો દ્વારા શિક્ષણ પૂરું પાડવું.
2. વિદ્યાર્થીઓ સ્વ-શિક્ષણ મેળવી શકે તેવું વાતાવરણ આપવું.
3. બળજબરી પૂર્વકનું શિક્ષણ જ્ઞાન જન્માવતું નથી એ માત્ર માહિતીપ્રાપ્તિ સુધી સીમિત રહે છે. માટે જ્ઞાન પ્રાપ્ત કરવા વિદ્યાર્થીઓને જ્ઞાનના ઉપાસક બનાવવા.
4. 'સ્વ થી સર્વ' સુધીની યાત્રા કરવા માટે સમભાવના, સર્વસ્વીકૃતિ અને સમસંવેદના વિદ્યાર્થીઓમાં વિકસાવવી.
5. આધ્યાત્મિકતા વ્યક્તિના આચરણમાં હોવી જોઈએ એ બાબતથી વિદ્યાર્થીઓને અવગત કરાવવા.
6. પ્રત્યેક જીવ પોતાની આગવી વિશેષતા લઈને જન્મ્યો છે. માટે તેની પ્રતિભા ખિલાવવા માટે દિશાનિર્દેશક બની રેહવું.

સંદર્ભ સૂચિ

ઉચાટ, ડી. એ. (૨૦૧૨). **શિક્ષણ અને સામાજિક વિજ્ઞાનોમાં સંશોધનનું પધ્ધતિશાસ્ત્ર (દ્વિતીય આવૃતિ).** રાજકોટ: પારસ પ્રકાશન

ઉચાટ, ડી. એ અને અન્યો (૨૦૦૬). **શૈક્ષણિક સંશોધનોના સારાંશ.** રાજકોટ : શિક્ષણશાસ્ત્ર ભવન, સૌરાષ્ટ્ર યુનિવર્સિટી.

ઉચાટ, ડી. એ (૨૦00). **સંશોધન વિશિષ્ટ પધ્ધતિઓ .** રાજકોટ : શિક્ષણશાસ્ત્ર ભવન, સૌરાષ્ટ્ર યુનિવર્સિટી.

જોશી, એચ. ઓ. (૨૦૦૯). **સંશોધન એહવાલની લેખન ભૂલો (દ્વિતીય આવુતિ).** રાજકોટ : આશુતોષ પ્રકાશન

ભટ્ટ, ડી. (૨૦૧૨). **અતરાપી. અમદાવાદ : વબર્ગ પ્રકાશન**

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A Study of Opinions of Secondary School Teachers towards Continuous and Comprehensive Evaluation

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[1]Guide and [2]Researcher

Abstract

Continuous and Comprehensive Evaluation (CCE) refers to a system of school-based assessment of students that covers all features of student development. In present study, the researcher studied the opinions of secondary school teachers regarding Continuous and Comprehensive Evaluation. For present study, the researcher constructed an opinionnaire for secondary school teachers towards Continuous Comprehensive Evaluation. In this opinionnaire, the researcher constructed 30 items. The researcher selected a sample of 73 secondary school teachers from east and west area of Ahmedabad city. The researcher constructed three hypotheses as mentioned above. These hypotheses were checked using t-tests. The research revealed that the secondary school teachers of east area have more positive opinions towards CCE than teachers of west area. The research also revealed that there was no effect of gender and experience on opinions.

Introduction

When we started the modern education system, we created different types of education commissions every year to develop it. Our teachers tried to create a good education system. A new wave of revolution is spreading in school level education and it is on the education system to achieve a good educational goal.

Learners is not able to develop himself with all his strength due to reframing, copy etc.The plants need ploughing, fertilizer and water at proper time and in proper quantity for better growth. In the same way, a new educational system is needed change with new generation. Continuous and Comprehensive Evaluation (CCE) is modern evaluation system. This CCE creates mental development, physical development, economic development, vocational development, and environment development in child of secondary school. Teachers, principals and educators takes the challenge for creative children of 21st century.CCE system is created for total development of child.

In present study, the researcher studied the opinions of secondary school teachers regarding Continuous and Comprehensive Evaluation (CCE).

Continuous and Comprehensive Evaluation

The purpose of education is to enable children to be responsible, productive and useful members of society. Knowledge skills and attitudes are created through learning experiences and opportunities created for learners in school. Continuous and Comprehensive Evaluation (CCE) is an assessment process mandated by the Right to Education Act of India in 2009. This approach to assessment was introduced by the state governments in India as well as by the Central Board of Secondary Education in India. Sixth to tenth standard and twelfth standard students in some schools. This will allow younger class students to practice board exams at an early age. The CCE method was claimed to bring major changes from the traditional chalk and teaching talk method, although it was implemented accurately.

As part of this system, students' marks were replaced by grades that were assessed by a range of academic and extracurricular assessments. The aim was to reduce the workload on the student through continuous assessment by taking a number of small tests throughout the year instead of a single test at the end of the academic program. Students were graded only on the basis of work experience skills, dexterity, innovation, consistency, teamwork, speaking in public, behavior, etc. to evaluate and present the overall measure of student ability. This helps students who are not good at pedagogy to show their talents in other fields like arts, humanities, sports, music, athletics and also helps to encourage students who are thirsty for knowledge.

Objectives of the Study

Objectives of present study are as follow.

1. To study the opinions of secondary school teacher regarding CCE programme.
2. To study the opinions of secondary school teacher regarding CCE programme in the context of area.
3. To study the opinions of secondary school teacher regarding CCE programme in the context of gender.
4. To study the opinions of secondary school teacher regarding CCE programme in the context of experience.

Hypotheses

$H0_1$ There is no significant difference between mean scores of opinionnaire obtained by secondary school teachers of east and west area.

$H0_2$ There is no significant difference between mean scores of opinionnaire obtained by male and female secondary school teachers.

$H0_3$ There is no significant difference between mean scores of opinionnaire obtained by secondary school teachers having experience up to 10 years and more than 10 years.

Research Method

Research methods are strategies, processes or techniques that are used in the collection of information or evidence for analysis to uncover new information or to create a better understanding of the subject. There are different types of research methods that use different tools for data collection. In present study, the researcher used descriptive survey method.

Research Tool

For present study, the researcher constructed an opinionnaire for secondary school teachers towards Continuous Comprehensive Evaluation. In this opinionnaire, the researcher constructed 30 items. Each item has three responses: 1) Agree, 2) Neutral and 3) Disagree.

Sample of the Study

The researcher selected a sample of 73 secondary school teachers from east and west area of Ahmedabad city. Researcher used snow ball technique in selection of sample. The final sample of study was as follow.

Table 1.0 Sample of the Study

Area	East		West		Total
Gender/ Experience	**Male**	**Female**	**Male**	**Female**	
Up to 10 years	7	9	8	5	29
More than 10 years	9	12	10	13	44
Total	16	21	18	18	**73**
	37		**36**		

Data Collection

The researcher constructed an opinionnaire for secondary school teachers towards opinions regarding continuous and comprehensive evaluation system. The researcher created google forms and gave link to secondary school teacher of Ahmedabad city. In this process researcher used snow ball technique in data collection. In this technique, the researcher gave link of google form to some secondary school teachers, these teachers spread google link to another teachers and thus whole data collection was obtained in the form of excel sheet.

Data Analysis

The researcher constructed three hypotheses as mentioned above. These hypotheses were checked using t-tests. The results of t-tests are obtained as mentioned in below tables.

$H0_1$ There is no significant difference between mean scores of opinionnaire obtained by secondary school teachers of east and west area.

Table 2.0 Result of t-test between mean scores of by teachers of east and west area

Area	N	M	SD	SED	t	Significance
East	37	69.64	5.20	1.25	7.30	0.01
West	36	60.54	5.46			

df	0.05	0.01
71	1.99	2.65

According to table 2.0, calculated t-value is 7.30, table t-values for df=71 are 1.99 at 0.05 level and 2.65 at 0.01 level. Calculated t-value is more than table t-values at both levels. Therefore, hypothesis is rejected and there is a significant difference between mean scores of opinionnaire obtained by secondary school teachers of east and west area. Moreover, mean score of teachers of east area is more than mean score of teachers of west area. Thus, it is revealed that the secondary school teachers of east area have more positive opinions towards CCE than teachers of west area.

$H0_2$ There is no significant difference between mean scores of opinionnaire obtained by male and female secondary school teachers.

Table 3.0 Result of t-test between mean scores of by male and female teachers

Gender	N	M	SD	SED	t	Significance
Male	34	64.26	5.41	1.25	1.32	NS
Female	39	65.92	5.24			

df	0.05	0.01
71	1.99	2.65

According to table 3.0, calculated t-value is 1.32, table t-values for df=71 are 1.99 at 0.05 level and 2.65 at 0.01 level. Calculated t-value is less than table t-values at both levels. Therefore, hypothesis is not rejected and there is no significant difference between mean scores of opinionnaire obtained by male and female secondary school teachers. Thus, it is revealed that the opinions towards CCE of male and female secondary school teachers are similar.

H0₃ There is no significant difference between mean scores of opinionnaire obtained by secondary school teachers having experience up to 10 years and more than 10 years.

Table 4.0 Result of t-test between mean scores of by teachers having experience up to 10 years and more than 10 years

Experience	N	M	SD	SED	t	Significance
Up to 10 years	29	65.28	5.39	1.28	0.29	NS
More than 10 years	44	64.91	5.26			

df	0.05	0.01
71	1.99	2.65

According to table 3.0, calculated t-value is 0.29, table t-values for df=71 are 1.99 at 0.05 level and 2.65 at 0.01 level. Calculated t-value is less than table t-values at both levels. Therefore, hypothesis is not rejected and there is no significant difference between mean scores of opinionnaire obtained by secondary school teachers having experience up to 10 years and more than 10 years. Thus, it is revealed that the opinions towards CCE of secondary school teachers having experience up to 10 years and more than 10 years are similar.

Findings

Major findings of this study are obtained as mentioned below.

1. The secondary school teachers of east area have more positive opinions towards CCE than teachers of west area.
2. The opinions towards CCE of male and female secondary school teachers are similar.
3. The opinions towards CCE of secondary school teachers having experience up to 10 years and more than 10 years are similar.

Conclusion

In present study the researcher studied the opinions of secondary school teachers of Ahmedabad city towards Continuous and Comprehensive Evaluation system. The researcher constructed an opinionnaire for secondary school teachers. The research revealed that the secondary school teachers of east area have more positive opinions towards CCE than teachers of west area. The research also revealed that there was no effect of gender and experience on opinions.

References

Anastasi, A. & Urbina, S. (2016), *Psychological Testing (7th Ed.)*. Noida: Pearson Education India.

Best, J. W. & Kahn, J. V. (1989). *Research in Education*. New Delhi: Prentice-Hall of India Pvt. Ltd.

Cronbach, L. J. (1990). *Essentials of Psychological Testing*. New York: Harper Collins Publishers.

Garrett, H. E. (1981). *Statistics in Psychology and Education*. Mumbai: Vakil Fetter and Simons Pvt. Ltd.

Jayalakshmi, A. V. (2018). *A Study on the Implementation of Continuous and Comprehensive Evaluation in CBSE schools*. Vadodara: M. S. University, Baroda.

Malhotra, R. (2013). *Continuous and Comprehensive Evaluation at Elementary Level in Himachal Pradesh: An Evaluative Study*. Shimla: Himachal Pradesh University.

Wagi, A. (2007). *An Evaluative Study of Continuous and Comprehensive Evaluation Scheme (CCE)*. Srinagar: The University of Kashmir.

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માધ્યમિક શાળાઓના વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની અસરનો અભ્યાસ

[1]ડૉ. મનોજ સી. શાસ્ત્રી અને [2]ગાયત્રીબેન બી. સાધુ
[1]માર્ગદર્શક અને [2]પીએચ.ડી. સ્કોલર, શિક્ષણ શાસ્ત્ર ભવન, ગુજરાત યુનિવર્સીટી, અમદાવાદ.

પ્રસ્તાવના

અધ્યાપન-અધ્યયન પ્રક્રિયા એ ખૂબ જટિલ પ્રક્રિયા છે. જે દ્રીધ્રુવી પ્રક્રિયા છે. તેનો એક ધ્રુવ શિક્ષક અને બીજો ધ્રુવ વિદ્યાર્થી હોય છે. જો આ બંને ધ્રુવો વચ્ચે યોગ્ય પ્રત્યાયન ન થાય તો અધ્યાપન-અધ્યયનની પ્રક્રિયા પણ યોગ્ય રીતે થઇ શક્તિ નથી. સામાન્ય રીતે જયારે વિદ્યાર્થીઓને રૂઢિગત વ્યાખ્યાન પદ્ધતિથી શીખવવામાં આવે ત્યારે અધ્યાપન-અધ્યયનની પ્રક્રિયા એક તરફી બની જાતિ હોય છે.

હેતુઓ

પ્રસ્તુત સંશોધનના હેતુઓ નીચે મુજબ છે.

1. માધ્યમિક શાળાઓના વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની અસરનો અભ્યાસ કરવો.
2. માધ્યમિક શાળાઓના વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની અસરનો તેમના જૂથના સંદર્ભમાં અભ્યાસ કરવો.
3. માધ્યમિક શાળાઓના વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની અસરનો તેમની જાતિના સંદર્ભમાં અભ્યાસ કરવો.
4. માધ્યમિક શાળાઓના વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની અસરનો તેમની શૈક્ષણિક સિદ્ધિના સંદર્ભમાં અભ્યાસ કરવો.

ઉત્કલ્પનાઓ

પ્રસ્તુત સંશોધનની શૂન્ય ઉત્કલ્પનાઓ નીચે પ્રમાણે છે.

$H0_1$ પ્રાયોગિક જૂથ અને નિયંત્રિત જૂથના વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત નહિ હોય.

$H0_2$ પ્રાયોગિક જૂથના છોકરાઓ અને છોકરીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત નહિ હોય.

$H0_3$ પ્રાયોગિક જૂથના છોકરાઓ અને છોકરીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત નહિ હોય.

અભ્યાસના ચલો

પ્રસ્તુત સંશોધનના અભ્યાસના ચલો નીચે મુજબ છે:

1. **સ્વતંત્ર ચલ**
   1. વિદ્યાર્થીઓનું જૂથ
      - પ્રાયોગિક જૂથ
      - નિયંત્રિત જૂથ
   2. જાતિ
      - છોકરાઓ
      - છોકરીઓ
   3. શૈક્ષણિક સિદ્ધિ
      - ઉચ્ચ સિદ્ધિ
      - નિમ્ન સિદ્ધિ
2. **પરતંત્ર ચલ**

   પૂર્વ કસોટીના પ્રાપ્તાંકો એ પરતંત્ર ચલ છે.

અભ્યાસની મર્યાદાઓ

પ્રસ્તુત સંશોધનની મર્યાદાઓ નીચે મુજબ છે:

1. પ્રસ્તુત સંશોધન અમદાવાદ શહેરની ગુજરાતી માધ્યમની એક શાળા પૂરતો માર્યાદિત છે.
2. પ્રસ્તુત સંશોધન માટે સંશોધકે કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રી અને ઉત્તર કસોટીની રચના કરી હોવાથી તેમને તમામ મર્યાદાઓ એ પ્રસ્તુત સંશોધનની મર્યાદા બનશે.

સંશોધન પદ્ધતિ

સંશોધકનો મુખ્ય હેતુ કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની ધોરણ-9ના વિદ્યાર્થીઓની સામાજિક વિજ્ઞાનની સિદ્ધિ પર અસરકારકતા તપાસવાની હતી. જેના માટે

સંશોધકે ધોરણ-9ના વિદ્યાર્થીઓ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની રૂઢિગત પદ્ધતિ સાથે સરખામણી કરી હતી. આ માટે પ્રાયોગિક પદ્ધતિનો ઉપયોગ કરવામાં આવ્યો હતો.

પ્રાયોગિક યોજનાની પસંદગી

સંશોધકે સાચી પ્રાયોગિક યોજનાઓ પૈકી માત્ર ઉત્તર કસોટી સમકક્ષ જૂથ યોજનાની પસંદગી કરી હતી. જેની રૂપરેખા નીચે પ્રમાણે હતી.

Fig 1.0: પ્રાયોગિક યોજના

સંશોધન ઉપકરણ

પ્રસ્તુત સંશોધનમાં સંશોધકે બે પ્રકારના ઉપકરણની રચના કરી હતી.

1. કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રી
2. ઉત્તર કસોટી

સંશોધનનો નમૂનો

પ્રસ્તુત સંશોધન માટે નીચે મુજબનો નમૂનો પસંદ કરવામાં આવ્યો હતો.

સારણી 1.0 સંશોધનનો નમૂનો

જૂથ	પ્રાયોગિક જૂથ		નિયંત્રિત જૂથ		કુલ
જાતિ/સિદ્ધિ	છોકરાઓ	છોકરીઓ	છોકરાઓ	છોકરીઓ	
ઉચ્ચ	8	7	9	8	32
નિમ્ન	12	13	11	12	48
કુલ	20	20	20	20	**80**
	40		**40**		

80 વિદ્યાર્થીઓને સમકક્ષ જૂથમાં વહેચવા માટે સંશોધકે જોડકાં પદ્ધતિનો ઉપયોગ કર્યો હતો. તથા વિદ્યાર્થીઓની સિદ્ધિ કક્ષા નક્કી કરવા માટે વિદ્યાર્થીઓએ શાળાની અગાઉની સામાજિક વિજ્ઞાનની પરીક્ષાના ગુણનો મધ્યસ્થ શોધી મધ્યસ્થ કરતાં વધુ ગુણ ધરાવતાં વિદ્યાર્થીઓને ઉચ્ચ સિદ્ધિ કક્ષામાં અને મધ્યસ્થ કરતાં ઓછા ગુણ ધરાવતાં વિદ્યાર્થીઓને નિમ્ન સિદ્ધિ કક્ષામાં વિભાજીત કાર્ય હતા.

પ્રયોગનું આયોજન

સંશોધક દ્વારા અમદાવાદ શહેરની પાલડી ખાતે આવેલી અંકુર માધ્યમિક શાળાને પ્રયોગની શાળા તરીકે નક્કી કરવામાં આવી હતી. સંશોધકે આ શાળાના 80 વિદ્યાર્થીઓને નમુના તરીકે પસંદ કાર્ય હતા. જેમાં 40 વિદ્યાર્થીઓને પ્રાયોગિક જૂથમાં અને 40 વિદ્યાર્થીઓને નિયંત્રિત જૂથમાં મૂકવામાં આવ્યા હતા. સંશોધકે ધોરણ-9ના સામાજિક વિજ્ઞાનના એકમ "આપત્તિ વ્યવસ્થાપન" પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની રચના કરી પ્રાયોગિક જૂથના વિદ્યાર્થીઓને અધ્યાપન સામગ્રીથી અને નિયંત્રિત જૂથના વિદ્યાર્થીઓને રૂઢિગત પ્રણાલીથી અધ્યાપન કરવામાં આવ્યું હતું. આ પ્રમાણે બંને જૂથમાં 7 દિવસ સુધી 45 મીનીટના 7-7 તાસ અધ્યાપન કાર્ય કરવામાં આવ્યું હતું. ત્યારબાદ બંને જૂથના વિદ્યાર્થીઓની એક જ દિવસે અને એક જ સમયે ઉત્તર કસોટી લેવામાં આવી હતી. 30 ગુણની ઉત્તર કસોટી માટે 1 કલાકનો સમય ફાળવવામાં આવ્યો હતો.

માહિતીનું વિશ્લેષણ

ઉત્કલ્પનાની ચકાસણી માટે સંશોધકે ક્રાંતિક ગુણોત્તર (t-મુલ્ય) શોધ્યો હતો. ઉત્કલ્પનાની ચકાસણીથી મળેલા પરિણામો નીચેની સારણીમાં દર્શાવ્યા છે.

$H0_1$ પ્રાયોગિક જૂથ અને નિયંત્રિત જૂથના વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત નહિ હોય.

સારણી 2.0 પ્રાયોગિક જૂથ અને નિયંત્રિત જૂથના વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે t-પરીક્ષણ

જૂથ	સંખ્યા	સરાસરી	પ્ર.વિ.	પ્ર.વિ. ભૂલ	t	સાર્થકતા
પ્રાયોગિક	40	33.05	4.19	0.96	4.08	0.01
નિયંત્રિત	40	29.15	4.37			

df	0.05	0.01
78	1.99	2.64

ઉપરોક્ત સારણી પરથી જોઈ શકાય છે t ની ગણેલી કિંમત 4.08 છે, જયારે df=78 માટે, t ની સારણીયન કિંમત 0.05 કક્ષાએ 1.99 અને 0.01 કક્ષાએ 2.64 છે. આમ, t ની ગણેલી કિંમત સારણીયન કિંમત કરતાં બંને કક્ષાએ વધુ હોવાથી ઉત્કલ્પનાનો અસ્વીકાર થાય છે અને પ્રાયોગિક જૂથ અને નિયંત્રિત જૂથ વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત જોવા મળે છે. વળી, પ્રાયોગિક જૂથના વિદ્યાર્થીઓની સરાસરી નિયંત્રિત જૂથના વિદ્યાર્થીઓ કરતાં વધુ હોવાથી કહી

શકાય કે વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની હકારાત્મક અસર જોવા મળે છે.

$H0_2$ પ્રાયોગિક જૂથના છોકરાઓ અને છોકરીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત નહિ હોય.

સારણી 3.0 પ્રાયોગિક જૂથના છોકરાઓ અને છોકરીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે t-પરીક્ષણ

જાતિ	સંખ્યા	સરાસરી	પ્ર.વિ.	પ્ર.વિ. ભૂલ	t	સાર્થકતા
છોકરાઓ	40	31.11	4.20	0.96	0.03	NS
છોકરીઓ	40	31.08	4.35			

df	0.05	0.01
78	1.99	2.64

ઉપરોક્ત સારણી પરથી જોઈ શકાય છે t ની ગણેલી કિંમત 0.03 છે, જ્યારે df=78 માટે, t ની સારણીયન કિંમત 0.05 કક્ષાએ 1.99 અને 0.01 કક્ષાએ 2.64 છે. આમ, t ની ગણેલી કિંમત સારણીયન કિંમત કરતાં બંને કક્ષાએ ઓછી હોવાથી ઉત્કલ્પનાનો સ્વીકાર થાય છે અને પ્રાયોગિક જૂથના છોકરાઓ અને છોકરીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત જોવા મળતો નથી. છોકરાઓ અને છોકરીઓ બંનેની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની સમાન અસર જોવા મળે છે.

$H0_3$ પ્રાયોગિક જૂથના ઉચ્ચ અને નિમ્ન સિદ્ધિ ધરાવતાં વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત નહિ હોય.

સારણી 4.0 પ્રાયોગિક જૂથના ઉચ્ચ અને નિમ્ન સિદ્ધિ વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે t-પરીક્ષણ

સિદ્ધિ	સંખ્યા	સરાસરી	પ્ર.વિ.	પ્ર.વિ. ભૂલ	t	સાર્થકતા
ઉચ્ચ	32	37.02	4.15	0.97	12.20	0.01
નિમ્ન	48	25.17	4.41			

df	0.05	0.01
78	1.99	2.64

ઉપરોક્ત સારણી પરથી જોઈ શકાય છે t ની ગણેલી કિંમત 12.20 છે, જયારે df=78 માટે, t ની સારણીયન કિંમત 0.05 કક્ષાએ 1.99 અને 0.01 કક્ષાએ 2.64 છે. આમ, t ની ગણેલી કિંમત સારણીયન કિંમત કરતાં બંને કક્ષાએ વધુ હોવાથી ઉત્કલ્પનાનો અસ્વીકાર થાય છે અને પ્રાયોગિક જૂથ ઉચ્ચ અને નિમ્ન સિદ્ધિ ધરાવતાં વિદ્યાર્થીઓની ઉત્તર કસોટીના પ્રાપ્તાંકોની સરાસરી વચ્ચે સાર્થક તફાવત જોવા મળે છે. વળી, પ્રાયોગિક જૂથના ઉચ્ચ સિદ્ધિ ધરાવતાં વિદ્યાર્થીઓની સરાસરી નિમ્ન સિદ્ધિ ધરાવતાં વિદ્યાર્થીઓ કરતાં વધુ હોવાથી કહી શકાય કે ઉચ્ચ સિદ્ધિ ધરાવતાં વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની હકારાત્મક અસર જોવા મળે છે.

સંશોધનના તારણો

પ્રસ્તુત સશોધનના આધારે નીચે મુજબના તારણો મળ્યા.

1. વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની હકારાત્મક અસર જોવા મળે છે.
2. છોકરાઓ અને છોકરીઓ બંનેની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની સમાન અસર જોવા મળે છે.
3. ઉચ્ચ સિદ્ધિ ધરાવતાં વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની હકારાત્મક અસર જોવા મળે છે.

ઉપસંહાર

સંશોધકે પ્રસ્તુત સંશોધનમાં ધોરણ-9ના વિદ્યાર્થીઓ માટે સામાજિક વિજ્ઞાન વિષયમાં કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની રચના કરી તેની અજમાયશ કરી. સંશોધકે નમુના તરીકે અમદાવાદના પાલડી વિસ્તારની અંકુર હાઇસ્કૂલના 80 વિદ્યાર્થીઓની પસંદગી કરી હતી. આ વિદ્યાર્થીઓને બે જૂથમાં વહેચી સંશોધકે એક જૂથને પ્રાયોગિક જૂથ અને બીજા જૂથને નિયંત્રિત જૂથ તરીકે પસંદ કર્યું હતું. પ્રાયોગિક જૂથને કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની માવજત આપવામાં આવી હતી જયારે નિયંત્રિત જૂથને રૂઢિગત પધ્ધતિની માવજત આપવામાં આઈએ હતી. સંશોધનના આધારે જાણવા મળ્યું કે, વિદ્યાર્થીઓની સામાજિક વિજ્ઞાન વિષયની સિદ્ધિ પર કમ્પ્યુટર આધારિત અધ્યાપન સામગ્રીની હકારાત્મક અસર જોવા મળે છે.

સંદર્ભ સૂચિ

Apter, M. (1991). *A Structural Phenomenology of Play', in Adult Play: A Reversal*. Amsterdam: Swets & Zeitlinger.

Bisht, D. (2016). *Development and Validation of Multimedia Instructional Package in Life Science for Students of X Standard*. Rohtak: Maharshi Dayanand University.

Good, W. J. & Hatt, P. (1952). *Methods in Social Research*. New York: McGraw Hill Book Co.

Jha, A. S. (2011). *Research Methodology*. New Delhi: A. P. H. Publishing Corporation.

Kumari, K. (2010). *Effectiveness of Multimedia Learning Package in Educational Psychology for Pre-service Teachers*. Rohtak: Maharshi Dayanand University.

Marshall, D. (2018). Retrieved from: https://www.cs.cf.ac.uk/Dave/Multimedia/node10.html

Shah, D. M. (2008). *Development of Multimedia Package for AIDS Awareness among the Higher Secondary Students*. Kolhapur: Shivaji University.

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Persian as the Emerging Trends During Medieval India

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Abstract:

As we know history is full of surprises and interesting in its own ways. It is indeed that Iran and India have a rich language, culture and civilization. Both the countries have played significant role in the formation and shaping of the world history. They cooperated each other through the centuries. India was engaged with many rulers and invaders and the court language changing in every time-to-time basis. Their language made so many impacts on the then existing languages too.

It was during the Sultanate Dynasty (1320A.D-1585A.D) that the introduction of Persian language and its literature in India occurred. With the passage of time it became the court language and later on the emerging trends within the state. The procedure continued till the British Raj in India i.e., till the 19th Century.

As India is celebrating 'Azadi Ka Amrit Mahotsav', it is high time to take an initiative to celebrate and commemorate 75 years of progressive and Independent India along with its Persian roots. It is high time to glorify the Persian as the emerging trends during the medieval India and the article helped the learners in some way.

Keywords: Persian, Language, Literature, Civilization, Heritage, Medieval

1. INTRODUCTION

The relationship between India and Persian world has a long history. Persian language is the official language in Iran and it was the court language during Mughal era in India. The relationship between India and Iran has been well-founded since immemorial. India and Iran are the two eminent civilizations of Asia. The Indian and Persian civilization shared a lot throughout the history. The close relationship between Indian subcontinent and the Iranian world (Persian language speaking zone) is very ancient and its roots have penetrated in history. According to established history write ups the Persian relation starts from 2000 BC. In ancient periods, the Indus valley civilization shared a lot with Mesopotamian civilization, which is extended to Persian Gulf.

Persian Language introduced in India during Delhi Sultanate and it occupied an important place during the course of time in the socio-cultural life of India and reached its zenith under the Mughal rule when all forms of arts and literature contributed to further development. Introduction of Persian language in India was the outcome of the long lasting contact of the Muslims with this country. This language introduced in this region for the first time by Mohammad Ibn Bakhteyar in 1206 A.D.

The famous historian Mohsin Shajokhani says that; 'India and Iran have shared brotherly relations since as far as back history can recall. They shared a common racial origin and being part of the same geographical territory. Their people share many common and similar features. Similarity can be noted in their language, trees, food, art, and customs as well as in the basic human nature of these warm and hospitable peoples. Both these countries have influenced and enriched each other to such an extent that it is impossible to study the history of either without reference to each other'.

The political relation between India and Iran was another important aspect. Almost every dynasty of Iran and India contacted each other, and there happened large flow of immigrants to both lands especially towards India. The Achaemenian dynasty, Parthian, Sassanid dynasty, and Safavid dynasty are closely related with pre Islamic rulers and Delhi sultanate and Mughal dynasty.

By the sixteenth century, Timurids of central Asia came to India. They conquered the India and established a dynasty known as Mughal Empire. Mughal Empire which is established by Timurid prince Zahir-ud-din Muhammed Babar (1526) was the main promoter of Persian culture in India. In the courts of Mughal Empire and their administrative offices Persian culture was ultimately dominated in the terms of language and personalities. The counter parts of Mughals in Iran, Safavids were allies of Mughals. Thus they came to give refuge to Mughal ruler Humayun, when he was dethroned by Sher-shah. And he was helped by them to regain his empire as soon as possible.

2. RESEARCH QUESTIONS

- How was the initial civilization relation between Persia and India?
- How the Mughals became the ambassadors of Persian civilization in India?
- How was the growth of Persian literature in Indian subcontinent?
- To what extent the cultural influence of Persian in Indian court culture?

- ❖ Who were the Sufi legends and literati of Persia?

3. RESEARCH OBJECTIVES

- ❖ To explore the initial civilization relations between India and Persia.
- ❖ To study about the courtly influence of Persia on India.
- ❖ To analyse the role of Mughals in popularizing and patronizing the Persian culture.
- ❖ To describe the growth and spread of Persian language and literature.
- ❖ To mention the Sufi legends and literary figures of Persian in India.

4. LITERATURE REVIEW

Indo-Iranian thought: a world heritage, the collection of papers of seminar on Indo-Persian contacts, conducted by Iran cultural house in 1995A.D., edited by M. B. Karimian. This book is also an authentic source of Indo-Persian contacts. The religious exchanges especially the Sufi exchanges are the main part of the book. The authors relatively depend upon real sources of Persian literature for depicting the Indo-Iranian thoughts. Thus, the medieval period was the major time for promoting of Persian language and literature in India. The role of so many Indian writers and poets who known Persian in the Persian literature cannot be ignored by any historians.

5. METHODOLOGY OF STUDY

During the early medieval period, the Persian scholars wrote detailed and reliable chronicles concerning political, social and cultural history of India. These Persian chronicles provide dependable and valuable sources of history. Persian chronicles on political and social history of medieval India are many and most of them are indispensable for the study of the history of the region. There are so many Persian chronicles that throw light on the socio-cultural condition of medieval age in India.

6. PERSIAN AND MEDIEVAL INDIA

The relationship between India and Iran has been well-founded since immemorial. Both the nations are the ancient cultures, which exchanged each other its culture, personnel and everything. They worked cooperated each other through the centuries. India has attracted so many rulers towards itself just because of its lavishness in lots of things such as ores, silver, golds, natural resources etc. It has always been rich in cultural diversity with different religions, languages and festivals. So it is believed that just because of these reasons many invaders ruled in India like Mughals during the medieval era and then by the Britishers. These rulers brought their culture and civilization and tried to incorporate it into Indian civilization. Therefore, the diversity among the Indian civilization naturally increased.

The medieval period in India started by the Mughals rule which was taken around two centuries ie from 1526A.D till 1761 A.D., but in the starting, they tried to control the whole power from the administrative powers to the masses language and even tried to convert their religion and made them to conversation each other into the Mughal's native language ie Turk or Persian.

Hence the Persian language was brought to India by the Mughal empire and was made an important section of the Indian learning curriculum. With the passage of time a lot of literate Indians were able to read, write & speak in Persian language. Persian is also known as Farsi and originally belongs to South-Western part of Iran. It has grammatical similarities with the European Languages. Persian was appointed as the language of administrative by Zahir-ud-din Babur in 1526 A.D. As we know that Sanskrit was the main and official language of the Indian even before the Mughals rule. But Persian was commercially among the most used language and it surpassed the use of Sanskrit. Its words even got incorporated into a few Indian languages such as Kashmiri, Punjabi, Urdu, Bengali, Marathi, Gujarati etc. sukhandan-i-Fars discovered that the roots of Sanskrit and Persian were related.

However, the Persian language prospered most under the Mughals. It kept on getting consolation during the Turk-Afghan times moreover. The Turk-Afghan rulers supported the Persian writers, journalists, researchers and rationalists to deliver stupendous works towards the Persian language and its literature in India.

During the Arachiac time frame, Hindus and Muslims, whose primary language was not Persian, competed with one another to realize this language of civilization, and India made Persian writing in the entirety of its branches, which contrasted well with the writing of Persian.

7. PERSIAN LITERATURE IN MEDIEVAL INDIA

One of the earliest Persian writers and researchers in Medieval India was Abu-Abdullah-Jaffar-ibn-Mohammad. He inhabited the court of Samanid Amir Nasr-ibn-Ahmed. He wrote in a basic and direct style and gave articulations to earnest sentiments. He is said to have made six idylls and versified Kalila wa Dimna of Abdullah Ibn Almugaffa. He also composed three verifiable sentiments, of which the famous is the Wamak and Azra. One more popular writer during that time was Daqiqi, who represented the support of Persian in court. Daqiqi began composing Shahnama, yet it couldn’t be finished on account of his initial homicide but later on Fardousi by including his verses complete it.

Babarnama, which was a translation of Tuzuk-e-Babari, was penned by Abdul Rahim Khan-i-Khanan in Persian language. Abdul Fazl has composed Akbarnama ie the History of Akber and also Ain-e-Akbari ie Administrative Book. Many books that were earlier written in Sanskrit got translated into Persina as well. Here are some of the famous books:

i. The Mahabharata was translated under the supervision of Abul Faizi the sibling of Abdul Fazal during the court of Akber, the Great.
ii. Dara Shikoh deciphered the Bhagavad Gita and Upanishads into the Persian language and called it Sir-e Akbari. His most famour works is Majma-ul-Bahrain.
iii. During the Akber, Hindi writers were appended to the Mughal court. The most compelling Hindi writer was Tulsidas,,who composed the Hindi adaptation of the Ramayana, the Ramcharitmanas.
iv. Abdul Qadir Badauni was a severe Pundit of Akbar. He made an interpretation of Mahabhrata into Persian as Razamnamah.
v. Jaganath Pandithraya, the court writer of Shahjahan, has composed two Sanskrit books ie Ganga Lahari and Rasagangadhara.
vi. Shahnama-e-Hind was another work by Abdul Malik Isaami. It is also known as Futuh-ul-Salateen. A.J.Arberty quoted that: ‘Futuh-ul-Salateen can be considered as the best work in Persian writing and both quantitatively and subjectively for sure one can say that it’s one of the world’s artistic show-stoppers.’

8. CONCLUSION

The painful of history in India and the suffering of the Indians because of invasion and foreign rulers is undeniable. But on the other hands, these rulers came from a different culture, language and civilization that enriched the Indian civilizations.

The mixture of language and literature gave so many amazing scholars to this country with so many literary trends. This love of literature brought lots of writers and scholars of several religions, speaking different languages into one single roof which giving out lots of gems in return.

In short we can say that the Indian and Persian intermingling of cultures have far reaching effects in the history of India especially the Indian Muslims. The Sufi interventions of Iranian land have the greatest impact on the lifestyle of Indian Muslims especially the north Indians. These unremitting and constant relations have impacted to making the cordial relation between Persian world and Indian Muslims. Though the mainstream and established histories have neglected the Muslim elements in the cultural fusion any one cannot deny the living marks of Indo Persian contributions.

BIBLIOGRAPHY

1. Amir, K. (1940). *Qanune Humayuni.* (M. H. Husain, Ed.) Calcutta.
2. Beach, M. C. (1992). *Mughals and Rajput painting* (Vol. 1:3). Cambridge: the new Cambridge history of India.
3. Brown, P. (1942). *Indian architecture.* Calcutta.
4. Chand, T. (1964). *Indo-Iranian relations.* New Delhi: Information Service of India, Embassy of India.
5. Chandra, s. (1996). *Historiography, religion and state in medieval India.* Pune.
6. Coach, E. (1991). *Mughal architecture; an outline of its history and development.* Munich.
7. Habib, I. (1998). *A political theory for the Mughal empire, a study of the ideas of Abul Fazal, proceedings of the Indian history congress, 59th Patiala session.* Lucknow: Indian history congress, 59th Patiala session.
8. Haider, P. M. (2011). *Indo Iran relations; historic and cultural perspectives, in Indo Iran relations collected papers, ed.* (S.M.Waseem, Ed.) new Delhi, India: Iran cultural house .
9. Husain, A. (2001). *Structure of politics under Aurangzeb 1658-1707.* Lucknow.
10. Husain, P. (2002). *Development of Persian historiography in India from the 2nd half of 17th century to the 1st half of the 18th century, Jamia Islamia: Iran cultural house.*
11. Hussein, M. (2006), Indo–Iranian relationship with special reference to Sassanid era (c.336 A.D – 646A.D) a thesis submitted to university of Pune . Pune: University of Pune.
12. Jafri, S Z (2006). the Islamic path; Sufism, society, and politics in India. New Delhi.

13. Raguib, S. M. (2010, 03). *Indo Iran historical relations and India's interest in West Asia,* http://merahind.blogspot.in/2010/03/Indo-Iranian-historical-relations. Retrieved 12 17, 2013, from http://merahind.blogspot.in.
14. Rezakhani, K. (2010). *Central Asia and the Making of the Indo-Iranian World, 300-800 CE,* London: London School of Economics.
15. Rizvi, S. A. (2002). *A History of Sufism in India* (Vol. 1). New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.
16. Roberts, J. M. (1987). *The penguin history of India.* New Delhi: penguin books.
17. Shajokhani, Muhsin.1995. Indo Iranian thought, Iran Cultural House, New Delhi, p.12
18. Shekhar, D. C. (2009). *Glimpses of Sassanid monarchial system and its impact on slave dynasty with a special reference to Balban's court.* Mumbai: cultural house of Iran.
19. Taghvaee, A., & Puorjafar, M. R. (1999). *A Indo-Iranian cultural relations at past, present and future.* Calcutta.
20. Wink, A. (1990). *The making of Indo Islamic world.* London: London University Press.

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શિક્ષણ અંગે સ્વામી વિવેકાનંદનો અભિપ્રાય

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Abstract (સાર)

૨૧ મી સદીમાં તકનીકી શોધખોળો (*Technological Innovation*) એ વૈશ્વિકીકરણ (*Globalisation*) માં ખૂબ જ મોટો ફાળો આપ્યો છે.જેના કારણે સમગ્ર માનવજીવન,વિચારો તથા જીવનશૈલી ઉપર ગહન અસર થતી જોવા મળે છે.જેમકે કૌટુંબિક,નૈતિક,આધ્યાત્મિક,સાંસ્કૃતિક કે ભાવનીક મૂલ્યોમાં આવેલું પરીવર્તન.પરંતુ આ પરીવર્તન મૂલ્યોને પાછળ છોડી ગયું.ઉદા.શહેરી વિસ્તારમાં વિભકત કુટુંબના કૌટુંબિક મૂલ્યોમાં જોવા મળતો ઘટાડો.આ બધા મૂલ્યોને સંભાળી રાખવાનું જો કોઈ સંસાધન હોય તો તે છે "*બાળક*".સમાજમાં જો બાળક શિક્ષણ દ્વારા આ મૂલ્યોને અપનાવી નથી શકતો તો તેવા શિક્ષણનો કોઈ જ અર્થ નથી.માનવજીવનની સમસ્યાઓને ઓછી નહીં પરંતુ વધારે કરે તેવા શિક્ષણ નો શું અર્થ ? એમ કહી શકાય કે બાળ સંસાધનનો ઉપયોગ ખોટી દિશામાં થઈ રહ્યો છે.જ્યાં સુધી આધ્યાત્મિક અને નૈતિક મૂલ્યો પ્રાપ્ત ન થાય ત્યાં સુધી બાળકનું શિક્ષણ પરિપૂર્ણ થતું નથી.આ પેપરમાં સ્વામી વિવેકાનંદના વિચારો અને દૃષ્ટિકોણને શિક્ષણ તથા મૂલ્યના સંદર્ભમાં દર્શાવવામાં આવ્યું છે.ફક્ત સ્પર્ધા,બળ કે અન્ય કોઈ પણ રીતે બાળકના મગજમાં માહિતી દાખલ કરવી આ શિક્ષણનો અર્થ નથી.સ્વામી વિવેકાનંદના શબ્દોમાં શિક્ષણ એટલે,

Education is the Manifestation of the perfection already in man.

- **Aim (ઉદ્દેશ્ય)**

શિક્ષણ દ્વારા સમાજમાંથી સામાજિક અને વૈશ્વિક દુષણોને દૂર કરી મનુષ્યના ઉત્થાન વિશે અભ્યાસ કરવો.શિક્ષણના એવા પાસાઓનો અભ્યાસ કરવો જે પૂર્ણતાની અભિવ્યક્તિ તરફ દોરી જાય છે.સ્વામી વિવેકાનંદની 'માનવ નિર્માણ (*Man Manking*)' માટેની શૈક્ષણિક યોજનાનો અભ્યાસ કરવો.

૧.શિક્ષણ પર સ્વામી વિવેકાનંદના દૃષ્ટિકોણનું વિશ્લેષણ કરવું.
૨.માનવ સંસાધનના વિકાસ માટે તેમની શિક્ષણ પદ્ધતિને જાણવી.

- **પ્રશ્નો**

૧.આજનું શિક્ષણ કેવું ?
૨.શિક્ષણ અંગે સ્વામી વિવેકાનંદનો દૃષ્ટિકોણ શું છે ?

૩.સ્વામીજીની શિક્ષણ પદ્ધતિ માનવ સંસાધન વિકાસ માટે કેવી રીતે સુસંગત છે ?

- આજનું શિક્ષણ

સ્વામી વિવેકાનંદના કહેવા પ્રમાણે આજે આપણે જે શિક્ષણ લઈએ છીએ તેમાં કેટલાક સારા મુદ્દાઓ છે પરંતુ તેના કરતાં ખામીઓ વધારે છે.આધુનિક શિક્ષણ વધારે પડતું કારકિર્દીલક્ષી છે.કારકિર્દી માટે કંઈ પણ કરવું,નૈતિક મૂલ્યોનો ભોગ આપીને પણ લક્ષ્ય પ્રાપ્ત કરવાની ભૂખ લોકોમાં જોવા મળે છે,આમ આધુનિક શિક્ષણ ચારિત્ર્ય નિર્માણ કેમનું કરવું,આત્મનિયંત્રણ કેમનું કરવું,મિત્રો, પાડોશીઓ,સહકર્મીઓ સાથે સંવાદિતા કેમની રાખવી તે શીખવતું નથી.સત્ય,પ્રમાણિકતા,પ્રેમ,કરુણા વગેરે જેવા મૂલ્યો કે જે શ્રેષ્ઠ સમાજના આધારસ્તંભ છે આવા મૂલ્યો વિષે કોઈ જ્ઞાન આપતું નથી.જીવનમાં તણાવ કેવી રીતે ઓછો કરવો ?, મુશ્કેલ પરિસ્થિતિઓમાં શાંત કેમનું રહેવું ?, મન ને અંદરની તરફ કેમનું વાળવું ?, પરમ આનંદનો અનુભવ કેમનો કરવો ? આવું કંઈ જ આજના શિક્ષણમાં જોવા મળતું નથી.આજનો વિદ્યાર્થી જો નિષ્ફળ થાય તો આત્મહત્યા કરે છે,તેને ગમતું ના થાય તો હિંસા કરવામાં સામેલ થાય છે આ જ સ્પષ્ટ પણે દર્શાવે છે કે આજનો વિદ્યાર્થી નકારાત્મક લાગણીઓને કાબૂમાં રાખવા તૈયાર નથી.આજના શિક્ષણ નો દુરુપયોગ ક્યારેક વ્યક્તિની નબળાઇ અને ખોટા કાર્યોને છૂપાવવામાં તથા પૂર્વધારણાઓ ને મજબૂત બનાવીને હિંસા કરતો જોવા મળે છે.તદુપરાંત આધુનિક શિક્ષણ જે નકારાત્મક સ્વભાવનું લાગે છે કે જે શિક્ષક,મહિલાઓ,વડીલોના આદર પ્રત્યે ભાર ન આપતું નથી.ગરીબ,પીડિત,અજ્ઞાની અને સમાજના નબળા વર્ગો પ્રત્યે શિક્ષિત વ્યક્તિની લાગણી જોઈને લાગે છે કે આજનું શિક્ષણ આવા મનુષ્ય ને મદદ કરતું નથી.માણસને આત્મઅનુભૂતિ માટે જરૂરી એવા ગુણો જેવા કે કારુણ્ય, બુદ્ધિશાળી, નિર્ભય, આત્મવિશ્વાસ, નૈતિકતા,પ્રમાણિકતા જીવનમાં કેમના લાવવા? તેનો પ્રયત્ન અને યોગ્ય તાલીમ પરંપરાગત શિક્ષણ પ્રણાલીમાં હતી.એવા ઉચ્ચ હોદ્દા નો ઉપયોગ શું જો શિક્ષક,ડૉક્ટર,એન્જિનિયર તેમના માતા-પિતાને છોડી દે ? વૃદ્ધાશ્રમ,સ્ત્રી,નબળા લોકો પર હિંસા દર્શાવે છે કે આજના શિક્ષિત વર્ગ ને સમાજના વંચિત વર્ગ માટે લાગણી નથી.ભારતમાં ગરીબી,અજ્ઞાનતા,ડર જેવા સામાજિક દુષણો નું પ્રમાણ સતત વધી રહયું છે.શારીરિક નબળાઈ,જાતિ અસ્પૃશ્યતા,સ્વાર્થી વૃતિ, નબળાનું શોષણ,પોતાના પર વિશ્વાસ નો અભાવ, નિરક્ષરતા,ધર્મની વિકૃતિ,ભ્રષ્ટાચાર,અપ્રામાણિકતા વગેરે આધુનિક નિષ્ફળતા સિવાય કશું જ નથી.રાષ્ટ્રના વિકાસ માટે અખંડિતતા, સ્વતંત્રતા, સમાનતા, બંધુત્વ અને લોકશાહી નિર્માણ કરે તેવા શિક્ષણની માંગ છે.આથી વિવેકાનંદને લાગ્યું કે એક સંપૂર્ણ શિક્ષણ પ્રણાલીની જરૂર છે જ્યાં સામાજિક દૂષણોને દૂર કરી મનુષ્યને પુનર્જીવિત કરી ને રાષ્ટ્રનો વિકાસ સાધવાના ઘટકો પર ભાર આપે.

- સ્વામી વિવેકાનંદ ના શિક્ષણ પર વિચારો

વિવેકાનંદ નિર્દેશ કરે છે કે વર્તમાન સમયના શિક્ષણની ખામી એ છે કે તેને કોઈ ચોક્કસ ધ્યેય નથી.એક શિલ્પકારને તે આરસના બ્લોકમાંથી શું આકાર આપવા માંગે છે તે વિશે સ્પષ્ટ ખ્યાલ ધરાવે છે; તેવી જ રીતે, એક ચિત્રકાર જાણે છે કે તે શું પેઇન્ટ કરવા જઈ રહ્યો છે.પરંતુ સ્વામીજી કહે છે કે એક શિક્ષકને,તેના શિક્ષણના ધ્યેય વિશે કોઈ સ્પષ્ટ ખ્યાલ નથી. સ્વામીજી તેમના શબ્દો અને કાર્યો દ્વારા એ સ્થાપિત કરવાનો પ્રયાસ કરે છે કે તમામ પ્રકારના શિક્ષણ અને તાલીમ નો અંત માણસનું નિર્માણ **(Man making)** કરવાનું છે.સમગ્ર વેદાંત દર્શનના પ્રકાશમાં માણસને શિક્ષિત કરવાની યોજના છે. તેમણે કહ્યું કે "માણસમાં પહેલેથી જ પૂર્ણતા રહેલી છે અને શિક્ષણ દ્વારા તેને અભિવ્યક્ત કરવાની છે".શિક્ષણનો ઉદ્દેશ્ય આપણા જીવનમાં પૂર્ણતાને પ્રગટ કરવાનો છે,જે આપણો આંતરિક સ્વભાવ છે.આ પૂર્ણતા એ અનંત શક્તિની અનુભૂતિ છે જે દરેક વસ્તુમાં અને દરેક જગ્યાએ અસ્તિત્વ ધરાવે છે.આ પૂર્ણતાના આવશ્યક સ્વરૂપને સમજ્યા પછી, આપણે તેને આપણા આંતરિક સ્વ સાથે ઓળખવું જોઈએ.આ હાંસલ કરવા માટે વ્યક્તિએ અહંકાર, અજ્ઞાન અને અન્ય તમામ ખોટી ઓળખ જે માર્ગમાં અવરોધરૂપ છે તેને દૂર કરવું પડશે.નૈતિક શુદ્ધતા અને સત્ય પ્રત્યેનો જુસ્સો શરીર,ઇન્દ્રિયો,અહંકાર અને અન્ય તમામ બિનજરૂરી તત્ત્વો જે નાશવંત છે તે છોડવામાં મદદ કરે છે.

વિવેકાનંદ શારીરિક સ્વાસ્થ્ય પર ખૂબ ભાર મૂકે છે કારણ કે એક સ્વસ્થ મન એક સ્વસ્થ શરીરમાં રહે છે.તેમના મતે વિદ્યાર્થીઓના મનને ધ્યાન,એકાગ્રતા અને નૈતિક શુદ્ધતાના અભ્યાસ દ્વારા નિયંત્રિત અને પ્રશિક્ષિત કરવાની જરૂર છે.કોઈ પણ કાર્યમાં સફળતા એકાગ્રતાની શક્તિનું પરિણામ છે, જે અનિવાર્યપણે અન્ય વસ્તુઓથી અલગતા સૂચવે છે,તે બ્રહ્મચર્યનો એક ભાગ છે.આથી તેમની યોજનાનો એક ભાગ છે તે એટ્લે કે શિક્ષણ.સ્વામી વિવેકાનંદના મતે શિક્ષણ એ છે કે જે મુક્તિ આપે છે (સા વિદ્યા યા વિમુક્તયે).તે વ્યક્તિને નકારાત્મક વલણોથી મુક્ત કરે છે.*ફ્રોબેલ*ની જેમ, તેમણે માનવના સર્વાંગી વિકાસ પર ભાર મૂક્યો કે જેનાથી માનવ સંવાદિતા અને શાંતિનું જીવન જીવી શકે છે.સ્વામીજી કહે છે આપણે માનસિક રીતે સુમેળભર્યું જીવન જીવી શકીએ તેવા માણસો બનવાનું છે.*રવિન્દ્રનાથ ટાગોર* પણ કહે છે કે, સર્વોચ્ચ શિક્ષણ એ છે કે જે આપણને માત્ર માહિતી જ નથી આપતું,પરંતુ આપણા જીવનને અંદરની તરફ જોતાં શીખવાડે છે અને જે સમગ્ર વિશ્વના બધા અસ્તિત્વ સાથે સુમેળતા ધરાવે છે.

- *સ્વામી વિવેકાનંદના શિક્ષણવિચાર ને તાત્ત્વિક આધાર*

સ્વામી વિવેકાનંદના શિક્ષણવિચાર ને તાત્ત્વિક રૂપે આદર્શવાદ (*Idealism*), પ્રકૃતિવાદ *(Naturalism*) અને વ્યવહારવાદ (*Pragmatism*) એમ ત્રણ ભાગોમાં વહેંચી શકાય.

પ્રકૃતિવાદી દ્રષ્ટિકોણમાં, વાસ્તવિક શિક્ષા પર ભાર આપ્યો છે અને કહ્યું કે તે પ્રકૃતિ અને પ્રાકૃતિક નિયમો ના માધ્યમથી જ સંભવ છે.

આદર્શવાદી દ્રષ્ટિકોણમાં, કહ્યું કે શિક્ષણનો ઉદ્દેશ્ય બાળકને નૈતિક અને આધ્યાત્મિક રૂપથી વિકસિત કરવાનો છે. અને

વ્યવહારવાદી દ્રષ્ટિકોણમાં, પશ્ચિમી વિચારો પર ભાર મુક્યો કે જ્યાં ઔધોગિકી,વેપાર અને વિજ્ઞાનની શિક્ષા દ્વારા ભૌતિક સમૃદ્ધિ પ્રાપ્ત કરવામાં આવે છે.

- શિક્ષણના ઉદ્દેશ્યો

શિક્ષણનો મુખ્ય ઉદ્દેશ્ય પૂર્ણતા પ્રાપ્ત કરવાનો છે. જે પહેલેથી જ માણસમાં રહેલી છે. સ્વામીજીએ અભિપ્રાય આપ્યો કે તમામ ભૌતિક અને આધ્યાત્મિકતાના પડદાથી ઢંકાયેલ માણસમાં જ્ઞાન પહેલેથી જ હાજર છે.પરંતુ અજ્ઞાનતા કારણે આપણે જોઈ શકતા નથી.આથી શિક્ષણે આ પડદો ફાડી નાખવો જોઈએ જેથી કરીને આપણી અંદર જ્ઞાનનો પ્રકાશ પ્રગટે. સ્વામી વિવેકાનંદ કહે છે કે બધા જ પ્રકારના શિક્ષણનો ઉદ્દેશ્ય એક જ હોવું જોઈએ તે એટલે કે માનવ નિર્માણ. શિક્ષણનો હેતુ વ્યક્તિનો સર્વાંગી વિકાસ કરવાનો છે.સ્વામી વિવેકાનંદે શિકાગો ખાતે 1893 માં યોજાયેલી ધર્મ પરિષદમાં કહ્યું હતું કે વિશ્વને જરૂર છે સંવાદિતા અને શાંતિ ની.અને તે શિક્ષણથી જ પ્રાપ્ત થઈ શકશે. તેથી શિક્ષણથી માણસમાં આ ગુણોનો વિકાસ થાય તેવા પ્રયત્ન થવા જોઈએ.સ્વામીજીએ કહ્યું, “હું કોઈ રાજકારણી નથી કે હું કોઈ સમાજ સુધારક નથી, માનવ નિર્માણ એ મારા જીવનનું ધ્યેય છે.”વિવેકાનંદના ગુરુ *શ્રી રામકૃષ્ણ* કહેતા હતા કે આપણે "મનુષ્ય" બનવાની જરૂર છે.મનુષ્ય એટલે કે “જેની આધ્યાત્મિક ચેતના જાગ્રત રહી છે તે. તેમના ગુરુને અનુસરીને તેમણે ભાર મૂક્યો કે તમામ શિક્ષણ, તમામ તાલીમનો આદર્શ આ માણસ બનાવવાનો હોવો જોઈએ.

- *આત્મવિશ્વાસ અને આત્મ-અનુભૂતિનું નિર્માણ*

શિક્ષણ એ આત્મજ્ઞાન પ્રદાન કરવું જોઈએ,જે ભૌતિક સમૃદ્ધિ અને દુન્યવી અસ્તિત્વના બંધનમાંથી મુક્ત કરે છે.એક માણસ આત્મવિશ્લેષણ અને આત્મદ્રષ્ટિ દ્વારા પૂર્ણતા પ્રાપ્ત કરી શકે છે.સ્વામીજી કહે છે કે , આ મહાનતાનું રહસ્ય છે કે ”આપણા સ્વમાં વિશ્વાસ અને ભગવાનમાં વિશ્વાસ.

➢ *નિર્ભયતા*

સ્વામીજી કહે છે કે ડર એ તમામ સામાજિક અને વ્યક્તિગત સમસ્યા માટે મુખ્ય કારણ છે.તે શિક્ષણ દ્વારા દૂર થવો જોઈએ અને નાગરિકોને જીવનના પડકારો સામે હિંમતવાન અને બહાદુર બનાવવા જોઈએ.

➢ *માનવજાતની સેવા*

સ્વામીજી કહે છે, "જો તમારે ભગવાનને શોધવો હોય તો માણસની સેવા કરો".તેઓ માને છે કે જે ભગવાનને આપણે પ્રતીકો અને છબીઓમાં તથા મંદિરોમાં શોધીએ છીએ અને પૂજા કરીએ છીએ પણ ત્યાં ભગવાન નથી.શિક્ષણે વિદ્યાર્થીઓને તે શીખવવું જોઈએ કે માનવ સેવા એ ભગવાનની સેવા છે.

➢ *સાર્વત્રિક ભાઇચારાનો વિચાર*

તેમણે કહ્યું કે શિક્ષણ દ્વારા, આપણે ધીમે ધીમે સાર્વત્રિક ભાઇચારાનો વિચાર પ્રાપ્ત કરવો જોઈએ. તેથી તેઓ હંમેશા સૌ સાથે સુમેળ અને સારા સંબંધથી જીવન જીવી શકે.

➢ *વિવિધતામાં એકતા*

શિક્ષણનો સાચો હેતુ વિવિધતામાં એકતા શોધવાનો છે.તેમણે કહ્યું કે આધ્યાત્મિક અને ભૌતિક જગત એક છે પરંતુ તેમની વચ્ચે જે ભેદ દેખાય તે ભ્રમ છે. તેથી શિક્ષણએ માણસને વિવિધતામાં એકતા શોધવા સક્ષમ બનાવવો જોઈએ.

➢ *સામૂહિક શિક્ષણ* ***(Mass Education)***

સ્વામી વિવેકાનંદે જનતાની સ્થિતિ સુધારવા પર ભાર મૂક્યો હતો અને તેમણે સામૂહિક શિક્ષણની હિમાયત કરી.વ્યક્તિગત વિકાસ આપણા સંપૂર્ણ રાષ્ટ્રનો સંપૂર્ણ વિકાસ કરતું નથી.તેથી તે માટે સમાજ કે સામાન્ય લોકોને શિક્ષણ આપવાની જરૂર છે.તેઓ તેમના સામૂહિક શિક્ષણને એક સાધન તરીકે લે છે.તેમણે અવલોકન કર્યું, “જો આપણે ફરીથી ઉદય પામવું હોય,તો તે આપણી અંદર કરવું પડશે એ જ રીતે, તે લોકોમાં શિક્ષણનો ફેલાવો કરીને કરવાનું છે." તેથી તેમણે સામૂહિક શિક્ષણને ખૂબ મહત્વ આપ્યું.તેમના વક્તવ્ય દ્વારા સામૂહિક શિક્ષણનું મહત્વ પણ વર્ણવવામાં આવ્યું છે.“મેં વિચાર્યું કે મહાન રાષ્ટ્રીય પાપ જનતાની ઉપેક્ષા છે,અને તે આપણા પતનનું એક કારણ છે,જ્યાં સુધી ભારતની જનતા

વધુ સારી રીતે શિક્ષિત થાય નહીં ત્યાં સુધી રાજકારણનો કોઈ ફાયદો થશે નહીં.'' તેમણે સ્ત્રી શિક્ષણ તેમજ સમૂહ શિક્ષણને પણ મહત્વ આપ્યું હતું.

- *શારીરિક અને માનસિક વૃદ્ધિ*

શિક્ષણનો એક મહત્વપૂર્ણ ઉદ્દેશ્ય છે બાળકનો શારીરિક અને માનસિક વિકાસ કરવાનો.જેથી કરીને બાળક તેનું શિક્ષણ પૂર્ણ કર્યા પછી રાષ્ટ્રીય વિકાસને પ્રોત્સાહન આપવા સક્ષમ બની શકે અને નિર્ભીક તથા શારીરિક રીતે સુવિકસિત નાગરિક બની પ્રગતિ શાધિ શકે.અન્ય પર આશ્રિત રહેવાને બદલે બાળક આર્થિક રીતે સક્ષમ બની પોતાના પગ પર ઊભું રહે.

- *ધાર્મિક વિકાસ*

સ્વામીજીના મતે ધાર્મિક વિકાસ એ આવશ્યક ઉદ્દેશ્ય છે.દરેક વ્યક્તિ તે શોધવા માટે સક્ષમ હોવો જોઈએ.અને શિક્ષણ દ્વારા તેનામાં અંકિત ધાર્મિક બીજનો વિકાસ કરવો જોઈએ.અને આ પ્રકારનું શિક્ષણ વ્યક્તિને સંપૂર્ણ સત્ય અથવા વાસ્તવિકતા શોધવામાં મદદ કરશે.આથી તેમણે ધર્મે પ્રત્યેની

લાગણીઓ અને લાગણીઓની તાલીમની વકીલાત કરી હતી કે જેથી સમગ્ર જીવન શુદ્ધ થાય.પછી આજ્ઞાપાલનની ક્ષમતા, સામાજિક સેવા, અને મહાન ના ઉપદેશો તથા અન્ય વિવિધ સારા ગુણોનો વિકાસ થશે.વ્યક્તિગત શિક્ષણે વિદ્યાર્થીઓમાં આ વિકાસને પ્રોત્સાહન આપવું જોઈએ.

- સ્વામીજીએ શિક્ષણના કેટલાક અન્ય ઉદ્દેશ્યોનો પણ ઉલ્લેખ કર્યો છે જેમ કે ચારિત્ર્ય નિર્માણ, ભૌતિક વિકાસ, માનવતાની સેવા, ત્યાગની ભાવના, ધાર્મિક વિકાસ, વ્યાવસાયિક કાર્યક્ષમતા,આધ્યાત્મિક વિકાસ,બૌદ્ધિક વિકાસ વગેરે.
- અધ્યાપનની પદ્ધતિઓ :

સ્વામી વિવેકાનંદ દ્વારા દર્શાવેલ શિક્ષણની પદ્ધતિઓ સંપૂર્ણપણે ભારતીય પરંપરા પર આધારિત છે પરંતુ તેનું ઘણું મૂલ્ય છે. સ્વામીજી ના મતે ***"Knowledge is inherent in every man's self ; what man knows is only what he discovers by taking the cover off his own soul".*** વિવેકાનંદ દ્વારા વર્ણવેલ શિક્ષણની પદ્ધતિઓ નીચે મુજબ છે.

1. યોગાભ્યાસ.
2. એકાગ્રતા અને ઊંડા ધ્યાન દ્વારા મનનો વિકાસ કરવો.

3. વ્યાખ્યાન, ચર્ચા, સ્વ-અનુભવ અને સર્જનાત્મક પ્રવૃત્તિઓ.

4. સ્વ-શિક્ષણ.

5. પ્રવાસ.

6. રચનાત્મક અભિગમ.

- નિષ્કર્ષ

સ્વામી વિવેકાનંદ કહે છે કે શિક્ષણ દ્વારા જ જનતાનો ઉત્કર્ષ શક્ય છે. શિક્ષણ તેના રચનાત્મક, વ્યવહારુ અને વ્યક્તિગત પાત્રને ઉજાગર કરે છે. તે ભારપૂર્વક જણાવે છે કે જો સમાજને સુધારવો હોય, તો શિક્ષણને સમાજના દરેક વ્યક્તિ સુધી પહોંચવું પડશે, કારણ કે વ્યક્તિઓ જ સમાજના ઘટક છે. જ્યારે માણસ પોતાની આંતરિક ભાવનાથી સભાન બને છે ત્યારે તેનામાં ગૌરવની ભાવના વધે છે, અને તે જ શિક્ષણનો મુખ્ય હેતુ છે. તેઓ ભારતના પરંપરાગત મૂલ્યોને વિજ્ઞાન અને ટેકનોલોજીની પ્રગતિ દ્વારા લાવવામાં આવેલા નવા મૂલ્યો સાથે સુમેળ સાધવાનો પ્રયત્ન કરે છે. નૈતિક અને આધ્યાત્મિક શિક્ષણ દ્વારા માણસના પરિવર્તનમાં જ તે તમામ સામાજિક દુષણોનો ઉકેલ શોધે છે. આપણા તત્ત્વજ્ઞાન અને સંસ્કૃતિના મક્કમ આધાર પર જ શિક્ષણની સ્થાપના કરવાનું કહે છે.

અંતે તે નિષ્કર્ષ પર આવે છે કે, માનવના વિકાસમાં સ્વામી વિવેકાનંદના વિચારો અને મૂલ્યોની મોટી ભૂમિકા છે. તેમના શિક્ષણના ઉદ્દેશ્યો, શિક્ષણની પદ્ધતિઓ, સામૂહિક શિક્ષણ, સ્ત્રી શિક્ષણ,માનવ નિર્માણ શિક્ષણ, મૂલ્ય શિક્ષણ સંપૂર્ણ માનવની પ્રક્રિયાની દિશા આપે છે.સ્વામી વિવેકનંદના વિચારો અને તેમનું જીવન વર્તમાન જીવનની સમસ્યા અને ભારતના ભૂતકાળ વચ્ચે એક પ્રકારનો સેતુ હતો. તેમનું મિશન હતું શિક્ષણ દ્વારા સમાજ સેવા, સામૂહિક શિક્ષણ, ધાર્મિક પુનરુત્થાન અને સામાજિક જાગૃતિ દ્વારા માનવજાતની સેવા.

- સંદર્ભગ્રંથ

1. સ્વામી વિવેકાનંદ ગ્રંથમાળા (૨૦૧૩), "ભાગ- ૧,૨,૪,૮".રાજકોટ, શ્રી રામકૃષ્ણઆશ્રમ.
2. સ્વામી વિવેકાનંદ (૨૦૧૧), "શિકાગો વ્યાખ્યાનો".રાજકોટ, શ્રી રામકૃષ્ણઆશ્રમ.
3. ડૉ.એ.પી.જે. અબ્દુલ કલામ (૨૦૧૯), "સ્વામી વિવેકાનંદ અને ભારતના યુવાનો (સંકલન)".રાજકોટ, શ્રી રામકૃષ્ણઆશ્રમ.
4. સ્વામી વિવેકાનંદ (૨૦૧૩), "મૂલ્યલક્ષી કેળવણીમાં માતા પિતા અને શિક્ષકોની ભૂમિકા".રાજકોટ, શ્રી રામકૃષ્ણઆશ્રમ.
5. Swami Vivekananda (1946)."Teachings of Swami Vivekananda". Ramakrishna Math, Howrah, (Kolkata) Ashrama Vedanta Press.

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માધ્યમિક સ્તરે વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રીની અસરકારકતા

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સારાંશ

આજે ટેકનોલોજીકલક્રાંતિએ શિક્ષણનું સ્વરૂપ બદલી નાખ્યું છે. શિક્ષણમાં અદ્યતન પ્રત્યાયનના માધ્યમો વધ્યા છે, નવવિચાર સતત વધતા જતા જ્ઞાન અને જાણકારીને અપનાવવાનું જ્ઞાન જરૂરી બન્યું છે. વિજ્ઞાન-ટેકનોલોજીના વિષયમાં પણ શિક્ષણ-પ્રક્રિયામાં નવું સ્વરૂપ પ્રદાન કર્યું છે. આજે અધ્યયન-અધ્યાપન પરિવર્તન પામીને SELF-LEARNING બન્યું છે કે જે કોઈપણ સમયે, કોઈપણ સ્થળે અને વિદ્યાર્થી કોઈપણ પ્રકારની ગતિ એ શિક્ષણ મેળવી શકે છે. માધ્યમિક કક્ષાએ વિજ્ઞાન ટેકનોલોજી વિષયમાં મુદ્રિત સ્વ-અધ્યયન સાહિત્યની રચના કરી તેની અસરકારકતા ચકાસવાનો એક નમ્ર પ્રયાસ છે. જેમાં સૌરાષ્ટ્ર વિસ્તારમાં મોરબી જીલ્લાના વાંકાનેરની માધ્યમિક શાળાના કુમાર અને કન્યા વિદ્યાર્થીઓની પરંપરાગત શિક્ષણ પધ્ધતિ કરતા સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયનને ઉંચી સિદ્ધિ મળી છે. વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા કુમાર અને કન્યા વિદ્યાર્થીનીઓની સિદ્ધિ વચ્ચે સાર્થક તફાવત નથી આથી તેની અસર સમાન છે. સ્વ-અધ્યયન સામગ્રી દ્વારા શિક્ષણ અંગે છોકરાઓ અને છોકરીઓના સમાન અભિપ્રાય ધરાવે છે.

સ્વ-અધ્યયન સામગ્રી દ્વારા શિક્ષણની અસરકારકતા પરંપરાગત શિક્ષણ પધ્ધતિ કરતા વધુ છે. દરેક વિદ્યાર્થીઓમાં શીખવાની મૂળભૂત શકિતઓ હોય જ છે, આ શક્તિઓ ઓળખીને અધ્યયનક્ષમતાનું સંવર્ધન કરી શકાય છે. જેના માટે સ્વ-અધ્યયન સામગ્રી શ્રેષ્ઠ છે.

૧. પ્રસ્તાવના

પ્રવર્તમાન સમયમાં વિદ્યાર્થીને શીખતો કરવો એ જરૂરી છે. વિદ્યાર્થી કઈંક શીખે તે માટે સ્વ-અધ્યયનના માધ્યમો ખૂબજ મદદરૂપ બનતા હોય છે. સ્વ-અધ્યયનના માધ્યમથી વિદ્યાર્થી જાતે ક્રિયા કરી સ્વપ્રયત્ને શીખતા હોય છે, જેમાં વિદ્યાર્થી કેન્દ્રમાં હોય છે. વિદ્યાર્થીને પોતાની જાતે ભણવું ગમતું હોય છે. તેના માટે ઘણીવાર અનુકુળ પણ છે સાથે આનંદદાયક પણ છે, તેથી જ માધ્યમિક સ્તરેથી જ ખરો શિક્ષક સ્વ-અધ્યયનની વિવિધ સામગ્રી તૈયાર કરીને વિદ્યાર્થીને શીખવા માટે આપતાં હોય છે. વિજ્ઞાન વિષય શિક્ષક પણ આયોજન કરતી વખતે આવા કેટલાંક એકમોને અનુરૂપ સંદર્ભ પુસ્તકો, સામયિકો, પ્રયોગપોથી કે અન્ય સહાયક સામગ્રીનું અધ્યયન કરી સ્વ-અધ્યયન સામગ્રી તૈયાર કરે,

જેથી વર્ગમાં તેનો ઉપયોગ કરી શકે છે. પ્રવર્તમાન અધ્યયન-અધ્યાપનની યુક્તિ-પ્રયુક્તિને કેન્દ્રમાં લઈ માધ્યમિક સ્તરે વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રીની અસરકારકતા જાણવી જરૂરી છે.

આજના નવાયુગમાં ટેકનોલોજીકલક્રાંતિએ શિક્ષણનું સ્વરૂપ બદલી નાખ્યું છે. શિક્ષણમાં અદ્યતન પ્રત્યાયનના માધ્યમો વધ્યા છે, નવવિચાર સતત વધતા જતા જ્ઞાન અને જાણકારીને અપનાવવાનું જ્ઞાન જરૂરી બન્યું છે. વિજ્ઞાન-ટેકનોલોજીના વિષયમાં પણ શિક્ષણ-પ્રક્રિયામાં નવું સ્વરૂપ પ્રદાન કર્યું છે. આજે અધ્યયન-અધ્યાપન પરિવર્તન પામીને E-LEARNING, SELF-LEARNING બન્યું છે કે જે કોઈપણ સમયે, કોઈપણ સ્થળે અને વિદ્યાર્થી કોઈપણ પ્રકારની ગતિ એ શિક્ષણ મેળવી શકે છે. આધુનિક શિક્ષણની સંકલ્પનાએ "વિદ્યાથીને શીખવવું એના કરતા તેને શીખતો કરવો" એ છે. આથી જ પરંપરાગત શિક્ષણ કાર્યને તિલાંજલિ આપી, વર્ગ શિક્ષણને જીવંત અને અર્થપૂર્ણ બનાવી શકાય તે માટે માધ્યમિક કક્ષાએ શિક્ષણ પ્રક્રિયામાં વિજ્ઞાન ટેકનોલોજીનો સમન્વય કરી વિદ્યાર્થીઓને પ્રેરિત કરે એવી સ્વ-અધ્યયનની સામગ્રી તૈયાર કરી શિક્ષણને અસરકારક બનાવી શકાય. સ્વ-અધ્યયનની સામગ્રીએ એ કોઈપણ અભ્યાસક્રમમાં કોઈ પણ વિષયના કોઈ પણ એકમ માટે રચી શકાય અને તેનો અધ્યયન માટે ઉપયોગ કરી શકાય, કારણ અંતે તો અધ્યેતાકેન્દ્રિત શિક્ષણના બધા જ પાસાઓને ન્યાય આપવાનો હોય છે. માધ્યમિક સ્તરના વયકક્ષાના વિદ્યાર્થીઓને સ્વતંત્ર રીતે અધ્યયન કરવાની ટેવ વિકસાવવા સ્વ-અધ્યયનની સામગ્રી મદદરૂપ બને તેવા હેતુથી માધ્યમિક કક્ષાએ વિજ્ઞાન ટેકનોલોજી વિષયમાં મુદ્રિત સ્વ-અધ્યયન સાહિત્યની રચના કરી તેની અસરકારકતા ચકાસવાનો એક નમ્ર પ્રયાસ કર્યો છે.

૨. સમસ્યા કથન

માધ્યમિક સ્તરે વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રીની અસરકારકતા

૩. સંશોધનના હેતુઓ

(1) પ્રત્યેક પેટા એકમ માટે સ્વ-અધ્યયન સામગ્રીની રચના કરવી.

(2) સ્વ-અધ્યયન સામગ્રી અંગે વિદ્યાર્થીઓના અભિપ્રાયો મેળવી અર્થઘટન કરવું.

(3) સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા અને પરંપરાગત શિક્ષણ પધ્ધતિ દ્વારા અધ્યયન કરતા વિદ્યાર્થીઓનીની સિદ્ધિના પ્રાપ્તાંકોની સરાસરીઓની તુલના કરવી.

(4) સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા કુમાર વિદ્યાર્થીઓની અને કન્યા વિદ્યાર્થીનીઓની સિદ્ધિના પ્રાપ્તાંકોની સરાસરીઓની તુલના કરવી.

(5) સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા વિદ્યાર્થીઓના અભિપ્રાયો પ્રાપ્ત કરવા અને અર્થઘટન કરવું.

(6) સ્વ-અધ્યયન સામગ્રી પ્રત્યે કુમાર વિદ્યાર્થીઓન અને કન્યા વિદ્યાર્થીનીઓના અભિપ્રાયોની તુલના કરવી.

૪. સંશોધનની ઉત્કલ્પનાઓ

H_01 વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા અને પરંપરાગત શિક્ષણ પધ્ધતિ દ્વારા અધ્યયન કરતા વાંકાનેરની માધ્યમિક શાળાના કુમાર વિદ્યાર્થીઓની સિદ્ધિના પ્રાપ્તાંકોની સુધારેલી સરાસરીઓ વચ્ચે કોઈ અર્થસૂચક તફાવત નહિ હોય.

H_02 વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા અને પરંપરાગત શિક્ષણ પધ્ધતિ દ્વારા અધ્યયન કરતા વાંકાનેરની માધ્યમિક શાળાના કન્યા વિદ્યાર્થીનીઓની સિદ્ધિના પ્રાપ્તાંકોની સુધારેલી સરાસરીઓ વચ્ચે કોઈ અર્થસૂચક તફાવત નહિ હોય.

H_03 વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા વાંકાનેરની માધ્યમિક શાળાના કુમાર વિદ્યાર્થીઓની અને કન્યા વિદ્યાર્થીનીઓની સિદ્ધિના પ્રાપ્તાંકોની સુધારેલી સરાસરીઓ વચ્ચે કોઈ અર્થસૂચક તફાવત નહિ હોય

H_04 સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા છોકરાઓ અને છોકરીઓના અભિપ્રાયોમાં કોઈ અર્થસૂચક તફાવત જોવા મળશે નહિ.

૫. સંશોધનનું મહત્વ

"વિદ્યાર્થીઓને જાતે શીખતા કરવા" એ આજના શિક્ષણનો હેતુ છે. આથી શાળાના શિક્ષકો અને વિદ્યાર્થીઓ માટે સ્વ-અધ્યયન સામગ્રી ઘણી જ ઉપયોગી થઇ શકે. માધ્યમિક કક્ષાએ અભ્યાસ કરતા વિદ્યાર્થીઓની રસ, રુચિ જળવાઈ રહે તેમજ વિદ્યાર્થીઓ ઊચ્ચ શિક્ષણ મેળવવા માટે સ્વ-અધ્યયન કાર્ય માટે સક્ષમ બને, અને સ્વ-અધ્યયન તરફ વળે એ માટે સતત પ્રયત્નશીલ કરવા દિશાસુચક પગલું બની શકે.

૬. વ્યાપ વિશ્વ અને નમુના પસંદગી

પ્રસ્તુત સંશોધનના વ્યાપવિશ્વમાં સૌરાષ્ટ્રના મોરબી વિસ્તારની માધ્યમિક શાળાઓમાં અભ્યાસ કરતા વિજ્ઞાન વિષયના ગુજરાતી માધ્યમના વિદ્યાર્થીઓની સમાવિષ્ટ કરવામાં આવ્યા હતા. પ્રસ્તુત સંશોધનમાં યાદૃચ્છીક નમુનાની લોટરી પધ્ધતિથી ચિઠ્ઠી ઉપાડીને સૌરાષ્ટ્ર વિસ્તારના મોરબી જીલ્લાની પસંદગી કરવામાં આવી હતી. આ જીલ્લામાંથી માધ્યમિક શાળાની પસંદી સહેતુક હાથવગા નમુનાની પધ્ધતિ થી કરવામાં આવી હતી. કુલ પ્રયોગ પાત્રોની સંખ્યા 120 હતી. જેમાં પ્રાયોગિક જૂથમાં 60 અને નિયંત્રિત જૂથમાં 60 હતા. છોકરાઓ અને છોકરીઓની સંખ્યા અનુક્રમે 60 અને 60 હતી.

૭. ઉપકરણો

પ્રાયોગિક કાર્યો માટે મુદ્રિત સ્વ-અધ્યયન સાહિત્ય અધ્યયન સામગ્રીની સંરચના કરવામાં આવી હતી. માહિતી એકત્રીકરણ માટે સંશોધક રચિત ઉપકરણમાં પ્રત્યેક પેટા એકમ માટેની લક્ષ્ય કસોટીઓ અને એક મુખ્ય લક્ષ્ય કસોટી, અભીપ્રાયાવલિ તથા વિદ્યાર્થી ડાયરીની રચના કરી ઉપયોગ કરવામાં આવ્યો હતો. લક્ષ્ય કસોટી અને અભીપ્રાયાવલિનું પ્રમાણીકરણ કસોટી અર્ધવિચ્છેદન પદ્ધતિ દ્વારા કરવામાં આવ્યું હતું.

૮. સંશોધન યોજના અને માહિતી એકત્રીકરણ

પ્રસ્તુત પ્રાયોગિક સંશોધનમાં “માત્ર ઉત્તર કસોટી નિયંત્રિત જૂથ યોજના” પસંદ કરવામાં આવી હતી. પ્રાયોગિક યોજના અનુસાર મુખ્ય પ્રયોગવિધિ હાથ ધરી, બંને જૂથના વિદ્યાર્થીઓને લક્ષ્ય કસોટીઓ દ્વારા અને પ્રાયોગિક જૂથના વિદ્યાર્થીઓને અભીપ્રાયાવલિ દ્વારા માહિતીનું એકત્રીકરણ કરવામાં આવ્યું હતું.

૯. માહિતી પૃથ્થકરણની રીત

ઉત્કલ્પનાઓના સંદર્ભમાં અંક શાસ્ત્રીય પૃથ્થકરણ માટે SPSS ના ઉપયોગ દ્વારા ટી મૂલ્ય તથા સમાના સંભવની રીતે, આસંગ સારણી દ્વારા કાઈવર્ગ કસોટી, ટકાવારી અને ક્રમાંકનનો ઉપાયોગ કરવામાં આવ્યો હતો.

સારણી 1: કુમાર વિદ્યાર્થીઓના શૈક્ષણિક સિદ્ધિના પ્રપ્તાંકોનું પૃથક્કરણ અને અર્થઘટન

જૂથ	પત્રોની સંખ્યાં	સરાસરી	પ્ર.વિચલન	t–મૂલ્ય	સાર્થકતાની કક્ષા
પ્રાયોગિક જૂથ	30	20.80	3.13	3.35	0.01 કક્ષાએ સાર્થક
નિયંત્રિત જૂથ	30	18.23	2.75		

કુમાર વિદ્યાર્થીઓના બંને જૂથના શૈક્ષણિક સિદ્ધિના પ્રપ્તાંકોની સરસરી વચ્ચેના તફાવતની સાર્થકતા માટેનું t–મૂલ્ય 3.35 એ 0.01 કક્ષાએ સાર્થક છે. આથી H_01 નો અસ્વીકાર થાય છે.

સારણી 2: કન્યા વિદ્યાર્થીઓની શૈક્ષણિક સિદ્ધિના પ્રપ્તાંકોનું પૃથક્કરણ અને અર્થઘટન

જૂથ	પત્રોની સંખ્યાં	સરાસરી	પ્ર.વિચલન	t – મૂલ્ય	સાર્થકતાની કક્ષા
પ્રાયોગિક જૂથ	30	20.40	3.08	3.31	0.01 કક્ષાએ સાર્થક
નિયંત્રિત જૂથ	30	17.86	2.43		

કન્યા વિદ્યાર્થીઓના બંને જૂથના શૈક્ષણિક સિદ્ધિના પ્રપ્તાંકોની સરસરી વચ્ચેના તફાવતની સાર્થકતા માટેનું t–મૂલ્ય 3.31 એ 0.01 કક્ષાએ સાર્થક છે. આથી H_02 નો અસ્વીકાર થાય છે.

સારણી 3: પ્રાયોગિકજૂથના વિદ્યાર્થીઓની શૈક્ષણિક સિદ્ધિના પ્રપ્તાંકોનું પૃથક્કરણ અને અર્થઘટન

જૂથ	પત્રોની સંખ્યાં	સરાસરી	પ્ર.વિચલન	t – મૂલ્ય	સાર્થકતાની કક્ષા
કુમાર	30	20.80	3.13	0.89	0.01 કક્ષાએ અસાર્થક
કન્યા	30	21.37	1.45		

પ્રાયોગિકજૂથના કુમાર અને કન્યા વિદ્યાર્થીઓની શૈક્ષણિક સિદ્ધિના પ્રપ્તાંકોની સરસરી વચ્ચેના તફાવતની સાર્થકતા માટેનું t–મૂલ્ય 0.89 એ 0.01 કક્ષાએ સાર્થક નથી. આથી H_03 નો સ્વીકાર થાય છે. સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા છોકરાઓ અને છોકરીઓના અભિપ્રાયોનું કાઈવર્ગ મૂલ્ય 0.01 કક્ષાએ સાર્થક નથી. આથી H_04 નો સ્વીકાર થાય છે.

૧૦. સંશોધનના તારણો

(1) સૌરાષ્ટ્ર વિસ્તારમાં મોરબી જીલ્લાના વાંકાનેરની માધ્યમિક શાળાના કુમાર વિદ્યાર્થીઓની પરંપરાગત શિક્ષણ પધ્ધતિ કરતા સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયનને ઉંચી સિદ્ધિ મળી છે. અર્થાત કુમાર વિદ્યાર્થીઓને વિજ્ઞાન વિષયના એકમો માટે સ્વ-અધ્યયન સામગ્રી વધુ અસરકારક છે.

(2) સૌરાષ્ટ્ર વિસ્તારમાં મોરબી જીલ્લાના વાંકાનેરની માધ્યમિક શાળાના કન્યા વિદ્યાર્થીનીઓની પરંપરાગત શિક્ષણ પધ્ધતિ કરતા સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયનને ઉંચી સિદ્ધિ મળી છે. અર્થાત કન્યા વિદ્યાર્થીનીઓને વિજ્ઞાન વિષયના એકમો માટે સ્વ-અધ્યયન સામગ્રી સમગ્ર વધુ અસરકારક છે.

(3) વિજ્ઞાન વિષયમાં સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન કરતા વાંકાનેરની માધ્યમિક શાળાના કુમાર વિદ્યાર્થીઓની અને કન્યા વિદ્યાર્થીનીઓની સિદ્ધિ વચ્ચે સાર્થક તફાવત નથી આથી તેની અસર સમાન છે. અર્થાત કુમાર વિદ્યાર્થીઓની અને કન્યા વિદ્યાર્થીનીઓની સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયનની અસર સમાન છે.

(4) સ્વ-અધ્યયન સામગ્રી દ્વારા અધ્યયન અંગેના છોકરાઓ અને છોકરીઓના અભિપ્રાયો વચ્ચે કોઈ સાર્થક તફાવત નથી. અર્થાત સ્વ-અધ્યયન સામગ્રી દ્વારા શિક્ષણ અંગે છોકરાઓ અને છોકરીઓના સમાન અભિપ્રાય ધરાવે છે.

૧૧. શૈક્ષણિક ફલિતાર્થ

પ્રસ્તુત સંશોધનમાં મળેલા તારણો પરથી ફલિત થાય છે કે સ્વ-અધ્યયન સામગ્રી દ્વારા શિક્ષણની અસરકારકતા પરંપરાગત શિક્ષણ પધ્ધતિ કરતા વધુ છે. દરેક વિદ્યાર્થીઓમાં શીખવાની મૂળભૂત શકિતઓ હોય જ છે, આ શક્તિઓ ઓળખીને અધ્યયનક્ષમતાનું સંવર્ધન કરી શકાય છે. જેના માટે સ્વ-અધ્યયન સામગ્રી શ્રેષ્ઠ છે.

સંદર્ભ સાહિત્ય

- ઉચાટ, ડી. એ. (૨૦૧૨). શિક્ષણ અને સામાજિક વિજ્ઞાનમાં સંશોધનનું પદ્ધતિશાસ્ત્ર. રાજકોટ: સૌરાષ્ટ્ર યુનિવર્સિટી.
- આચાર્ય (૨૦૦૮). શિક્ષણ સંશોધનનું પદ્ધતિશાસ્ત્ર. અમદાવાદ: અક્ષર પબ્લિકેશન.
- એચ. જી. દેસાઈ અને કે. જી. દેસાઈ (1997). સંશોધન પદ્ધતિઓ અને પ્રવીધિઓ. (છઠ્ઠી આવૃત્તિ). અમદાવાદ: યુનિવર્સીટી ગ્રંથ નિર્માણ બોર્ડ. ગુજરાત રાજ્ય.
- શાહ, ડી. બી. (૨૦૦૪). શૈક્ષણિક સંશોધન. અમદાવાદ: યુનિવર્સીટી ગ્રંથ નિર્માણ બોર્ડ. ગુજરાત રાજ્ય.
- ઉચાટ, ડી. એ. (૨૦૦૮). માહિતી પર સંશોધન વ્યવહારો. રાજકોટ: સૌરાષ્ટ્ર યુનિવર્સિટી.

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Better the Incentives, So the Performance? A Snapshot based on Work Stress of UAE Based NRIs

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Abstract

Work stress and work performance has long been a topic of argument among the corporates. As Human Resource Management gains much importance in this global corporate world these elements need continuous discussion and arguments to find a better solution to eliminate the stressors and improve the efficiency of employees all over the world. The pay/incentive systems in any organization are counted as an important additive motivator for better performance and reduced stress of work among the employees. Hence this study has been conducted to see the relation between the incentive system, work stress and in turn the work performance. The study has been conducted among the NRIs working in the private sector companies of United Arab Emirates which is a prominent source of foreign exchange for India. The selected sample of employees are analyzed using the statistical tools of ANOVA and Post hoc Analysis. The study would enhance further studies in Human Resource Management.

Introduction

Work stress is a global problem faced by people all over the world on which discussions and arguments are enduring. It has a direct bearing on work performance and individual efficiency and hence it assumes much importance in the corporate world as well as individual output. Work stress may be defined as the corporeal and cognitive response to acute circumstances(Usman Ali et al., 2014). The subject of work stress is a significant area of discussion of business organizations as it has a lot to deal with the overall performance. Stress could make an individual go to depression and could severely affect his health and attitude towards work. Many factors contribute to work stress including work place atmosphere, employer employee relationships, reduced role of employees in participative management and excessive workloads. Work stress has a strong bearing on managerial interference in work and hence the type of management is an important factor influencing the degree of work stress and work performance. In contrast to public sector which is guided mainly by maintaining a socio-economic balance of society, Private sector organizations are motivated by profit maximization and growth of market share and hence put high demands on employee performance and resourcefulness(Macklin et al., 2006). Hence the study would like to look into the work stress related issues of employees in the private sector employees.

Incentives play a vital role in work stress as well as work performance. The pay and incentive systems in an organization has a lot to do with the overall performance of employees in any organization. Work performance has a direct bearing on work stress which in turn has a bearing on reward system. One of the fundamental criteria of aversive motivation is pain and pleasure (Esch & Stefano, 2010). Hence reward system in any organization has a role in generating pleasure and thus would lead to motivation which reduce stress and improve performance.

According to the Migrant Stock 2020, as released by the Population Division of the UN Department of Economic and Social Affairs (DESA), UAE has an ethnic community of 3.5 million Indians constituting 30% of the country's population. The UAE private sector is capable of creating tens of thousands of jobs every year. The UAE uses its rich oil resources to accelerate its economic development by importing specialized financial and social services as well as setting up well defined trading networks. Country uses imported services to the extent of 80% of its total population(Satisf, n.d.). Hence the study focuses on the private sector NRI employees in UAE who are a major contributor of wealth of our nation.

Literature Review and Research Gap

There are endless studies and ongoing discussions in the area of work stress and a few of them are reviewed and the major findings are discussed here. According to a study by K Bhui and S Dinos there are a number of factors contributing to work stress including high demand on productivity and low control situations, imbalance in effort and rewards, management style and the type of job. One of the most significant and persisting stressor is management practices followed in the business organization. It is also highly prominent in private as well as public sectors(Bhui et al., 2016)

In a study on teachers in European countries it was held that the educators experience emotional exhaustion rather highly. It is held that the educators are satisfied with their job but were not satisfied with their salary they receive. In the public sector it could be seen that the employees were satisfied with their job but were not comfortable with the management, whereas in the private sector the reverse happens. It was revealed that the nature of work and management style contributed significantly to the emotional exhaustion of employees in the public sector(Tsigilis et al., 2006). In a review paper on the causes and effect of employee turnover in the private sector organizations in Malaysia some crucial factors in job turnover have been identified which could seriously affect the work stress of employees. They include influence of management, poor managerial understanding of employees, pay related issues, disparity in job and qualification, poor opportunities in career growth, lack of fringe benefits and influence of co-workers(Arokiasamy, 2013).

In a comparative study on employees' stress management in private and public sector banks in Nagapattinam District, Tamilnadu, the author analyzes the impact of various socio-demographic factors on stress levels of bank employees and is revealed to have a direct impact on employees' stress levels. The author put forth a number of factors related to work, organization, personal, health environment, psychological, and emotional as impacting stress levels (Xavior Selvakumar & Advisor, 2015)

Work stress in the Private sector of the UAE

As UAE private sector is a major contributor of our national income and tens of thousands of Indians are working in the private sector organizations of the United Arab Emirates, we could see lots of unending discussions and written articles and studies in the said area. A few of them are reviewed here. According to a study held in UAE it is put forth that job stress contributes to lower levels of job satisfaction. In the study five different factors are being identified as stressors; they are, work related stressors, work-role stressors, pay and growth stressors, status of job and work-family conflict. Out of these pay and growth related factors as well as work related factors are considered to be highly significant and the pressure on these factors alone amounted to decreased job satisfaction of academic staff of UAE(Jawabri et al., 2019).

In a study to identify the elements of job stress and productivity in UAE based organizations it is found that the most prominent variables are work load, role ambiguity, gender discrimination and low interpersonal relationships. The factors responsible for productivity are identified as job schedules, efficiency of the supervisor, remuneration, systems and procedures, group dynamics, absenteeism and presentism(T & Gupta, 2018). Though there are a vast number of studies held in the area of work stress and productivity or work performance across the world, only few literatures are found in the work stress related performance of NRIs in UAE.

Statement of the Problem

There are concrete evidences on the negative impact of work stress on the performance of employees. Varied factors account for the work stress including workload, working hours, management styles, inter personal relationships, pay related and career related issues. The United Arab Emirates (UAE) is a foreign country where around more than 3 million Indians are employed especially in the private sector. India is a country depending much on the remittances of the NRIs. Hence the study here is aiming at the Human Relations aspect of the UAE private sector organizations. It analyzes the work stress implications on the performance of NRIs in the private sector business organizations in UAE. Absence of monetary or non-monetary schemes of incentives are also one of the factors leading to work stress and hence the impact of the incentive system should be evaluated to check whether these have an impact on reducing or increasing the work stress of employees. According management theories a good incentive system could reduce the workload stress to some extent and therefore employees' perception of the effect of incentive system should be analyzed.

Objectives of the Study

1. To analyze the work stress of private sector employees of UAE
2. To evaluate the relationship between work stress and work performance
3. To evaluate the effectiveness of incentive system on work stress of employees

Significance of the Study

India has long been one of the top most country in receiving remittances from foreign countries especially middle east. Around 3.5 billion expatriate Indians are employed in the oil rich Gulf countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates (UAE). The remittances from these NRIs have always been a permanent and consistent source of strength and support to India's balance of payments in more than 5 decades (Pattanaik, 2007). Out of the total population of NRIs in middle east countries, more than 2.5 million are from Kerala. In UAE alone 7,73,624 Keralites are permanently resident. Out of these except a minority are employed in the private sector organizations in construction, financial services, trading etc. Reviewed literature shows that employees in Gulf countries face considerable work stress from varied factors which are irresistible. In a study held among the employees in the Al-Ain Municipality public sector work force, work stress was evident and was caused by a number of heterogeneous reasons including even the economic rather financial tensions in the country's economy(Jenaibi, 2010). As the work stress has a considerable effect on work performance and productivity the work stress studies are taken up seriously by many organizations in a move to improve their overall performance. There are a number of studies in the area of work performance, but only limited sources to view in the area of work stress and work performance relativity. Hence it assumes much importance in the context.

Research Design

The study titled 'Analyzing the work stress and work performance of NRI employees in the private sector undertakings in UAE' aims at the relationship between work stress and work performance. The population of the study is the Non-resident Indians working in the private sector business organizations in the United Arab Emirates. A sample size of 98 respondents were selected using convenience (non-random) sampling method. Data has been collected using structured questionnaire in electronic form. Statistical analysis tools of Chi-square (χ^2-test), Likert Scale (5 point) analysis, ANOVA and Correlation have been used to analyze the data.

Analysis and Findings

1. **Age and Gender**

Most of the respondents belong to the age group of 30 -40 years and 93% of them were male employees. As gulf countries are explored for employment mostly by men there was a considerable difference in gender in sample. Analysis of Variance Test has been conducted to see whether there is any significant relation between age and Work stress.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Stress Score	Between Groups	.180	2	.090	.088	.915
	Within Groups	96.820	95	1.019		
	Total	97.000	97			
Incentive Score	Between Groups	4.799	2	2.399	2.472	.090
	Within Groups	92.201	95	.971		
	Total	97.000	97			

Since the p values are greater than 0.05, it can be inferred that the age of the respondents has no significant influence on stress and incentive system for 5% level of significance.

2. **Monthly Income**

   Majority of the respondents have an income level of between Rs. 50,000- Rs. 1,00,000 p.m. The income levels were tested for a relation with stress levels and with incentive system.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Stress Score	Between Groups	7.350	3	2.450	2.569	.059
	Within Groups	89.650	94	.954		
	Total	97.000	97			
Incentive Score	Between Groups	6.133	3	2.044	2.115	.104
	Within Groups	90.867	94	.967		
	Total	97.000	97			

Since the p values are greater than 0.05, it can be inferred that the monthly income of the respondents has no significant influence on stress and incentive system for 5% level of significance.

3. **Work experience of employees in Gulf countries**

   50% of the respondents have been working in Gulf countries since last 10 years. Only 28% accounted for a period ranging from 5 to 10 years.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Stress Score	Between Groups	2.808	3	.936	.934	.428
	Within Groups	94.192	94	1.002		
	Total	97.000	97			
Incentive Score	Between Groups	9.795	3	3.265	3.519	.018
	Within Groups	87.205	94	.928		
	Total	97.000	97			

Since the p value corresponding to stress value is greater than 0.05, we can conclude that the work experience of the respondents has no significant influence on stress for 5% level of significance. But, since the p value corresponding to incentive score value is less than 0.05, we can conclude that the work experience of the respondents has significant influence on the incentive system for 5% level of significance. In order to find the significantly different category post hoc test is performed and the results are given below.

Post hoc test

Multiple Comparisons							
Dependent Variable	(I) Your work experience in Gulf countries	(J) Your work experience in Gulf countries	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Incentive Score	> 10 Years	< 1 Year	-0.05737	0.36728	0.876	-0.7866	0.6719
		1 - 5 Years	-.63617*	0.30049	0.037	-1.2328	-0.0395
		5-10 Years	-.65365*	0.22818	0.005	-1.1067	-0.2006
*. The mean difference is significant at the 0.05 level.							

From the table it is clear that the incentive systems of the respondents who have 1- 5 years and 5 – 10 years of experience in gulf countries are significantly different from that of the respondents who have more than 10 years of experience. Also, the respondents belonging to other groups are not significantly different each other with respect to incentive system.

4. **Family status of NRIs**

   Respondents counting around 68% were not having their family staying with them. As this variable is considered to be a stress reliever the following test has been made.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Stress Score	Between Groups	.985	2	.493	.487	.616
	Within Groups	96.015	95	1.011		
	Total	97.000	97			
Incentive Score	Between Groups	.350	2	.175	.172	.842
	Within Groups	96.650	95	1.017		
	Total	97.000	97			

Since the p values are greater than 0.05, it can be inferred that the presence of the family members with the respondents has no significant influence on stress and incentive system for 5% level of significance.

5. **Frequency of visit to home land**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Stress Score	Between Groups	10.043	3	3.348	3.619	.016
	Within Groups	86.957	94	.925		
	Total	97.000	97			
Incentive Score	Between Groups	6.225	3	2.075	2.149	.099
	Within Groups	90.775	94	.966		
	Total	97.000	97			

Since the p value corresponding to incentive score is greater than 0.05, we can conclude that the frequency of visiting home lands of the respondents has no significant influence on the incentive system for 5% level of significance. But, since the p value corresponding to stress score is less than 0.05, we can conclude that the frequency of visiting home lands of the respondents has significant influence on stress for 5% level of significance. In order to find the significantly different category post hoc test is performed and the results are given below.

Post hoc test

Multiple Comparisons							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Stress Score	2-3 times in a year	Once in a year	.74212*	.26725	.007	.2115	1.2727
		Once in two years	.25902	.43586	.554	-.6064	1.1244
		Rarely	-.00136	.43586	.998	-.8668	.8640
*. The mean difference is significant at the 0.05 level.							

From the table it is clear that the stress of the respondents who visits their homeland 2-3 times in a year is significantly different from that of the respondents who visits their homeland less than 2 times in a year. Also, the respondents belonging to other groups are not significantly different each other with respect to stress score.

6. Opinion about work efficiency

Opinion about work efficiency		N	Mean	Std. Deviation	Std. Error Mean	Sig.
Stress Score	Excellent	75	.0692	.99516	.11491	0.225
	Average	23	-.2257	1.00418	.20939	
Incentive Score	Excellent	75	.0356	1.05715	.12207	0.528
	Average	23	-.1160	.79475	.16572	

Since the p values are greater than 0.05, it can be inferred that the stress levels of respondents has no significant influence on work performance for 5% level of significance.

7. Correlation between stress and incentive system

Pearson Correlation coefficient	-.220*
P value	.029
Sample size	98

The correlation coefficient between stress and incentive system is -0.220. This indicates that the correlation between stress and incentive system is negative but significantly low.

Discussion and Conclusion

A number of variables including demographic factors, years of work experience in UAE, the family visa status of NRI employees in UAE, work performance, incentive system etc. have been analyzed for studying the relationship between work performance and work stress of employees in private sector organizations in UAE. From the results it could be referred that the variables age gender, or family status bear no significant relation on the stress levels of employees as well as the incentives provided by these organizations. Whereas work experience and frequency of visit to home land has a significant influence on work stress as well the work performance of employees. It is scientifically proved that employees visiting their hole places lesser than twice in a year has a considerably higher levels of stress compared to those visiting their home lands at least twice in a year. Likewise, years of work experience in gulf countries has a considerable effect on reduced work stress as well as the benefits associated with their works. This shows that the performance of employees has an indirect bearing on their reduced stress levels due to frequency of visits to their home places and as their work experience rises their work stress are also reduced as well as incentive systems could boost their work performance. Further studies should be conducted to compare private sector as well pubic sector employees to see whether these management factor has an influence on work stress and work performance.

References

Arokiasamy, A. R. A. (2013). A qualitative study on causes and effects of employee turnover in the private sector in Malaysia. *Middle East Journal of Scientific Research*, *16*(11), 1532–1541. https://doi.org/10.5829/idosi.mejsr.2013.16.11.12044

Bhui, K., Dinos, S., Galant-Miecznikowska, M., de Jongh, B., & Stansfeld, S. (2016). Perceptions of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: a qualitative study. *BJPsych Bulletin*, *40*(6), 318–325. https://doi.org/10.1192/pb.bp.115.050823

Esch, T., & Stefano, G. B. (2010). Endogenous reward mechanisms and their importance in stress reduction, exercise and the brain. *Archives of Medical Science*, *6*(3), 447–455. https://doi.org/10.5114/aoms.2010.14269

Jawabri, A., Alarmoti, A., & Mohammed, M. A. (2019). Job stress and satisfaction among academic staffs in public universities: An empirical study in the United Arab Emirates (UAE). *Management Science Letters*, *9*(7), 973–986. https://doi.org/10.5267/j.msl.2019.4.007

Jenaibi, B. Al. (2010). Job Satisfaction: Comparisons amoung diverse public organizations in the UAE. *Management Science and Engineering*, *4*(3), 60–79.

Pattanaik, S. (2007). Gulf NRIs and Their Remittances to India: The Saga of Overlooked Great Expectations. *Journal of International and Area Studies*, *14*(1), 31–53. http://iia.snu.ac.kr/iia_publication/iia_publication_jias.htm%5Cnhttp://search.ebscohost.com/login.aspx?direct=true&db=ecn&AN=0929930&site=bsi-live

Satisf, J. (n.d.). *Exploring Under-representation of Young Emirati Adults in the UAE Private Sector by Examining Emirati*.

T, B., & Gupta, K. (2018). Job Stress and Productivity: A Conceptual Framework. *International Journal of Emerging Research in Management and Technology*, *6*(8), 393. https://doi.org/10.23956/ijermt.v6i8.171

Tsigilis, N., Zachopoulou, E., & Grammatikopoulos, V. (2006). Job satisfaction and burnout among Greek early educators: A comparison between public and private sector employees. In *Educational Research and Review* (Vol. 1, Issue 8). http://www.academicjournals.org/ERR

Xavior Selvakumar, A., & Advisor, R. (2015). EMPLOYEES STRESS MANAGEMENT IN PUBLIC AND PRIVATE SECTOR BANKS IN NAGAPATTINAM DISTRICT-AN ANALYSIS. *Asia Pacific Journal of Research*. www.apjor.com

Zachariah, K. C. & Rajan, S. Irudaya (2011), *Kerala Migration Survey 2011* (PDF), Department of Non-resident Keralite Affairs, Govt. of Kerala, p. 29.

Macklin, D. S., Smith, L. A., & Dollard, M. F. (2006). Public and private sector work stress: Workers compensation, levels of distress and job satisfaction, and the demand-control-support model. *Australian Journal of Psychology*, *58*(3), 130–143. https://doi.org/10.1080/00049530600940190

Usman Ali, W., Rizwan Raheem, A., Nawaz, A., & Imamuddin, K. (2014). Impact of Stress on Job Performance: An Empirical study of the Employees of Private Sector Universities of Karachi, Pakistan. In *Research Journal of Management Sciences ISSN* (Vol. 3, Issue 7). www.isca.me

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AUTOMOBILE SECTOR: LATEST IMPLICATIONS OF GST

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ABSTRACT

Automobile Sector is one of the biggest, developing and dynamic segments in the Indian economy. To accentuate its importance in the Indian economy, during 2015-16 for which information is accessible, the auto segment represented 7.1% of nation's GDP and is targeted to 29% by 2025. Major worldwide vehicle producers presently have their assembling workshops in India. The auto segment, including the vehicle manufacturing & service, is spread over various States in India making it an extremely critical supporter of exchequer in practically every one of the States. The auto segment contains Automobile Manufacturers (OEMs) who manufacture or assembling Motor Vehicles, Auto Ancillaries providing parts to other OEMs, the Dealers of OEMs and suppliers of related administrations for vehicles. This article expects to analyze on the GST suggestions according to the OEM point of view.

KEY WORDS: Automobile, Development, Manufacturing, GST, GDP

INTRODUCTION

The Automobile producing comprehensively has for sections - traveler vehicles including utility vehicles, business vehicles - for products and traveler application, three wheelers (again for merchandise and traveler application) and bikes. Just to give a thought regarding the numbers, the Gross Turnover of the Automobile Manufacturers in India during FY 2019-20 as far as USD was 83,876 Million which expanded to 87,724 Million in FY 2020-21. While the information on Gross Turnover for FY 2021-22 isn't accessible, during FY 2021-22, the segment delivered 49.19 Million vehicles, higher than any of the previous years. This makes it perhaps the biggest player among other segments. The auto segment likewise has solid presence in exports and 6.24 Million vehicles were exported from India in 2020-21. As far as number of vehicles, bikes are by a long shot the most well known type of vehicles sold in India, representing 81% of Domestic Sales and 80% of the vehicles created in FY 2019-20. (Source siamindia.com Statistics)

Auto segment's activities are to some degree complex from charge point. Under the pre-GST arrangements, the area overall had convoluted charge structure concerning different assessments with assorted arrangements, variety of orders and rates, flowing impacts, issues on set off of expenses endured at before stage, valuation issues and so forth, other than being exposed to genuinely high pace of tax collection, by and large changing somewhere close to 28% and 56% of cost. The area has consistently welcome and upheld the idea of significant worth added tax collection around which GST is worked, regardless of difficulties in carrying out such a significant change, fully expecting having straightforward and sane expense structure under GST and furthermore objective paces of tax collection on its items. On audit of genuine year one working under GST, the effects thereof on OEMs are viewed as both positive and negative; however the degree of such effect would fluctuate between the fragments alluded to above relying upon their current business cycles and duty structure and issues. The GST suggestions according to OEM point of view and assumptions from GST, both positive and negative, and a portion of the forthcoming issues that need consideration are managed beneath under various Headings/areas of conceivable effect and in doing as such, the progressions achieved through the ensuing Notifications have additionally been thought of.

1. Tax towards end customer:

(a) Subsuming number of duties into two expenses - CGST and SGST, with consistency of lawful arrangements across States, normal duty base for the two charges trying not to outpouring of expense on charge, as well as getting rid of valuation strategies like Rule 10A and MRP based valuation for spare parts, are significant up-sides. On the negative side, State level Vehicle Tax/Road Tax isn't subsumed in GST in spite areas of strength for of from car industry and will keep on being additional expense for the end client. In addition, this duty would stay in State space and States might be enticed to climb something very similar for income contemplations.

(b) The multiplicities of characterizations and the chance of ensuing questions is diminished. Nonetheless, due to cess demand and adaptability accessible to the Government in obsession of its rates, different rates actually win which should be limited to least, preferably to two rates (other than concessional rates explicitly gave).

(c) Under the previous expense system, Central Excise Duty and CST were not payable on transportation cost of vehicles straightforwardly sold from OEM production line to seller, which was a typical dispersion practice for vehicles and bikes. Because of idea of composite stock, post GST, such transportation cost (which is a sizable sum) endures charge at same rate as material for the vehicle. Additionally, under GST, the last cost to the client is exposed to full assessment rate against Central Excise Duty which was not appropriate on exchanging edges. These two changes expand the duty base.

(d) High pace of expense on Passenger Cars, other than those which merit characterization as little vehicle, has been one of the complaints of the auto segment. In the assessment rates at first advised under GST, taking perception of this, the pace of expense on very good quality Passenger Cars and Utility Vehicles was essentially lower contrasted with existing rates and some advantage was likewise presented in pace of duty on fair size vehicles contrasted with before rates. In any case, by Notification No. 5/2017 - Compensation Cess (Rate) dated 11.09.2017, the Cess on these Cars was expanded, considerably invalidating the above benefit. A table appearance consolidated pace of reexamined charge under GST versus pre-GST rate on significant classifications of vehicles is joined as Annexure A. The GST rates would apply on a more extensive base worth, as referenced in (c) above. It will be seen that the adjustment of rates is negligible assuming we think about the expansion in base worth. Subsequently, the issue of higher paces of assessment on vehicles remains generally neglected.

(e) The concessional pace of duty for Hybrid Cars (other than those gathering little vehicle measures) in prior charge system has been removed in GST and they are exposed to burden @43%, which is a significant slowed down to the impending section.

(f) As respects post deal fixes and overhauling, there is uncertainty on its duty treatment because of composite inventory idea. Government necessities to affirm its acknowledgment on the ongoing business practice of treating spare parts/material utilized as supply of products and work as supply of administration as opposed to regarding the action as composite inventory which would be exceptionally emotional and debate inclined.

(g) Though this isn't auto segment explicit, restricting the worth and pace of duty pertinent on provisions of old and pre-owned cars is a welcome advance as the equivalent would confine the twofold

charge occurrence on same products (Reference Notification No. 8/2018 - Central Tax (Rate), Notification No.9/2018 - Integrated Tax (Rate) and Notification No. 1/2018 - Compensation Cess (Rate), all dated 25.01.2018).

POST GST CHANGE IN PER CENTAGE OF TAX APPLICABLE ON MAJOR CATEGORIES OF MOTOR VEHICLES							
Sr. No.	**Type of Vehicle**	**HSN Code**	**Pre GST Duties & Taxes**			**Post GST (CGST + SGST inc. Cesses)**	**Post GST Difference in %**
			Central Excise inc. Cesses %	**VAT + CST %**	**Total %**		
1	**Passenger Car UVs included**						
(a)	Small Car - Petrol	8703	14.63	18.07	32.70	29	-3.70
(b)	Small Car - Diesel		16.13	18.31	34.44	31	-3.44
(c)	Mid. Segment Car		29.13	20.37	49.50	45	-4.50
(d)	Large Car		32.13	20.83	52.96	48	-4.96
(e)	Sports / Utility Vehicle		35.13	21.30	56.43	50	-6.43
(f)	Hybrid Car		13.63	17.91	31.54	43	11.46
(g)	Electric Car		7.13	8.70	15.83	12	-3.83
2	**Fully Built Commercial Vehicles**						
(a)	Goods Truck, Bus – Diesel > 13	8704 & 8702	12.63	15.20	27.83	28	0.17
(b)	Tractors & Farm Equipments	8701	12.63	15.20	27.83	28	0.17
(c)	Special Purpose Vehicle	8705	12.63	15.20	27.83	28	0.17
3	**Chassis – for goods truck - Diesel**	8706	13.13	15.27	28.40	28	-0.40
(a)	- for Diesel bus > 13		14.13	15.40	29.53	28	-1.53
4	**Petrol – Two Wheelers**						
(a)	Bike > 350 cc	8711	13.63	17.91	31.54	31	-0.54
(b)	Motor Cycles, Mopeds, Scooters		13.63	17.91	31.54	28	-3.54
5	**Three Wheelers (Non Ele.)**	8703 & 8704	12.63	17.75	30.38	28	-2.38

2. Impact on cost of production and distribution:

(a) Major positive is decrease in costs (however a portion of these advantages must be given to clients as far as hostile to exploitative arrangements), for the most part by virtue of the accompanying:

Category	Production Trends			Domestic Sales Trends			Export Trends		
	2018-19	2019-20	Change%	2018-19	2019-20	Change%	2018-19	2019-20	Change %
Passenger Vehicles	41,04,890	43,00,177	+4.76	33,87,925	35,25,185	+4.05	8,32,234	7,95,287	-4.44
Commercial Vehicles	8,17,122	9,08,214	+11.15	7,68,914	8,76,452	+13.99	1,12,435	1,18,587	+.05
Three Wheelers	12,38,967	14,97,119	+20.84	7,56,269	9,52,687	+25.97	5,13,961	7,96,115	+54.90
Two Wheelers	2,87,25,318	3,14,90,679	+9.63	2,19,43,761	2,43,76,119	+11.08	33,54,512	38,12,864	+13.66
Total	3,48,86,297	3,81,96,189	+9.49	2,68,56,869	2,97,30,443	+10.70	48,13,142	55,22,853	+14.75

Source : siamindia.com Statistics - Performance of Auto Industry during 2019-20

1. Saving of 2% CST on bury - state acquirement.

2. Saving money on VAT give up where deals to clients in different states are steered through stops - primarily business vehicles - as well as on moves of semi-completed merchandise to different plants in various states - 4% or considerably a greater amount of comparing buys inside State.

3. Saving in Octroi/LBT/Entry Taxes without credit on acquirement.

4. Input Tax Credit on outward transportation - net advantage for business vehicles sold through warehouses.

5. Merchant cost decreases for relating benefits in production network.

6. More extensive Input Tax Credit accessibility for example guarantee parts, administrations connected with exchanging exercises, things like furniture prior out of credit chain.

7. Saving in cost of non-decrease of Central Excise Duty on post deal motivating forces.

8. Realignment of dispersion chain for example number of terminals confined as warehouse in a State can now take special care of clients in adjoining states without additional duty suggestion.

9. Benefits in transportation cost because of decrease in transportation time with cancelation of actually take a look at posts.

(b) Further capability of saving in process of things working out because of expense impartiality, for example, through defense of obtainment choices on work, level of gatherings and re-appropriating, determination of sellers with area no bar, realignment of creation processes even where units are in various States, possible legitimization at merchant end also - as this multitude of choices can be made simply founded on working effectiveness alone.

(c) While the extent of Input Tax Credit is extended, a significant negative is impressively expanded consistence exertion with credit matching idea and compromise issues. Besides, the issue of concern is that while coordinating of credit with the assessment really paid is being demanded, since no proper instrument has yet been given by the Government to coordinating and affirmation of credit, the credit profited stays temporary. This issue might go on for some additional time till GSTN return processes are patched up. With enormous sums in question and with huge seller base, the auto segment is truly uneasy of this present circumstance as regardless of whether not many merchants are in the end found deviant, cost suggestions can be exceptionally high. Keeping in view the troubles, the Government actually needs to relook at its stand on this matching commitment on beneficiary essentially for the underlying time of coordinated and half years or so till the GSTN processes on return matching are redone and balanced out.

(d) Another significant negative is that without exchanges at concessional rate like C Form or F Form exchanges as allowed under the pre-GST regulations, the necessity for working capital on stock at all stages - in plant, at stations, in travel, at showrooms has gone up with obstructing more subsidizes in charges. Credit collection issues at station areas are another issue.

(e) In auto segment, it has been normal practice for OEMs to give passes on, shape and so on as well as a feature of the material expected by seller (who obtains rest of the material for his own and as such doesn't fit the bill to be work laborer) for supply of parts to the OEM. There is vagueness on how such things ought to be esteemed while they are shipped off the seller as well as while the merchant supplies the parts and various practices are being followed with arrangements deciphered in an unexpected way. Since gigantic qualities and enormous number of exchanges are involved, to stay away from prosecutions at later date, Government needs to emerge with a revision/Notification explaining that the worth of such supplies ought to be figured as NIL, keeping in thought the guideline of significant worth added tax collection and the way that these are just go-between exchanges and the worth of such passes on, molds and so forth and material is as of now viewed as in vehicle evaluating and in the end exposed to burden.

(f) The issue of spot of supply in the event of tooling cost recuperation where part provider and the client are in various states is likewise a bone of conflict. Segment 10 (1) (c) of IGST Act gives that where the inventory doesn't include development of merchandise, whether by the provider or the beneficiary, the spot of supply will be the area of such products at the hour of the conveyance to the beneficiary. Thus, in the event that the provider of part creates device in a state and the client is situated in another State, charging CGST: SGST which wouldn't be accessible as credits to the client situated in various state bringing about inflated cost is required.

(g) in the event of worldwide tooling exchange additionally, the expense is recuperated from the unfamiliar client yet without development of hardware from India to outside India, it neglects to fulfill the state of product of merchandise. The provider needs to charge GST bringing about inflated cost and influencing global seriousness of Indian auto segment.

(h) The Input Tax Credit on provisions acquired to give incidental advantages to representatives with regards to business arrangement/conditions, is by and large denied in GST likewise as under the prior charge system. While there is no avocation for the actual denial in the arrangement of significant worth added tax assessment, the curious valuation arrangements additionally expect expense to be paid on such incidental advantages on their open market esteem. This is making vagueness and various practices are being followed. Indeed, even the Government reactions are fairly clashing. Since auto segment utilizes huge number of workers and it has been an exchange practice of giving them a few incidental advantages, it is worried about the issue. Almost certainly, the Government won't digress from its strategy of not permitting Input Tax Credit on provisions implied for giving advantages to representatives. In any case, to stay away from ambiguities around here, Government needs to tell that the worth of any provisions to workers concerning business understanding/conditions will be taken as Nil as no Input tax break is permitted on the relating supplies utilized for something similar.

(I) In request to get supplies from merchants in different states without a moment to spare according to creation necessities, one of the practices followed is seller dispatching a similar minimal in front of conveyance plans and the provisions being held at carrier distribution center at OEM area and provided according to OEM prerequisite. With E way bill techniques, there is misgiving that under such game plan view might be taken that these are neighborhood supplies expecting merchant to take enrollment at carrier distribution centers, treat supplies as inside moves, assume praise and pay charge as nearby supplies on genuine stock to OEM from the distribution center. This will confuse the current practice.

(j) Variation in the cost of parts is a typical practice in the business. The impact of such cost variety must be given by issuance of credit note/charge note. Considering the necessity to specify the reference of unique receipt on the credit note/charge note, the part provider is expected to issue

3. Influence on the State Incentives/Subsidies and on Area based Central Excise exclusion:

(a) The State Governments have either not emerged with strategy on how they would manage the issue in changed charge structure under GST or have confined the quantum helpful for SGST, in this manner denying benefit on entomb State supplies. This is a significant negative ramification for organizations that made significant interests in unambiguous states remembering a specific degree of motivator/sponsorship they would get. State Governments need to resolve this issue and safeguard the quantum of motivating forces.

(b) Number of OEMs and their auxiliary merchants were drawn to Uttarakhand, principally considering the Central Excise Duty exclusion plot. While some of them have finished the time of exception benefit before presentation of GST, some were/are still inside benefit period. The exception which essentially involved benefit equivalent to 100 percent of Excise Duty on esteem expansion stands removed with presentation of GST. The pay given by the Central Government in lieu thereof as monetary help extensively works out to sum equivalent to entirety of 58% of CGST paid through charge in real money record and 29% of IGST paid through charge in real money record (in the two cases after usage of Input Tax Credit of Central Tax and Integrated Tax) - again an adverse consequence for auto segment.

4. Consistence exertion:

(a) The auto segment has patched up its inner expense work in accordance with necessities under the GST system and set forth broad amounts of energy in setting up new interior cycles, new bookkeeping and IT framework to conform to GST prerequisite after investigation of GST regulation and specifically a few new ideas in that. Broad exertion has additionally been set up in re-working of item valuing and cost suggestions at merchant end as well as on preparing - both interior as well concerning sellers and vendors.

(b) Easier compliances in certain issues like uniform legitimate arrangements across states, lesser order issues, no structures assortment, no GAQ calculation on stock exchanges, no Section 4A/Rule 10A valuation, no issue of pre-decided deal and so forth diminish the consistence exertion.

(c) However, the experience is that the general consistence exertion has expanded because of prerequisite of matching information tax reduction to burden installment by seller as well as because of necessity of settling full expense and benefiting credit at relating area on all inside moves of labor and products and have to reinforce the duty work at areas like warehouses, branches and so on to deal with this angle. Consistence of hostile to exploitative arrangements is one more new region for consistence.

(d) In auto segment, it is normal practice to gather installments against provisions ahead of time and taking into account the working confusions, consistence of necessity to treat point of receipt of advance as season of supply included part of endeavors. Vide Notification No. 66/2017 - Central Tax dated 15.11.2017 the expressed necessity concerning propels got has been shed for products which is a positive improvement for auto segment.

(e) On the acquisition side, the review value corrections are regular. The work on during the pre-GST period was to give joined charge/credit note for the equivalent for example one report covering number of prior provisions. Prerequisite of one charge note/credit note per relating unique receipt brings about sizable expansion in managerial exertion in representing such exchanges.

(f) Number of organizations in auto segment had taken enrollment under LTU and Centralized Service Tax Registration for the most part to work with unified organization. Nonappearance of such courses of action has prompted totally decentralized charge organization at enrollments in separate States, under various specialists, Central or State, with plausibility of various perspectives being taken by the experts on similar issues. This involves worry for auto segment as most organizations have enrollments in a few States.

Conclusion:

After just about one year of working, the ramifications of GST on auto segment have been both positive and negative (leaving to the side the early stage struggles), as examined prior. Additionally, as expressed prior, they shift from one section to another and even inside sub-fragments. An examination of execution of Auto Industry during FY 2017-18 as far as numbers versus FY2016-17 is given in Table connected as Annexure B. While it shows great generally speaking development in numbers under the chose standards, one needs to comprehend that such changes are impression of various more significant factors, for example, monetary circumstances, changes in economic situations, contrasts in conditions and explicit issues in years being thought about and tax collection is only one of the elements having bearing. Other than the examination is in numbers and the generally speaking decent development number is arrived at through somewhat better execution in bike and three wheeler fragments. Nonetheless, in light of these figures, inside impediments of what has been referenced of such examinations, one can reason that the general effect of GST on auto segment in it's absolute first year has not been negative and the area in spite of the underlying issues has moved to the new expense framework with the broad endeavors put in for something very similar. There have been negative ramifications and areas of worries on which auto segment has been addressing to the Government and positive reaction consequently will help development of the area and fortify its situation and commitment to the economy.

REFERENCES

1. https://www.businessworld.in/article/Impact-Of-GST-On-Automobile-Sector/24-12-2020-357444/
2. https://blog.saginfotech.com/gst-impact-on-automobile-industry-in-india
3. www.taxmanagementindia.com/visitor/detail_article.asp?ArticleID=9985
4. https://corpbiz.io/learning/impact-of-gst-on-the-automobile-sector/
5. https://auto.economictimes.indiatimes.com/tag/gst
6. www.pwc.in/assets/pdfs/trs/indirect-tax/sectoral-updates/impact-of-gst-automotive-sector.pdf

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THE APPLICATION OF CORPORATION AND SECURITIES LAW IN COMMON LAW ASIA CONCERNING CLIMATE RISK, WITH SPECIAL REFERENCES TO SINGAPORE, HONG KONG, AND INDIA

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Abstract:

A strategic climate litigation study focuses mainly on litigation filed against individual litigants or the state for violations of environmental law, tort law, human rights law, or public law. Less has been written on corporate and securities cases against companies and directors in general, and Asia in particular, than in any other region. These omissions are addressed in this report. Using three major common-law countries in Asia as a case study, this essay investigates whether corporation law and securities law enforcement may be utilized to mitigate climate-related risks. In particular, the emphasis is on whether or not this is feasible and how it may be accomplished. To address climate risk, this paper argues that public enforcement of securities law and listing requirements is better options than private enforcement since both public and private enforcement of corporate law have their drawbacks.

Keywords: litigation; human rights; securities law; climate risk; corporate law

Introduction:

There has been researching on climate litigation as a strategic tool to halt environmental degradation and address climate-related transgressions. This article investigates whether and how corporate law and securities enforcement might be utilized to solve climate challenges in different countries. The primary defense is that the constraints of corporate law make public enforcement of securities law a more effective tool for combating climate problems.

Objectives of the study:

1) To analyze the significance of corporate disclosure under securities law for creating climate change-related risks and then examine how corporate disclosure obligations can be enforced.
2) To identify the overall trend in prosecuting climate-related crimes across Asian jurisdictions.
3) To highlight divergences and trends, if any, concerning each jurisdiction.
4)To identify gaps that may affect enforcement and prosecution efforts.

5) To find out the ongoing debate regarding whether the publication of corporate climate-related risk information is required by securities laws and regulations in East Asia.

6) To study how firms and countries can deal with increasing disclosures of climate-related risks.

7) To find out how climate change can affect the financial performance of firms.

Research methodology:

This paper is a comparative study of the role of the law in China, India, and South Korea in inducing companies to disclose climate-related risks and opportunities. Several pieces of information are collected from the media and databases on how relevant laws are used to protect investors and regulate listed companies. The case studies and textual analysis of the listed companies' annual reports in these three Asian countries show that, for the most part, there is no incentive provided by relevant laws in these three countries to elicit climate-related information from companies. It is a descriptive research and aims to provide an overview of the role of the law in inducing companies to disclose climate-related risks and opportunities.

(i) Corporate Law and Its Application:

In this series installment, the Task Force on Climate-Related Financial Disclosures (TCFD) looks at whether or not directors in Singapore, Hong Kong, and India are obliged by law to consider risks related to climate change. Certain schools of thought contend that some nations' business laws impose this responsibility on directors. It requires substantial complexity and unpredictability at every stage of implementation.

(a) The virtue of sincerity:

Directors of Indian corporations are required to advance the goals of the company. They wouldn't violate their commitments if they thought they had behaved in the company's best interests, even if their primary goal was to enhance their personal interests. "Good faith" in Indian law refers to making a decision based on personal judgment while following a set of rules. The courts will use a subjective threshold to determine whether someone acted in good faith.

Under Indian law, the need to behave in a person's or a party's best interests is not expressly stated. Judges in Singapore base their judgments on both subjective and objective criteria. It is critical to consider how courts in India(Ramachandran, 2018), Hong Kong, and Singapore have construed the "best interest requirement" and "reasonable criteria."

(b) Organizational interests:

Section 166(2) of the Indian Penal Code states that directors are in charge of preserving the environment. Climate change-related heatwaves will shorten workdays by 5.8%, particularly in the construction and agriculture industries. According to reports, Typhoon Hato cost Hong Kong's economy $8 billion in losses. In these three nations, authorities and policymakers worry that climate change might cost the economy and business sector money.

(c) Applying the best interest obligation to the climate:

Directors have to act in the company's best interests, and they should carry out their responsibilities accordingly(*SFC Reminds Listed Companies of Duties on Corporate Acquisitions and Disposals*, 2019). For instance, moving to renewable energy sources or updating outdated equipment might result in enormous business costs. Consider a situation where the board of directors believes that lowering these risks would help the business achieve its long-term goals while limiting the value provided to shareholders in the near term.

Despite their subjective view that their actions (or inactions) would be in the best interests of shareholders, stakeholders, or the corporate entity, directors are likely to violate the best-interest duty if they fail to take climate-related risks into account when making decisions. Courts may declare judgments invalid if it can be shown that an important aspect was ignored throughout the decision-making process(Lim, Ernest, 2022). Finally, if directors do not consider these risks while making decisions, they will breach their duty to act in good faith.

(d) Obligation to use reasonable care, skill, and diligence:

The need to perform with a certain level of competence, care, and attention has been codified in legislation in each of the three Asian nations. The legal systems of Singapore and Hong Kong stipulate that this responsibility must satisfy several objective standards and is not entirely up to interpretation. A minimal variable level of care depends on the director's specific duties, the size and type of the firm, and the industry the business works in. When assessing the degree of care expected of directors of financial institutions, it is likely to consider to what extent the moral laws and policies on risks connected to the climate have been implemented. Look at the recommendations the HKMA has made for financial firms regarding environmental risk management(Lim, Ernest, 2022). The risk management framework should include climate scenario analysis, which should also include stress testing. The board of directors may be held accountable for failing to fulfill their obligations with reasonable skill, care, and attention. Depending on why such disclosure was not provided, it would be decided whether or not to hold directors responsible for a company's disregard for the suggestions. Market conventions, stakeholder expectations, and shareholder expectations will affect the director's capacity to delegate responsibilities if the disclosure has not yet been made.

(ii) Enforcement:

Whether the state will apply corporate law to enforce obligations under corporate law remains in great dispute. The main problem in all three nations is that private litigants encounter enormous obstacles when attempting to execute corporate law legislation. Effective mechanisms for carrying out these commitments are necessary but insufficient. Directors should consider climate-related issues even if corporate law does not require them(Cyril Shroff, 2021).

(a)Private policing:

Derivative actions and actions claiming unfair discrimination or oppression are the two main types of private enforcement proceedings. Disgruntled minority shareholders acting on behalf of the company are often the plaintiffs in a derivative action. Instead of seeking compensation for damages done to the company, minority shareholders often bring lawsuits claiming injustice, prejudice, or oppression(Dr.Das, 2020). A corporation's injuries may be seen as an insult to its shareholders.

The activity of derivation:

Under the common law derivative action doctrine, an unhappy shareholder may sue a corporation without a judge's consent. According to Singaporean law, the complainant who wants to initiate a statutory derivative action must get permission from the court to do so in both Singapore and Hong Kong. There is a need for good faith, which states that her interests must be aligned with both the complainant and the corporation's interests.

A company member does not have to hold a certain number of shares or to have been a business member for a specific amount of time under Singapore or Hong Kong regulations. When considered in light of the threat posed by climate change, these ideological inconsistencies become more relevant. Consider a scenario where a non-governmental organization (NGO) purchases share of a company to bring a derivative action against the company's board of directors for failing to monitor or manage risks associated with climate change.

The fact that the court will award compensation to the company rather than to the shareholders themselves is, across all three jurisdictions, the most significant disincentive for minority shareholders to bring a common law or statutory derivative action. This is the case because the compensation will go to the company. This, in conjunction with the ban on contingent fee agreements and the laws that stipulate the loser is responsible for all costs, often discourages people from bringing derivative proceedings(Chauhan & Kumar, 2018). It should be no surprise that derivative proceedings are rare in private corporations and almost nonexistent in publicly traded companies across all three jurisdictions.

Intolerance, discrimination, and the use of private law enforcement:

On discrimination, prejudice, or bad management, shareholders may bring direct claims against a company. The claimant must satisfy a two-part test based on Singaporean law to get an oppression action and demonstrate that they are not misusing the system. It is assumed that a derivative action is appropriate if the necessary remedy is a resting order in the corporation's favour. However, the accepted movement was undoubtedly strong if buying out the investors was the wisest course of action. Commercial injustice results when a written agreement, such as a company's bylaws or shareholder agreement, is broken. In quasi-partnerships, concerns about commercial injustice often surface (small, private businesses). A Singaporean court found it difficult to establish commercial unfairness in publicly traded or widely owned companies. Indian law allows shareholders to sue if they feel they have suffered from unfair management, oppression, or discrimination. It is claimed that directors neglected to take climate-related risks into account. However, it is uncertain whether or not this issue will be taken seriously(Apfelroth et al., 2019). An alternative method of preserving director accountability is by public enforcement of their duties. Before bringing oppression, discrimination, or nasty management charges against an organization, a claimant must satisfy several precondition conditions. It seems unlikely that a climate-related disaster would worsen, forcing an organization to close.

(b)Public policing:

Hong Kong and India both have legal systems that allow for the public enforcement of corporate law. The Securities and Futures Commission is permitted to file a lawsuit against a company under Hong Kong law. The government may pursue legal action if it believes that an Indian company is managing its operations in a manner that is harmful to the interests of the general public under the regulations that apply to Indian firms.

(iii) Security legislation and its application:

The court in Ramirez v. ExxonMobil, a case held in Texas, decided not to dismiss the plaintiff's lawsuit against the multinational oil company. Due to advances in Singapore, Hong Kong, and India, climate risk disclosures have expanded and become more standardized. Many governments throughout the world are thinking about requiring businesses to reveal issues with the environment.

(a)The "Material" Risk of Climate Change Financial Information:

Despite the impartiality of the materiality test, there are several areas of concern where climate risk may be seen as dependent or speculative. Climate risk is pertinent financial data that firms must disclose under applicable financial reporting rules. Since what is required is currently available knowledge on the effects of climate change in the future, climate change information does not have forward-looking nature(Calvello, 2009).The implications of climate change on businesses and their operations can now be quantified. Nevertheless, these effects will also influence the environment. The circumstances under which firms are obligated to publicize information are described in Chapter 13 of the Consolidated Mainboard Listing Rules of the HKEX in Hong Kong. The framework in the three Asian countries is currently being examined in this section due to the importance of climate disclosures to investors' financial risk.The hazards associated with the economic transition to the next zero-emissions regime could include "events" or "activities." This is due to the possibility that changes in law or policy intended to lower hazards related to climate change could have an impact on the risks associated with economic growth(Bolland, 2012). A few examples are a carbon tax, emission limits, and technological advancements in renewable energy, electric vehicles, and battery storage.

According to the Listing Obligations and Disclosure Requirements, 2015, listed companies are required to disclose any events or information that, in the board's opinion, is of material nature. The LODR Regulations categorize disclosure responsibilities into two groups. The first issue relates to incidents important enough to merit reporting, as the law requires. The second is that information may only be relevant if it satisfies the "materiality" criteria before sharing it.More specific reporting requirements on environmental, social, and governance (ESG) concerns, with an emphasis on climate change, have recently been established in Hong Kong, India, and Singapore. If an issuer fails to evaluate climate-related risks, the disclosures given by the issuer may be seen as misleading. This might include actions like "risk management," "under-provisioning for bad debts," "overvaluation of its assets," or "false disclosure"(Armour et al., 2009).

(b)Reporting on Environmental Sustainability and Climate Change:

Businesses must report on environmental, social, and governance (ESG) concerns on two levels under the Listing Rules of the HKEX in Hong Kong. Specific mandatory disclosure requirements make up the first level, while different "comply-or-explain" standards make up the second. By addressing environmental problems for their own sake, even if unrelated to financial success, disclosure of knowledge concerning climate change "applies more universally."The top 100 companies by market capitalization were required by SEBI in 2012 to publish a business responsibility report (BRR) as part of their annual reports. In connection with the release of the LODR Regulations in 2015, the BRR requirements were expanded to encompass the top 500 listed enterprises. These patterns are also evident in Singapore. SGX is considering the potential implementation of mandated climate-related disclosures under the suggestions of TCFD(Wan et al., 2019).

(c)Disclosure Commitments: Legal Remedies for Noncompliance:

The failure to report the approved exchange of information that must be disclosed under the listing requirements is prohibited for listed firms in Singapore. The Singapore Monetary Authority may start taking civil enforcement action. Anyone who violates the securities laws is pursued by Hong Kong's Securities and Futures Commission (SFC) (Gillis, 2012). The SFC also has the power to bring legal action against criminal enforcement.

In Hong Kong, the HKEX has the power to publicly criticize or publicly condemn a director or senior management member and admonish them privately. It can also be declared that a person cannot hold their post. The Singapore Exchange has the authority to impose administrative fines and submit proposals for composition. In India, investor protection claims, especially those addressing violations of securities disclosure regulations, are often pursued in open enforcement actions.

(iv) Governmental And Non - governmental enforcement for climate risk:

Climate risk is given considerable weight by the rules regulating businesses and securities in the three Asian nations that were the subject of this study. Although Hong Kong, India, and Singapore have access to these tools, their use concerning the danger presented by climate change is either negligible or nonexistent. In the context of climate change, it is crucial to consider the potential of conducting a comparative study of private and governmental enforcement methods.

(a)Theoretical Considerations Regarding the Comparison of Public and Private Enforcement:

One could conclude that corporate law is often implemented by private means before the courts in a given nation after studying corporate and securities law. In contrast, it is more probable that administrative or specialized regulatory entities will be in charge of securities legislation. It would be reckless to choose "a priori winner," according to Jackson and Roe, who assert that each method of enforcement has benefits. Coffee observes that the United States may be an anomaly in creating a system that prioritizes strict private enforcement. This is due mainly to the lack of an entrepreneurial framework in most other countries (also known as a plaintiff bar). Findings by Armour and his co-authors show that private enforcement has far less impact on the viability of the stock markets than was previously thought. Public authorities often focus on businesses, the directors of such enterprises, or the intermediaries between the two when it comes to deterrence(Hu, 2017). However, harmed investors could be compensated for their losses due to regulatory proceedings or settlements. This paper examines the employment of enforcement mechanisms in Hong Kong, India, and Singapore and is concerned about the risk that firms face from climate change.

(b)Public Enforcement vs. Private Enforcement in Asia's Common Law:

Evidence on the effectiveness and outcomes of enforcement procedures under corporate and securities law in Hong Kong, Singapore, and India shows that they are consistent with the theoretical paradigm. The private enforcement sector has not considerably aided the expansion of the nation's financial markets in India. Investor compensation for potential losses is not something that SEBI is permitted to undertake(Calvello, 2009). The underlying corporate law in Hong Kong, Singapore, and India on directors' responsibilities to manage climate risk is strong, but the enforcement methods are not entirely aligned. In any case, the lack of economic incentives that would encourage a robust enforcement mechanism renders the legal systems in the three Asian nations unsuitable for private litigation. This is the situation even if personal litigation is motivated by the legal environment (Emma Nan, Jessica, 2019).

Singapore's public enforcement of security laws is conducted substantially differently from other nations. The regulatory body's capacity to provide enough resources is a prerequisite for successfully concluding enforcement proceedings. To address ESG problems, most notably climate risk, they would need to improve their resource pool with sufficient numbers of skilled professionals(*Astaka Holdings Limited Independent Fact-Finding Report*, 2020).

Conclusion:

This paper presents five different lines of thought. First, under the laws of the three Asian jurisdictions, directors must consider climate risks as part of their duty to act in good faith in the company's best interests and exercise reasonable care, skill, and diligence. If they fail, they may violate these duties, which could place them in legal jeopardy. Taking into account climate risks is also a best practice that should be required of directors. Second, the private enforcement of directors' obligations for climate change is fraught with significant doctrinal and practical challenges, notably for derivative actions and, to a lesser degree, oppressive measures. This is especially true for derivative proceedings. Third, although these challenges do not arise in the public enforcement of corporate law, a mechanism available in Hong Kong and India, it is questionable whether public enforcement will be significantly more effective in addressing climate risks than private enforcement. This is because, based on previous cases, public enforcement is only used in the circumstances involving insolvent companies, directorial disqualification, or severe impact on the community; failure to take into account climate-rising risks. Fourth, companies are required to disclose climate risks as part of their disclosure obligations under securities law, listing rules, and reporting obligations; failure to do so may render companies and directors in breach of these regulations, which are enforceable by the securities regulators and stock exchanges. Disclosure of climate risks should also be required as part of companies' disclosure obligations under securities law. Fifth, because public enforcement of corporate law is rarely used in the three Asian jurisdictions, private enforcement of corporate law in listed companies is almost nonexistent there. As a result, public enforcement of securities law and listing rules regarding the disclosure of climate-related risks is a more promising route, provided that the state and regulators have sufficient resources, they are competent and independent, and effective sanctions and remedies are issued where they are warranted.

References:

1. Apfelroth, J., Brand, R., Fraidin, S., & Smith, C. (2019). *United States : Fiduciary Duties Of Dissenting Directors And Their Boards – Stobart v Tinkler*. Mondaq.Com.
2. Armour, J., Black, B., Cheffins, B., & Nolan, R. (2009). Private Enforcement of Corporate Law: An Empirical Comparison of the United Kingdom and the United States. *Journal of Empirical Legal Studies*, *6*(4), 687–722. https://doi.org/https://doi.org/10.1111/j.1740-1461.2009.01157.x
3. *Astaka Holdings Limited Independent Fact-Finding Report* (Issue April). (2020). Astaka Holdings Limited.
4. Bolland, J. (Ed.). (2012). *Principles of Research* (Second Edi, Issue January). https://doi.org/https://doi.org/10.1002/9781119199458.ch1
5. *Business Organisations Lecture Notes*. (2022). LAWS200 - Business Organisations.
6. Calvello, A. A. (2009). Environmental Alpha: Institutional Investors and Climate Change. In *John Wiley & Sons* (Issue October). John Wiley & Sons. https://doi.org/10.1002/9781118266748
7. Chauhan, Y., & Kumar, S. B. (2018). Do investors value the nonfinancial disclosure in emerging markets ? *Emerging Markets Review*, *37*(December), 32–46. https://doi.org/https://doi.org/10.1016/j.ememar.2018.05.001
8. *Consultation Climate-related Disclosure Update and CSA Notice and Request for Comment Proposed National Instrument 51-107 Disclosure of Climate-related Matters*. (2021). www.lautorite.qc.ca
9. Cyril Shroff, A. G. (2021). *Governance Laws and Regulations India*. ICLG.Com.
10. Dr. Suratha Kumar Das, D. C. R. M. (2020). Corporate Governance Corporate Governance. In *Oxford Encyclopedia of Business and Management*. VIKAS® PUBLISHING HOUSE PVT LTD.
11. Gillis, P. (2012). *China Accounting Blog*. News and Opinion on Accounting in China.
12. Hu, Y. (2017). The role of public enforcement in investor compensation: A Hong Kong perspective. In *Common Law World Review*. https://doi.org/https://doi.org/10.1177/1473779517731737
13. Ilana, Evelyn, Rob, Natalie, Jack, Sam, Mattea, Sophia and Emma Nan, Jessica, A. and Q. E. and M. (2019). Understanding company law. In *Understanding Company Law* (Nineteenth). https://doi.org/10.4324/9780203148303
14. Lim, Ernest, U. V. A. (2022). *Climate Risk : Enforcement Of Corporate And Securities Law In Common Law Asia*. National University of Singapore. ernestlim@nus.edu.sg
15. *Mainboard Rules Denitions and Interpretation*. (2018). Code of Corporate Governance.
16. Ramachandran, R. (Ed.). (2018). *Annual Report 2017-2018* (Vol. 12, Issue 2). BASF India Limited. https://www.basf.com/documents/in/en/investor-relations/annual-reports/Annual_Report_2014-2015.pdf
17. *SFC Reminds Listed Companies of Duties on Corporate Acquisitions and Disposals*. (2019). Hong Kong Law.
18. Wan, W. Y., Chen, C., & Goo, S. H. (2019). Public and Private Enforcement of Corporate and Securities Laws : An Empirical Comparison of Hong Kong and Singapore. *European Business Organization Law Review*, *20*(January), 319–361.

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A Study on Corporate Social Responsibility

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Abstract

The main objective of this research paper is to acquire an understanding of Corporate Social Responsibility. This concept has acquired significance when the organizations are to integrate social and environmental concerns in business operations. Furthermore, their communication with the stakeholders takes place on voluntary basis. Every organization is required to put into operation the policy, which is concerned with Corporate Social Responsibility. It produces a report on an annual basis, which is annually detailing all the corporate activities. Another concept that has been taken into account is community development. Community development is regarded as one of the indispensable areas that are necessary in order to lead to effective growth and development of the individuals and nation as a whole. It is necessary to identify the areas, which need to be improved and initiate measures to bring about improvements. Corporate Social Responsibility has rendered a significant contribution in bringing about community development. The main areas that have been taken into account in this research paper include, the principles of CSR, theories of CSR, meaning and significance of community development, and roles of CSR in community development.

Keywords: Corporate Social Responsibility, Community Development, Individuals, Organization, Principles,Theories.

Corporate Social Responsibility (CSR) is the concept that has gained prominence in business reporting. Every corporation has the policy concerning CSR, which produces a report, annually, detailing its activities. Every corporation is able to recognize the corporate activity, which is socially responsible and the activities, which are not socially responsible. There are two interesting points regarding this. Firstly, one do not necessarily agree with each other in terms of what is socially responsible. Although one claims to recognise what it is or is not, when one is asked to define it, then normally, it is difficult. The comprehensive definition of social responsibility is concerned with what is or should be the relationship between global corporations, governments of countries and individual citizens. More locally, the definition is concerned with the relationship between the corporation and the local society in which it resides or operates. Another definition is concerned with the relationship between a corporation and its stakeholders (Crowther, & Aras, 2008).

CSR is a concept, whereby the organizations integrate social and environmental concerns in their business operations and their interaction with the stakeholders on a voluntary basis. An increasing number of researchers and writers have recognized that the activities of the organization have an impact upon the external environmental conditions and have suggested that one of the roles of accounting should report upon the influence of the organization in this respect. There is not any reason to think that shareholders are willing to tolerate an amount of corporate non-profit activity, which appreciably causes a reduction either in the dividends or the market performance of the stock. Every large corporation should be thought of as a social enterprise that is an entity, whose existence and decisions can be justified as long as they serve public and social purposes (Crowther, & Aras, 2008).

The Principles of CSR

Due to the uncertainty surrounding the nature of CSR activity, it is difficult to define CSR and to be certain in terms of any such activity. It is therefore, imperative to be able to identify such activity. The view of three main principles of CSR are to be taken into consideration to comprise all of the CSR activity (Crowther, & Aras, 2008).

Sustainability

Sustainability is concerned with the effect in terms of which action is taken into consideration in the present, which has an impact upon the options that are available in the future. If resources are utilized in the present, then they are no longer useful in future. This point is of particular concern, if the resources are finite in quantity. Therefore, the raw materials of an extractive nature, such as, coal, iron or oil are finite in quantity and once they are used will not be available for future use. In the future, therefore, alternatives will be needed to implement the functions that are provided by these resources. In production and manufacturing organizations, these resources are made use of. This may be at some point in the relatively distance future but of more immediate concern is the fact that as resources get depleted, then the cost price of the remaining resources tend to increase. Therefore, in this manner, the operational costs of the organizations tend to increase.

Accountability

Accountability is concerned with an organization recognising that its actions affect the external environment and therefore assuming responsibility for the effects of its actions. This concept therefore implies a quantification of the effects of actions taken, both internal and external to the organization. More specifically, the concept implies a reporting of those quantifications to all parties affected by those actions. This implies a reporting to external stakeholders of the effects of actions that are put into operation by the organizations and how they influence the functions of the stakeholders. This concept therefore, implies a recognition that the organization is a part of the wider societal network and has responsibilities to all of that network rather than just to the owners of the organization. Alongside this acceptance of responsibility, there must be a recognition that those external stakeholders have the power and authority to affect the ways in which those actions of the organization are taken and role is played in making decisions.

Accountability therefore, necessitates the development of appropriate measures of the environmental performance and reporting of the actions of the organizations. This necessitates costs on the part of the organization in developing, recording and reporting such performance. Benefits must be determined by the usefulness of the measures selected to the decision-making processes and by the ways in which they facilitate the allocation of resources. It takes place both within the organization and between it and other stakeholders. Such reporting has to be based upon various characteristics. These are, understanding of all parties concerned, relevance to the users of the information provided, reliability in terms of accuracy of measurement, representation of impact and freedom from prejudice, and comparability, which implies consistency, both over time and between different organizations. However, such reporting will involve qualitative facts and judgements as well as quantifications. This qualitative aspect will inhabit comparability over time and will tend to mean that such impacts are assessed differently by various users of the information,reflecting their identical values and priorities.

Transparency

CSR is a comprehensive subject area, which leads to a variety of opinions and can be considered in number of different ways. When the stakeholders within as well as outside the organization are engaged in the decision making processes or they are formulating measures and laws concerning goodwill and welfare of the organization and its members, they need to ensure that these must be clear to the members. When these aspects will be clear to the members, they will be able to adequately abide by them. Transparency needs to be depicted in the implementation of tasks and activities as well. The reason being, when the members ofthe organization will not be clear and feel perplexed, then they would be unable to carry out their job duties in a well-organized manner and achieve the desired outcomes. Therefore, it isvital to ensure that laws, measures, procedures, rules, tasks and activities all should be in accordance to the goals and objectives of the organization and transparency should be their main quality.

Theories of CSR

The theories of CSR have been stated as follows: (Ismail, 2009).

The Utilitarian Theory

In the utilitarian theory, the corporation serves as part of the economic system in which the function is mechanical. It is traditionally known in profit maximization. CSR ideas emerge after the realization that there is a need for the economics of responsibility, embedded in the business ethics of the corporation. The utilitarian theory could also be taken synonymously with the instrumental theories. In the case of these theories, the organization is viewed as an entity for the creation of wealth. The social activities are regarded as one of the means for achieving appropriate economic outcomes. Utilitarian theories are also based upon the idea in terms of the investment in the local community in which it has been stated that investment will be in the long term make provision of adequate resources, amenities and facilities that would enable the individuals to live their lives in an enhanced manner.

The utilitarian theories are related to the strategies for competitive advantages. The proponents of these theories are the ones, who viewed these theories as the bases for the formulation of strategies and approaches in the dynamic utilization of the natural resources of the corporation for competitive advantages. The strategies also include the altruistic activities that are recognized as the social instruments for marketing. Altruistic activities are the selfless activities that are carried out for the welfare of the community. The utilitarian theory suggests that the corporation needs to accept social duties and rights to participate in the activities of social co-operation. Within it, the functionalist theory, specifically advocates that the corporation is viewed as an integral part of the economic system of which one of the important goals is profit-making. The organization is viewed as an investment and investmentshould be productive and profitable to the investors and stakeholders. From the perspective ofthe internal aspect of the organization, CSR was regarded as the defence strategy of the industrial system against the external attacks. The reason being, there should be a balance between profit making and social objectives of the economic system's equilibrium.

The Managerial Theory

The managerial theory is primarily concerned with the management of the organization. The managerial theory puts emphasis upon the corporate management in which the CSR is approached by the corporation internally. This is regarded as the main point of difference between the utilitarian and managerial perspective of CSR. This suggests that all the factors that are external to the corporation are taken into account. The managerial theories have been divided into three sub-groups, these are, corporate social performance, social responsibility, auditing and reporting (SAAR) and social responsibility for multinationals.

CSR for multinationals grows as a result of global competitions and challenges they experienced. This aspect of managerial theory comes into being as a result of the

responsibility that the managers have experienced. This is facilitated by defining useful tools about the CSR for the multinational companies to survive in foreign countries. The members of the organization are required to make moral and wise decisions, which are aimed at maximization of profit.

Managerial theories are also strongly related to political theories based on conceptualization. They put emphasis upon the social responsibilities of organizations that arise from the power and authority that is vested among individuals, especially the ones, who are in leadership positions. Organization is understood like being a citizen with certain involvement in the community. The origin of the political power of the CSR is based on the Davis (1960) idea, who proposed that business is the social institution and it should make use of power and authority in a responsible manner. It is also noted that causes that generate the social power are from inside and outside of the corporation. Managerial theories are also covered under the integrative theories of Gargia and Mele (2004), namely, the entities of public responsibility and corporate social performance. Public responsibility puts emphasis upon law and public policy processes that are taken as a reference for social performance. Whereas, corporate social performance conducts search in terms of social legitimacypertinent to social issues.

The Relational Theory

Relational theory has an origin from the complex firm environment relationships. As a term, it implies that the interrelationships between the two are focused on the analysis of CSR. Relational theory is divided into four sub-groups of theories. These include, business and society, stakeholder approach, corporate citizenship and social contract. Business and society is proposed to mean business in society in which CSR emerges as the matter of interaction between two entities. One of the measures of CSR is the development of economic values in a society. Another person is the obligation to consider the effects the decisions and actions on the whole social system. Stated in the form of a general relationship, social responsibilities of the businesses need to reflect upon the social power they have. The stakeholder approach has been developed as one of the strategies in improving the management of the organization. It is also stated as a way of acquiring an efficient understanding of the reality in order to manage the socially responsible behaviour of the organization.

The stakeholder approach has been developed as one of the strategies in making improvements in the management of the organization. It is also stated as the way of understanding reality in order to manage the socially responsible behaviour of the organization. The stakeholder approach further considers an organization as the interconnected web of different interests, where self-creation and community creation take place independently. Corporate citizenship of the relational theory strongly depends on the type of community to which it is referred. It is the approach that the organization has to adopt to implement the tasks and activities in a responsible manner. Fundamentally, it is about the relationship that an organization develops with its stakeholders, and therefore, the former has to continuously implement the traits of commitment and dedication. In other words, it can be stated that within the organization, it is vital for the members to form effective terms and relationships with each other. In this manner, they will be able to incur profitability.

Meaning and Significance of Community Development

When understanding the role of CSR in community development, it is crucial to understand the meaning of community. Community is generally defined as the group of individuals sharing the common purpose. These individuals need to work in collaboration with each other for the fulfilment of desired goals and objectives. The community members are respectful and considerate in terms of other members. There are presence of community leaders as well. The community leaders are vested with the authority to direct and supervise the tasks and activities. The community leaders are the individuals, who strive to influence others to take responsibility for the actions, achievements and community welfare (Ismail, 2009).

Community development (CD) refers to initiatives undertaken by the community with partnership with external organizations or corporations to empower the individuals and groups of individuals by making provision of competencies and abilities. Knowledge, competencies and abilities are required to bring about changes in the organization. The knowledge and competencies are often focused upon making use of local resources and building political power through the formation of large social groups, and participating in tasks and activities that are focused upon promoting community welfare. The individuals working for the well-being of the community are required to understand both how to work with others and how to affect the position of the communities within the framework of larger social institutions (Ismail, 2009).

Community development is the process of developing active and sustainable communities, based on mutual respect and social justice. It is primarily concerned with influencing the power structures to remove the impediments that prevent the individuals from participating in the issues that affect their lives. Community workers facilitate the participation of the individuals in this process. They enable the connections to be made between the communities and with the development of comprehensive rules, policies and programs. CD expresses the value of fairness, equality, accountability, opportunity, choice, participation, mutuality, reciprocity and continuous learning. Education and empowerment opportunities are the key instruments in bringing about community development. CD is referred to as the combined processes, programs, strategies and activities that make the community sustainable as compared to economic development (Ismail, 2009).

The comprehensively used meaning of CD is the one given by the United Nations in which the CD is regarded as an organized effort of the individuals in a community conducted in such a manner to help provide solutions to the problems with the minimum help and assistance from the external organizations. Another aspect that is related to CD is about the active involvement of the individuals in the issues and concerns, which form their experience. It is a developmental process that is both a collective and individual experience. It is based ona commitment to equal participation between all those involved to facilitate the sharing of skills, knowledge and experience. It takes place both in the neighbourhoods and communities of interest. Whenever, individuals come together to identify the relevant factors and act in terms of the issues of common concern. Therefore, it can be stated that it is vital for the members of the community to identify the areas within the community, which need to be improved on a regular basis (Ismail, 2009).

Roles of CSR in Community Development

The roles of CSR in CD have been identified in the following areas: (Ismail, 2009).

To Share the Negative Consequences as a result of Industrialization – Industrialization has had a profound effect upon not only India, but many nations throughout the world (Negatives of the Industrial Revolution, 2019). With the advent of industrialization,there have been number of transformations taking place in the marketplaces. Within these

Closer Linkages between the Corporations and Communities – Through CSR the existence of corporations in the social system is felt beyond the perception from merely regarding corporation as the place, where the individuals are able to find employment opportunities. In various types of organizations, the individuals are engaged in the production of goods and services. When the corporations are focused upon bringing about improvements in productivity and profitability, it is vital to conduct an analysis of the demands of the consumers. Therefore, based on consumer demands, measures and approaches are formulated based on pioneering methods. Therefore, it can be stated that there is need to create closer linkages between the corporations and communities.

Helping to Acquire Talents – Organizations with the reputation for CSR can take advantage of their status and reinforce their appeal as an attractive employer by making their commitment part of their value proposition for potential candidates. It is also found that when the organizations view their commitment towards the organization to socially responsible behaviour in a more unfavourable manner. They also tend to have more positive attitudes in terms of various areas that correlate with better performance. They have formed the viewpoint that organizations are required to reward and recognise great customer service, act in a rapid manner to address and resolve the concerns of the customers and are led by the individuals in the case of senior management, who have the main objective of meeting the needs and requirements of the customers. tasks and functions. These include, clerical work, administrative work, technical work, production and manufacturing, research and so forth. Paying adequate attention and getting engaged in thorough practice are some of the ways to augment ones understanding in termsof usage of various types of technologies.

CSR Contributes in the Protection of the Environment – Some of the world's largest organizations have made a visible commitment to the CSR. The initiatives and measures are implemented that have the primary objective of causing a reduction in problems and barriers that lead to destruction and exploitation of natural resources. It is of utmost significance to keep the environment clean and green. It is vital to implement measures that would lead to protection of the environment. The individuals, particularly belonging to rural and tribal communities need to be aware of the ways that would need to be implemented to keep the environment clean and green. Preservation of the environment would render a significant contribution in leading to well-being of the individuals and communities.

CSR is for Human Right Corporate Sustainability – The United Nations have launched the global compact. It is an initiative to convince international organizations to commit themselves to universal principles in relation to the protection of human rights. Being the world's largest corporate responsibility initiative, the UN global compact is also seen as a strategic policy for the businesses that are committed to through the alignment of their operations and strategies within the areas of human rights, labour and the environment. The organization is regarded as the primary agent stimulating modernization and globalization. It can contribute effectively in ensuring that markets, commerce, technologies and financial resources are indispensable ways that would contribute in promoting corporate sustainability. The understanding of the global compact stands as the largest corporate citizenship and sustainability initiative in the world with more than 4700 corporate participants and stakeholders from more than 130 countries.

Interdependence between Corporation and Community – The corporations that primarily focus upon implementing tasks and functions that are dedicated towards promoting well-being of the community have to create an interdependence with the community. In order to be successful in the implementation of tasks and activities, it is necessary to conduct an analysis of the needs and requirements of the members of the community. When the members of the corporation form the viewpoint that community members are in need of certain goods or services, then they aim to carry out their tasks and activities in a well-organized manner.

When the corporations are able to effectively implement the tasks and activities to promote community well-being, they are also able to render a significant contribution in alleviating the societal problems of poverty, illiteracy, homelessness and unemployment. Therefore, it can be stated that interdependence is regarded as an essential aspect in corporation and community.

A CSR Program is anAid in the Alleviation of Poverty – Poverty is regarded as the major barrier within the course of sustenance of living conditions in a well-organized manner. In India, the individuals primarily belonging to rural communities and residing in urban slums are the ones, who are struggling to make ends meet. The prevalence of the conditions of poverty are regarded as major factors. In order to lead to effective growth and developmentof the individuals, communities and nation as a whole, it is essential to alleviate the conditions of poverty. In order to achieve this purpose, there are certain factors that need to be taken into consideration. These include, implementing programs and schemes for promoting health and well-being, diet and nutrition, skills development, employment opportunities and so forth. These programs and schemes have primarily been beneficial to the individuals, belonging to deprived, marginalized and socio-economically backward sections of the society.

A CSR Program helps in Collection of Data – When a corporation has to carry out a task or a function, or work on a research project, it is of utmost significance to collect data and information. There are two ways of collecting data, i.e. qualitative and quantitative.

Qualitative data is the data that is collected through interviews of the respondents. Whereas, quantitative data is the data that is collected through getting the survey questionnaires filled out from the respondents. For the purpose of collection of data, it is vital to implement measures and schemes appropriately. The first and foremost step is to identify the area of research. On the basis of the research area, it is essential to identify the population of the respondents to collect data. It is apparent that usage of technologies is regarded as indispensable for the purpose of collection of data. Therefore, it can be stated that CSR program renders a significant contribution in the collection of data.

Promoting Social Equity – Social equity is one of the essential areas, which enables the individuals to socialize with each other in an operative manner. Inequalities are regarded as major impediments to sustainable development. Therefore, to bring about effective growth and development of the community and nation, it is essential to promote social equity.

Inclusive sustainable development requires dealing with the structural causes of inequalities in accordance to the human rights principles of universality, indivisibility, equality, non-discrimination, participation and accountability. Promoting social equity and dealing with social exclusion and discrimination are vital aspects that need to be emphasised within the corporation and the external environmental conditions. Incentives need to be provided to the policymakers that are necessary to formulate programs and procedures to promote social equity and well-being of the individuals and community. Furthermore, it is necessary to prioritize the disadvantaged groups through setting of targets and disaggregating data on the basis of factors such as, caste, race, gender, age, income, occupation, location, and socio-economic background (Promoting Equality, 2014).

Promoting Gender Balance – Research has indicated that within the country, women have experienced discriminatory treatment and are regarded as inferior as compared to males. In some cases, they have not even been given equal pay for the same work performed as their male counterparts. As a consequence they had to quit their jobs and source of income. Hence, it can be stated that discriminatory treatment is regarded as one of the major impediments within the course of attainment of empowerment opportunities and enhancing one's livelihoods. In promoting gender balance, it is vital for the individuals, particularly in

Conclusion

Corporate Social Responsibility (CSR) is the concept that has acquired eminence in particularly business organizations. Every corporation has the policy that puts emphasis upon CSR, which produces a report, annually, detailing its activities. Every corporation is able to identify the corporate activity, which is publically accountable and the activities, which are not publically accountable. The three main principles of CSR are to be taken into consideration to comprise all of the CSR activities, these are, sustainability, accountability and transparency. The theories of CSR are, utilitarian theory, managerial theory and relational theory. In understanding the concept of CSR, it is vital to understand, how it renders a significant contribution in promoting effective growth and development of the communities. Within communities, there are number of aspects that need to be taken into consideration, these are, changes, well-being, alleviation of societal problems and so forth.

The individuals need to make effective use of knowledge and competencies to promote well-being and development of the community.

The roles of CSR in CD have been identified in the areas, which are, to share the negative consequences as a result of industrialization, closer linkages between the corporations and communities, helping to acquire talents, role in transfer of technology, CSR contributes in the protection of the environment, CSR is for human right corporate sustainability, interdependence between corporation and community, a CSR program is an aid in the alleviation of poverty, a CSR program helps in collection of data, for achievement of corporate sustainability goals, promoting social equity and promoting gender balance. The CSR has been rendering a significant contribution in leading to well-being and progression, taking into account the above stated areas. Finally, it can be stated that corporate social responsibility is primarily concerned with the relationship between corporation and the local society. The tasks and functions of the corporation have to be put into operation in such a manner that would lead to well-being and progression of the individuals and society.

Bibliography

Crowther, D., & Aras, G. (2008). Corporate Social Responsibility. Retrieved January 12, 2020 from mdos.si

Ismail, M. (2009). Corporate Social Responsibility and Its Role in Community Development:

An International Perspective. *The Journal of International Social Research, 2(9),* 199-

209. Retrieved January 12, 2020 from sosyalarastirmalar.com

Negatives of the Industrial Revolution. (2019). Retrieved January 13, 2020 from historycrunch.com

Promoting Equality, including Social Equity, Gender Equality and Women's Empowerment. (2014). Retrieved January 12, 2020 from sustainabledevelopment.un.org

Promoting Gender Balance Wisely. (n.d.). Retrieved January 13, 2020 from knowledge.insead.ed

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Determination of extractive values of selected medicinal plants collected from Gujarat, India

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Abstract

The objective of the present study was aimed at the extractive values of leaves of some medicinal plants from Gujarat, India. The plant sample collection is from two different cities in Gujarat. They were evaluated by performing extractive values parameters. Analytical results showed that the extractive values of vadodara city's Murraya koenigii, Trigonella foenum-graecum with petroleum ether, and ethyl acetate solvent found the highest extractive values compare to anand city. However, anand city's Citrullus lanatus with methanol solvent found the highest extractive values compare to vadodara city. Therefore, the current study has presented helpful information on the quality of these herbal materials to verify their authenticity, safety, and efficacy before incorporation into pharmaceutical formulations.

Keywords: Citrullus lanatus, Trigonella foenum-graecum, Murraya koenigii, Extractive value

1.0 Introduction

The traditional system of medicine is known as Ayurveda. In Ayurveda, drugs are obtained from plants, animals, and mineral origin. These sources of drugs can be divided into poisonous and nonpoisonous classes. The crude drugs obtained from these sources are generally possessed unwanted impurities and toxic substances, which can lead to harmful effects on the human body [1]. Indian traditional systems of medicinal mainly comprises of Ayurveda, Sidda and Unani Ayurveda is the oldest holistic management system with meticulously documented medicines and being practiced by a large population in India and abroad the development of this traditional system of medicines with perspectives of safety efficacy and quality will help not only to preserve the traditional heritage but also to rationalize the use of natural product in health care [2]. World Health Organization (WHO) has prescribed a number of quality control tests that medicinal plant materials should undergo. Quality control is determined on the basis of identity, purity, content, and other chemical, physical and/or biological properties, as well as by the manufacturing process [3].

The plant possesses valuable medicinal properties but most of the advantages are still confined to tribal areas because of raw knowledge and the absence of proper scientific standardization. For the useful application of the plant parts in modern medicine, Physico-chemical and phytochemical standardization are very important [4]. Toxic plants need to be purified by various methods. In Ayurveda, this process is known as Shodhana. Extractive parameters are a useful method for it.

In the Gujarat region *Citrullus lanatus,Trigonella foenum-graecum, Murraya koenigii* plants are usually found, these plant species are been proverbial for their therapeutic importance[5]. A literature survey indicates a lack of research on these plant leaves. Therefore, an investigation of these three plants would be desirable. The present study aimed to carry out extractive values of the plant to assure the quality, safety, and efficacy of this formulation.

2.0 Material and methods

2.1 Collection and Processing of plant material

The fresh and healthy leaves of *Citrullus lanatus*, *Trigonella foenum-graecum, and Murraya koenigii* were collected from vadodara and anand, Gujarat. The collected sample was washed well to remove sand and dust and leaves were separated. The separated leaves were shade dried and made into a fine powder using a mixer grinder and powder used for further analysis.

2.2 Determination of Extractive values

Preparation of leaf extract five grams of fine powder of *Citrullus lanatus*, *Trigonella foenum-graecum, and Murraya koenigii* samples were extracted with methanol, ethyl acetate, and petroleum ether respectively. The drug material is ground into a fine powder and then placed inside a clean container. Allowing the material to remain suspended in the solvent over time. The container is then closed and kept for at least three days. The content is stirred periodically. At the end of extraction, the micelle is separated from the marc by filtration. Evaporate the filtrate to dryness in a dish and dried and weighed. The percentage of soluble extractive was calculated concerning the shade-dried plant powder [6][7].

2.3 Statistical analysis

The values were represented as mean ±SD (standard deviation) and the data obtained from this study were subjected to an analysis of variance (ANOVA) and significance was determined at P<0.05 [8].

3.0 Results and discussion

The extractive values mainly evaluate the quality of the drug. More the quality will be the therapeutic effect. *Citrullus lanatus, Trigonella foenum-graecum, Murraya koenigii* are exudate materials obtained from the plant leaves. Extractive value parameters were estimated based on the methods recommended by World Health Organization (WHO).

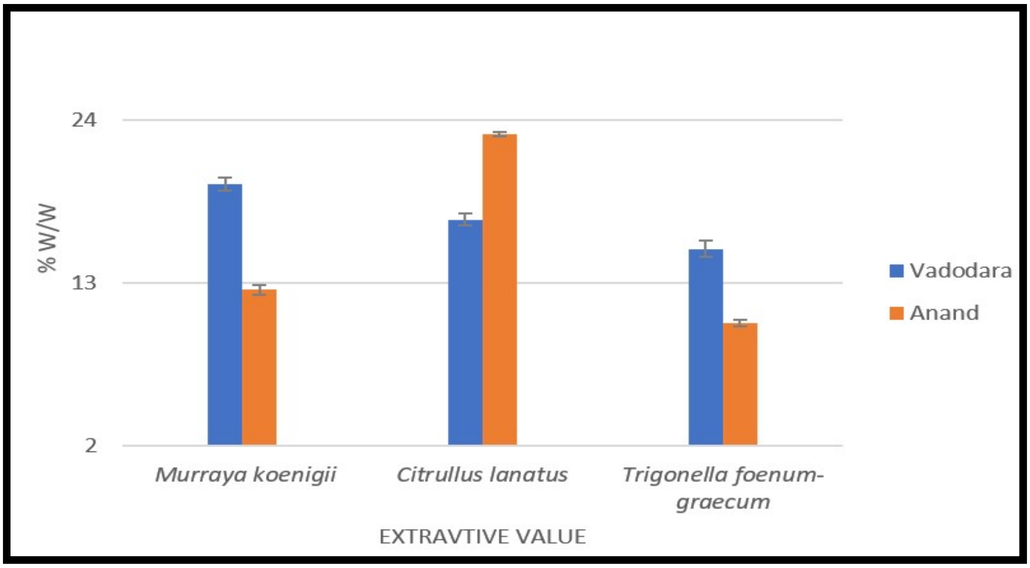

Fig 1: Extractive values of *Murraya koenigii, Citrullus lanatus, Trigonella foenum-graecum* respectively. All the values are expressed as Mean ± SD (Standard Deviation) (n=3), significantly different at p<0.05,

Measurement of extractive value is the most important step for the evaluation of crude drugs [9]. The present study was carried out to identify these parameters for *Murraya koenigii*, *Trigonella foenum gracecum* , *Citrullus lanatus* in two different cities anand and vadodara, Gujarat, India.

Chemical substances found in plant species can be isolated and quantified using solvents with higher extractive values, while solvents with lower extractive values should be avoided. The extractive values are useful for evaluating the chemical constituents present in the crude drug and for estimating which constituents are soluble in a specific solvent. The variation in an extractable matter in different solvents suggests that the bioactive principle of medicinal plants is influenced by a variety of intrinsic and extrinsic factors.

The extractive values are valuable to estimate the chemical constituents present in the crude drug and assist in the evaluation of definite constituents soluble in a particular solvent. Less extractive value indicates the addition of exhausted material, adulteration, or incorrect processing during drying or storage [10]. Here, *Murraya koenigii* with petroleum ether solvent the of Vadodara city is higher than anand city. *Citrullus lanatus* with methanol solvent the of anand city is higher than vadodara city. *Trigonella foenum-graecum with ethyl acetate solvent the Vadodara city is higher than anand city. That means Murraya koenigii* and *Trigonella foenum-graecum of Vadodara city have a higher amount of active constituents present. Similarly, Citrullus lanatus* of anand city have a higher amount of active constituents present. *On average all three plants, both cities with respective solvent Citrullus lanatus* have higher extractive values and *Trigonella foenum-graecum* has lower extractive values. This method was used to determine the number of active constituents present in the plant material, which are soluble in a given solvent. Extraction of any crude drug with a particular solvent yielded a solution containing different phytoconstituents soluble in that solvent.

4.0 Conclusion

We found that *Murraya koenigii* with petroleum ether solvent the of vadodara city is higher than anand city. *Citrullus lanatus* with methanol solvent the of anand city is higher than vadodara city. *Trigonella foenum-graecum with ethyl acetate solvent the Vadodara city is higher than anand city.* Therefore, the current study has presented helpful information on the quality of these herbal materials to verify the authenticity, safety, and efficacy before incorporation into pharmaceutical formulations.

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6.0 References

1. Maurya, S. K., Seth, A., Laloo, D., Singh, N. K., Gautam, D. N. S., & Singh, A. K. (2015). Śodhana: An Ayurvedic process for detoxification and modification of

therapeutic activities of poisonous medicinal plants. *Ancient science of life*, *34*(4), 188Doi: 10.4103/0257-7941.160862

2. Kumbhar, R. R., & Godghate, A. G. (2015). Physicochemical and quantitative phytochemical analysis of some medicinal plants in and around Gadhinglaj. *International Journal of Science Environment and Technology*, *4*, 172-177
3. Ameh, S., Obodozie, O., Inyang, U., Abubakar, M., & Garba, M. (2010). Quality control tests on Andrographis paniculata Nees (Family: Acanthaceae)–an Indian 'Wonder'plant grown in Nigeria. *Tropical Journal of Pharmaceutical Research*, *9*(4).Doi: 10.4314/tjpr.v9i4.58937
4. P.N.N. saxena, Shrivastava & R.C.Saxena (2012) Preliminary physico-pytochemical study of stembark of Alstania scholrar is (L) R. BR,-A medicinal plant, IJPSR, vol 3, No.4,1071-1075
5. Erhirhie, E. O., & Ekene, N. E. (2013). Medicinal values on Citrullus lanatus (watermelon): pharmacological review. *International Journal of Research in Pharmaceutical and Biomedical Sciences*, *4*(4), 1305-1312
6. Abubakar, A. R., & Haque, M. (2020). Preparation of medicinal plants: basic extraction and fractionation procedures for experimental purposes. *Journal of Pharmacy & Bioallied Sciences*, *12*(1), 1. DOI: https://dx.doi.org/10.4103%2Fjpbs.JPBS_175_19
7. Anonymous (2002). WHO guidelines, 1st Edition, NewDelhi;AITBS Publishers and Distributors; 28-30, 41-46
8. Adusei, S., Otchere, J. K., Oteng, P., Mensah, R. Q & Tei-Mensah, E. (2019). Phytochemical analysis, antioxidant and metal chelating capacity of Tetrapleura tetraptera. Heliyon, 5(11), e02762.Doi: https://doi.org/10.1016/j.heliyon.2019.e02762.
9. Regupathi T, Chitra K.(2015) Physicochemical analysis of medicinal herbs, Eclipta alba (L.) Hass and Lippia nodiflora (Linn.). Int J Pharm Phytopharm Res;4:249-51
10. Patel, M. A., Acharya, S. R., Macwan, C. P., Patel, T. B., & Suhagia, B. N. (2017). Evaluation of physico-chemical parameters of different Shodhit guggul. *Int J Pharm Pharm Sci*, *9*, 247-51

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શિક્ષણ વિશે ડૉ. આંબેડકરનું વિચારદર્શન

જાદવ દિવ્યાબેન પી.
પીએચ.ડી. વિદ્યાર્થીની, હેમ.ઉ.ગુ.યુનિવર્સિટી, પાટણ

આપણા જીવાતા જીવનમાં ક્યારેક એવા કામો બહુ સરળતા કે સહજતાથી થઈ જતા હોય છે. પછી તેનો વિચાર વર્ષોના વ્હાણાં વાયાં પછી કરીએ તો એ વાતો પછી અજુગતી લાગે છે ને મન વિચાર કરવા લાગે છે કે કદાચ આવાં કામો કરવા એ આપણાં ગજા બહારની વાત છે. એ તો કોઈ કાળબળે જ આપણી પાસે કરાવ્યું હશે. આવું જ કંઈક બની ગયું. સામાજિક ક્રાંતિના જ્યોર્તિધર ડૉ. બાબાસાહેબ આંબેડકરના જીવનચરિત્ર વિશે, તેમના જીવનચરિત્ર વિશે વિચાર કરીએ ને તેમના આંબેડકરીય વિચારોને નિહાળીએ તો તે આપણને આકાશ કુસુમવત લાગે છે. પણ એ કોઈ કાળના આધારે નહીં પણ ડૉ. બાબાસાહેબના અથાગ પરિશ્રમના પરતાપનું પરિણામ સામાજિક ક્રાંતિનું પ્રેરકબળ બન્યું છે. તો વળી સમયે–સમયે રચાતું દલિત સાહિત્ય જે આંબેડકરીય વિચારધારાના આવિષ્કારરૂપે રચાયેલ હોવાથી એ તરફ લોકોનું ધ્યાન વિશેષ ખેંચાયું છે. સાહિત્યના કેન્દ્રમાંથી દૂર નીકળી ગયેલા માણસને દલિતરૂપી આ આંબેડકરીય સાહિત્ય ફરી પાછો પ્રસ્થાપિત કરે છે ને ફરી એક વાર તે સમગ્ર સાહિત્યમાં હલચલ મચે છે. આંબેડકરીય સાહિત્ય એ દલિત જીવનનું સાહિત્ય અને સામાજિક જીવનપ્રવાહને વહેવા મળે તો એક નવોજ આયામ કહી શકાય તેમ છે. એટલેજ તો દલિતરૂપી આ આંબેડકરીય સાહિત્ય ખૂબજ ચર્ચાતું, વિલસતું અને વિકસતું રહ્યું છે. આજે આ દલિતરૂપી આંબેડકરીય સાહિત્ય કવિતા, નવલકથા, નાટક, આત્મકથા, નિબંધો ને રેખાચિત્રો જેવા વિવિધ સ્વરૂપોમાં પગરવ માંડ્યા છે. પ્રારંભના તબક્કામાં ગુજરાતી આંબેડકરીય સાહિત્યમાં દલિત સાહિત્યકારો દ્વારા દલિતો પર થતાં દમન, પીડા, ઘૂટન, અપમાન, અવહેલના વગેરેને તેમને તેમના સાહિત્યમાં આક્રોશપૂર્વક રજૂ કર્યા છે. આવા સ્વરૂપો અમાનવીય વ્યવહારોને ધિક્કારે છે. અસમાનતાને વખોડે છે. છૂત-અછૂતને પડકારે છે અને એ દ્વારા વૈચારિક હલચલ ઊભી કરે છે. એટલુંજ નહીં પણ એ દલિત સમાજને સંગઠિત બની આવા અન્યાયો સામે બુલંદ અવાજ કરવા પ્રેરિત કરે છે. જેમ ડૉ. બાબાસાહેબ આંબેડકર દલિતોના આધારસ્તંભ બનીને લડ્યા હતા. આજે એ આંબેડકરીય વિચારધારારૂપે ચારેબાજુ ફેલાઈને તેમના વિચારોને પ્રગટાવીને લોકોને તે તરફ અવાજ ઉઠાવવા પ્રેરણા પ્રદાન કરે છે.

શિક્ષણ એવી જરૂરિયાત છે કે તમામ વ્યક્તિઓ સુધી પહોંચવું જોઈએ. શિક્ષણ સસ્તામાં સસ્તું હોવું જોઈએ. જેથી ગરીબમાં ગરીબ વ્યક્તિ તેને પ્રાપ્ત કરી શકે. કોઈને બળ આપવું સરળ છે પરંતુ

જ્ઞાન આપવું કપરું છે. આપણે એ કાર્યથી સિદ્ધ કરી દેવું જોઈએ. અમારી પાસે ફક્ત શક્તિ જ નહીં, પરંતુ બુદ્ધિમતા પણ છે જેનાથી સર્વ લોકોને એવા માર્ગ ઉપર લઈ જઈએ કે જેથી એકતા તરફ જવાય.

શિક્ષણ એક પ્રત્યેક વ્યક્તિનો જન્મસિદ્ધ અધિકાર છે. આથી શિક્ષણના દ્વાર પ્રત્યેક નાગરિક માટે ખુલ્લા હોવા જોઈએ. ગરીબી કે અન્ય બીજી કોઈ બાબત શિક્ષણના માર્ગમાં કદાપી બાધક બનવી જોઈએ નહિ.

વિદ્યાર્થીઓ આપણું કર્તવ્ય, જવાબદારીઓ કેવી રીતે પાર પાડશે તેના ઉપરજ સમગ્ર સમાજના ભવિષ્યનો આધાર રહેલો છે.

બાળકોને શિક્ષણ આપો તેમનામાં મહત્વાકાંક્ષા પેદા કરો. તેમના મગજમાં એ વાત ઠસાવો કે "તેઓ મહાન થવા માટે જ જન્મ્યા છે" તેમનામાં ઘર કરી ગયેલી હીન ભાવનાઓ દૂર કરો. જો તમે આટલું કરશો તો પોતાના માટે પણ ગૌરવ અને સન્માન પ્રાપ્ત કરી શકશો. પછાત વર્ગો દલિતોના શિક્ષણને મહત્વનુ લેખાવતા ડૉ. આંબેડકરે કહ્યું કે............

"દલિત વર્ગો હવે એમ સમજવા લાગ્યા છે કે અમે સૌથી ઉચ્ચશિક્ષણના લાભ પૂરેપૂરા પ્રમાણમાં મેળવવાના અમારા અધિકાર અને તકને જતી કરી શકીએ નહીં, દલિત વર્ગોને હવે ખબર પડી છે કે શિક્ષણ વિના તેમનું અસ્તિત્વ સલામત નથી."

દલિતો, અનુસુચિત જાતિઓ, અનુસૂચિત જનજાતિઓ, ગિરિજનો, વનવાસીઓ તથા અન્ય પછાત વર્ગોને શિક્ષિત કરવાની ભારપૂર્વક રજૂઆત કરતાં બાબાસાહેબે કહ્યું કે;

"ત્રીજો વર્ગ એ છે કે જેમને પછાત વર્ગો (OBC) કહેવામાં આવે છે, જેમાં દલિતો (ST) ગિરિજનો, વનવાસીઓ (SC) અને અન્ય પછાત જાતિઓનો સમાવેશ કરવામાં આવ્યો છે. એક ચોથો વર્ગ છે કે જેમાં મુસ્લિમોને પણ આવરી લેવાયા છે. આ વિભાગોને લક્ષ્યમાં રાખીને જોઈએ તો શિક્ષણની બાબતમાં આ જુદી જુદી કોમોની તુલનાત્મક પ્રગતિમાં ભારે અસમાનતા જોવા મળે છે."

ભારતીય સંવિધાનમાં ડૉ. આંબેડકરે કરેલી શૈક્ષણિક જોગવાઈઓ :

કલમ (૧૫) (૧) : કોઈ પણ નાગરિકની સામે ફક્ત ધર્મ, જાતિ, જ્ઞાતિ, લિંગ, જન્મસ્થાન અથવા એમાના કોઈ કારણે રાજ્ય ભેદભાવ કરી શકાશે નહિ.

કલમ (૧૭) : “અશ્પૃશ્યતા” નાબૂદ કરવામાં આવે છે અને કોઈપણ રૂપમાં એના આચરણની મના કરવામાં આવે છે. “અશ્પૃશ્યતા” માંથી ઉદ્‌ભવતી કોઈ નિર્યોગ્યતા લાગુ પાડવી તે કાયદાનુસાર શિક્ષાપાત્ર ગુનો ગણાશે.

કલમ (૨૯) (૨) : રાજ્ય વડે નિભાવતી કે રાજ્યના નાણાંમાંથી સહાય મેળવતી કોઈ શિક્ષણ સંસ્થામાં ફક્ત ધર્મ, જાતિ – જ્ઞાતિ ભાષા અથવા એમના કોઈ કારણે કોઈ નાગરિકને પ્રવેશનો ઈન્કાર કરી શકાશે નહિ.

કલમ (૪૫) : આ સંવિધાનમાં આરંભથી દસ વર્ષની મુદતની અંદર, તમામ બાળકોને ચૌદવર્ષની વય પૂરી થાય થાય ત્યાં સુધી મફત અને ફરજિયાત શિક્ષણ આપવાની જોગવાઈ કરવાનો રાજ્યો પ્રયત્ન કરશે.

કલમ (૪૬) : લોકોના નબળા વર્ગોના અને ખાસ કરીને અનુસૂચિત જાતિઓ અને અનુસૂચિત જનજાતિઓના શૈક્ષણિક અને આર્થિક હિતોની અભિવૃદ્ધિ રાજ્ય વિશેષ કાળજીથી કરશે અને સામાજિક ન્યાય અને તમામ પ્રકારના શોષણ સામે તેમનું રક્ષણ કરશે.

ડૉ. આંબેડકર સમાજના પછાતવર્ગો, દલિતવર્ગો, આદિવાસીઓ અને શુદ્ર, નિષાદ તથા અત્યંજ જેવી ૮૦% વસતીનું પ્રમાણ ધરાવતી તેમજ લઘુમતિઓ માટે પણ સર્વસુલભ શિક્ષણની જોગવાઈ કરે છે.

:: સંદર્ભગ્રંથો ::

(૧) ડૉ.બાબાસાહેબ આંબેડકર જીવનચરિત્ર :- ડૉ. પી.જી. જ્યોર્તિકર

(૨) ડૉ.આંબેડકરનું જીવન અને કાર્ય: મૂળલેખક : ડૉ. ધનંજય કીર
અનુવાદકો : દેવેન્દ્રનાથ કર્ણિક, મૂળજીભાઈ વી. ખુમાણ

(3) અનન્ય (આંબેડકરવાદી સાહિત્ય): સંપાદન હરીશ મંગલમ, મધુકાન્ત કલ્પિત અરવિંદ વેગડા

(૪) ડૉ.આંબેડકર કા સમાજદર્શન : ડૉ. ડી.આર જાદવ

(૫) ‘ભીમરાવ આંબેડકર’ – વિરેન્દ્ર ગ્રોવર

22 અધ્યાપન અને અધ્યયન પર આધુનિક ટેક્નોલોજીની અસરોનો અભ્યાસ

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Abstract

આધુનિક ટેક્નોલોજીના ઉપયોગથી શિક્ષણ ખૂબ ઝડપથી પરિવર્તનશીલ બન્યું છે. આ ટેક્નોલોજી એ અધ્યયન-અધ્યાપનમાં ઘણી સગવડો ઉભી કરી આપી છે. જેમનો પ્રભાવ બાળકના જીવનમાં ગર્ભવસ્થાથી જ થતો હોય એમ આધુનિક્ન ટેક્નોલોજીના જ્ઞાનની સાથે જ જન્મે છે. ઇ-લર્નિંગ એ પોતે એક ખૂબ ઉત્સાહપ્રેરક, શક્તિદાતા, વિસ્તરણ કરતું અને ઉત્તમોત્તમ શિક્ષણ છે. તે અધ્યેતાને અધ્યયન માટેના માધ્યમની પસંદગી માટે તક આપે છે. જે સમગ્ર શિક્ષણ-પ્રક્રિયાને સ્વ-અધ્યયન તરફ દોરી જાય છે. શિક્ષણમાં આમૂલ પરીવર્તન કરવાની પૂરી ક્ષમતા સાથે આધુનિક ટેક્નોલોજી પ્રવેશી છે, ત્યારે શિક્ષણનું જૂનું માળખું, ભસ્મભૂત કરી, વિજ્ઞાન અને ટેક્નોલોજી એ વિસ્ફોટકનું કામ કર્યું છે. ઓનલાઇન એજ્યુકેશન કે ઇ-લર્નિંગ શિક્ષણમાં દાખલ થયું છે સાથે-સાથે તેમાં પણ સતત પરીવર્તન લાવવાનું શરૂ કરી દીધું છે. ઇ-લર્નિંગ અધ્યયનલક્ષી છે, તેનું રોજ-રોજ નવસર્જન થતું રહે છે અને તે અન્ય પદાર્થોની જેમ ખરીદ-વેચાણ થાય છે. આ જ્ઞાનપ્રાપ્તિના જ્ઞાનના વ્યાપાર સામે પણ અડીખમ ઊભુ રહેવું પડશે. વિશ્વમાં કોઇ પણ ખૂણામાંથી કોઇપણ વ્યક્તિ જ્ઞાન સર્જન કરીને અને વિશ્વમાં તરતું મૂકી શકે છે, આ એક ઉત્તમ વ્યવસ્થા છે. આ વ્યવસ્થા જેટલું સબળ બનશે, એટલો જ ટેક્નોલોજીનો ઉપયોગ વ્યાપક અને સમૃદ્ધ બનશે.

1) પ્રસ્તાવના :

પ્રવર્તમાન સમયમાં વિજ્ઞાન અને ટેક્નોલોજી એ હરણફાળ ભરી છે. ત્યારે શાળા, શિક્ષકો અને વિધ્યાર્થીઓ આધુનિક ટેક્નોલોજીની ફળશ્રુતિનો ભરપૂર ઉપયોગ કરતાં થયાં છે. આધુનિક ટેક્નોલોજીના ઉપયોગથી શિક્ષણ ખૂબ ઝડપથી પરિવર્તનશીલ બન્યું છે. આ ટેક્નોલોજી એ અધ્યયન-અધ્યાપનમાં ઘણી સગવડો ઉભી કરી આપી છે. જેમનો પ્રભાવ બાળકના જીવનમાં ગર્ભવસ્થાથી જ થતો હોય એમ આધુનિક્ન ટેક્નોલોજીના જ્ઞાનની સાથે જ જન્મે છે અને આ ટેક્નોલોજીનું વડગણ, તેના ઉપયોગનો નશો કોઈ કેફી દ્રવયના સેવનથી પણ વધુ ખતરનાક હોય છે. જે ટેક્નોલોજી બાળકને વિકસાવે છે, તે જ ટેક્નોલોજીનો અતિરેક ઉપયોગ એના વિકાસમાં અડચણરૂપ પણ બને છે. આધુનિક્ન ટેક્નોલોજીમાં ઈ-લર્નિંગનો પ્રભાવ વધુ છે. ઈ-લર્નિંગ એ

ડિસ્ટન્સ એજ્યુકેશનનું એક સ્વરૂપ છે. જ્યાં શિક્ષક દૂર બેસે છે, પછી તે જગ્યા ઘરની હોય કે ઘરની બહાર, તેઓ તેમના વિદ્યાર્થીઓને શિક્ષણ આપી શકે છે. શિક્ષકો અને વિદ્યાર્થીઓ તેમના વિચારોની આપ-લે કરે છે, જે શિક્ષણને સમજવાનો એક સારો માર્ગ ઑનલાઇન શિક્ષણ છે. આજે, ઓનલાઈન શિક્ષણમાં વપરાતી શિક્ષણ-સંબંધિત સામગ્રીને એક જગ્યાએથી બીજી જગ્યાએ ટેકનોલોજી દ્વારા ઓનલાઈન મોકલી શકાય છે. ઉપયોગમાં લઈ શકાય છે માટે આધુનિક્ન ટેક્નોલોજીના પ્રભાવની અધ્યયન-અધ્યાપન ઉપર વિશેષ અસર થતી હોય છે.

(૨) ઇ-લર્નિંગ :

'ઇ-લર્નિંગ એક એવો સામાન્ય પારિભાષિક શબ્દ છે કે, જે કમ્પ્યુટરની મદદથી મળતી બધા જ પ્રકારની તાલીમ સાથે સંબંધિત છે. કમ્પ્યુટર, સ્માર્ટફોનમાં ઇન્ટરનેટનું જોડાણ અનિવાર્ય છે. કમ્પ્યુટર, સ્માર્ટફોન, લેપટોપ, ટેબલેટ વગેરે જેવા સાધનોથી ઇ-મેઇલ, બ્લૉગ્સ, વેબસાઇટ, પોડકાસ્ટ્સ જેવા માધ્યમો દ્વારા તથા ફેકબૂક, ગૂગલ, વોટ્સઅપ, ટ્વિટર, ટેલિગ્રામ, ઇન્સ્ટાગ્રામ વગેરે જેવા સોશિયલ મીડિયા એપ્સ દ્વારા ઇન્ટરનેટ પર વેબપેજ ખોલ્યા બાદ તેમાં chit-chat (વાતચિત) શક્ય બન્યું છે. ઇન્ટરનેટના ઉપયોગથી આ વિશાળ પ્રક્રિયા ઝડપી અને સરળ બની છે. આ બધા જ મીડિયા એપ્સ દ્વારા ઇ-લર્નિંગ શક્ય બન્યું છે.

અધ્યયન અને અધ્યાપનમાં અદ્યતન વિચારો સમાવતા લેખો, ચિત્રો અને કેટલીક ક્લિપની મદદથી નાના-નાના વિડીયો બનાવ્યા પછી તેને વેબસાઇટ કે બ્લૉગ પર મૂકી શકાય છે, અને અધ્યેતા પોતાની અનુકૂળતા મુજબ વેબસાઇટ ખોલીને જાતે જ અધ્યયન કરતો હોય છે. હવે યુટ્યુબ જેવા વિડીયો હોસ્ટરના માધ્યમ દ્વારા અધ્યાપક અધ્યયન-સામગ્રી અપલોડ કરતાં હોય છે, અને એ સામગ્રીનું સગવડતા મુજબ અધ્યયન થાય છે. આમ ઇલેકટોનિક સાધનો અને મધ્યમોની મદદથી થતું સ્વ-અધ્યયન એ ઇ-લર્નિંગ છે, જે સમગ્ર શિક્ષણ-પ્રક્રિયાને સ્વ-અધ્યયન તરફ દોરી જાય છે.

(3) ઇ-લર્નિંગના માધ્યમો (આધુનિક ટેક્નોલોજીના માધ્યમો):

ઇ-લર્નિંગ એ પોતે એક ખૂબ ઉત્સાહપ્રેરક, શક્તિદાતા, વિસ્તરણ કરતું અને ઉત્તમોત્તમ શિક્ષણ છે. તે અધ્યેતાને અધ્યયન માટેના માધ્યમની પસંદગી માટે તક આપે છે.

ઇ-લર્નિંગના સાધનો:- ડેસ્કટોપ, લેપટોપ, સ્માર્ટફોન, ટેબલેટ વગેરે

ઇ-લર્નિંગના માધ્યમો:- ઇ-મેઇલ, બ્લૉગ્સ, વેબસાઇટ, પોડકાસ્ટ્સ વગેરે

સોશિયલ મીડિયા એપ્સ:- ફેકબૂક, ગૂગલ, વોટ્સઅપ, ટ્વિટર, ટેલિગ્રામ, ઇન્સ્ટાગ્રામ વગેરે

વિડીયો કોન્ફરન્સ:- ગૂગલમિટ, ઝૂમ, વેબેક્ષ, સ્કાઇપ, સ્લેક, લાઇફસાઇઝ વગેરે

વેબબ્રાઉઝર:- ઓપેરા, ગૂગલક્રોમ, ફાયરફોક્સ, વેબકીટ, નાઇટલીઝ, ઇન્ટરનેટ એક્સપ્લોરર, સફારી, લિનક્સ વગેરે

ઇ-લર્નિંગ સતત પ્રસ્તુત રહે છે, તેમાં updating થતું રહે છે, સામગ્રીમાં કંઇ ખોટું જણાય તો રદ કરી શકાય છે અને ખૂબ ઝડપથી નવી માહિતી કે મોદ્દા ઉમેરી શકાય છે. કોઇ પણ દેશની કાનૂની જોગવાઇઓનો ભંગ ન થાય તે અધ્યયન સામગ્રી, માહિતી કે વિગતો તૈયાર કરતી વખતે ધ્યાનમાં રાખવી પડે છે.

(4) ઓનલાઈન એજ્યુકેશન :

અધ્યેતા કોઇપણ અધ્યયન સામગ્રી માટે ઊંડાણપૂર્વક અભ્યાસ કરી શકે તે માટેની સ્વયં સંચાલિત સામગ્રીનું વ્યવસ્થાપન હોય છે. ઓનલાઇન અધ્યયન એટલે શિક્ષણ પરિક્ષણની જરૂરી લઘુત્તમ વિધિઓ અને શરતો સાથેનું ઇન્ટરનેટ સાથેનું ઇન્ટરનેટ દ્વારા અધ્યયન.

(5) આધુનિક ટેક્નોલોજીમાં પરિવર્તનો :

શિક્ષણક્ષેત્રે આધુનિક ટેક્નોલોજીના સ્વીકારથી ઘણા પરિવર્તનો આવ્યાં છે. આવાં પરિવર્તનો રોજ થતાં રહે છે, જેનો સ્વીકાર કરીને જ શૈક્ષણિક વિકાસને વધુ આગળ ધપાવી શકાય છે. આ પરીવર્તન વિકાસની નવી કેડી રચે છે.

i) **જીવન વિડિયોનું પ્રસારણ(લાઈવ) (Live Broad Cast):** વિવિધ તજજ્ઞો દ્વારા વાંચકને રસ પડે તે મુજબ ચોક્કસ વિષયાંગનો વિડીયો બનાવી, નિયત બ્લૉગ પર કે વેબસાઇટ પર મૂકવામાં આવે છે. વિડીયો જોતાં સાથે કે પછી પ્રશ્નો પૂછી વાતો કરી શકાય, ઘરબેઠાં વર્ગશિક્ષણ અને જૂથ અધ્યયન કરી શકાય છે.

ii) **નોલેજ પોર્ટલ્સ (Knowledge Portals):** અધ્યયન માટેની સામગ્રી એકઠી કરવામાં ખૂબ સમય બચાવી આપે છે. કમ્પ્યુટરમાં સોફ્ટવેર દ્વારા વિષયાંગો પરથી માહિતી કે વિડીયો ક્લિક કરતાં જ ઉપલબ્ધ છે, તે નોલેજ પોર્ટલ છે. કોઇ એક વિષયાંગ સંબંધિત માહિતી અને વિડીયો એક જ વિન્ડો પરથી મળે તેવી વ્યવસ્થાને નોલેજ પોર્ટલ કહે છે.

iii) **ઇન્ટ્રાનેટની રચના (Intranet):** કોઇપણ સંસ્થાના અંદરોઅંદરના વ્યવહારો માટે જુદાં-જુદાં સ્થળો પર આવેલા કમ્પ્યુટરોનું આંતરિક જાળુને ઇન્ટ્રાનેટથી ઓળખવામાં આવે છે. આમ સંસ્થાના પોતાના કમ્પ્યુટરો વચ્ચેનું આંતરિક જાળું એટલે ઇન્ટ્રાનેટ છે. દા.ત. રેલ્વેનું ઇન્ટ્રાનેટ, મોટી સંસ્થાઓ, યુનિવર્સિટીઓનું ઇન્ટ્રાનેટ

iv) **વાઇ-ફાઇ (Wi-Fi):** ઇ-લર્નિંગ કે ઓનલાઇન એજ્યુકેશનમાં વાઇ-ફાઇ મોટું પરિવર્તન ગણાય છે. ઇન્ટરનેટ અને નેટવર્કના જોડાણો માટે રેડિયાનાં મોજાનો ઉપયોગ કરી વાયર વગરના ખૂબ ઝડપી સંદેશાઓ મોકલતી ટેક્નોલોજી એ વાઇ-ફાઇ છે.

v) **આભાસી વર્ગખંડો (Virtual Class-rooms):** ઇન્ટરનેટની મદદથી અધ્યેતાના કમ્પ્યુટર કે સ્માર્ટફોનની સ્કીન પર આભાસ ઊભા કરી શિક્ષણ આપવાની એક વ્યવસ્થા છે. આ એક ડિજિટલ ટેક્નોલોજી ઉમેરવાનું શરૂ થયું છે. ડિજિટલ અને નેનો-સેન્સર મળીને બહુ જ ઓછા કદવાળા સાધન થકી વિશાળ માહિતી રજૂ કરી શકાય અને અધ્યેતા માટે માહિતી પ્રસ્તુત બને છે. આ બહુ મોટું પરીવર્તન છે.

vi) **ઇન્ટરનેટ ઓફ નેનો થિંગ્સ (IONT):** ઇ-લર્નિંગમાં ડિજિટલ ટેક્નોલોજી ઉપરાંત સેન્સરની ટેક્નોલોજી ઉમેરવાનું શરૂ થયું છે. ડિજિટલ અને નેનો-સેન્સર મળીને બહુ જ ઓછા કદવાળા સાધન થકી વિશાળ માહિતી રજૂ કરી શકાય અને અધ્યેતા માટે માહિતી પ્રસ્તુત બને છે. આ બહુ મોટું પરીવર્તન છે.

(6) આધુનિક ટેક્નોલોજીના ઉપયોગની સમિક્ષા

શિક્ષણમાં આમૂલ પરીવર્તન કરવાની પૂરી ક્ષમતા સાથે આધુનિક ટેક્નોલોજી પ્રવેશી છે, ત્યારે શિક્ષણનું જૂનું માળખું, ભસ્મભૂત કરી, વિજ્ઞાન અને ટેક્નોલોજી એ વિસ્ફોટકનું કામ કર્યું છે. ટેક્નોલોજીકલ પરીવર્તન આવશે અને પૂરી ક્ષમતા સાથે તેનો સ્વીકાર જરૂરી બનશે

-ઓનલાઇન એજ્યુકેશન કે ઇ-લર્નિંગ શિક્ષણમાં દાખલ થયું છે સાથે-સાથે તેમાં પણ સતત પરીવર્તન લાવવાનું શરૂ કરી દીધું છે. આ પરીવર્તન માટે હંમેશા સજ્જ બનવું પડશે.

-ઇ-લર્નિંગ અધ્યયનલક્ષી છે, તેનું રોજ-રોજ નવસર્જન થતું રહે છે અને તે અન્ય પદાર્થોની જેમ ખરીદ-વેચાણ થાય છે. અહીં જ્ઞાનના પ્રાપ્તિના જ્ઞાનના વ્યાપારની પણ શરૂઆત થઇ છે. આ જ્ઞાનપ્રાપ્તિના જ્ઞાનના વ્યાપાર સામે પણ અડીખમ ઊભુ રહેવું પડશે.

-વિશ્વમાં કોઇ પણ ખૂણામાંથી કોઇપણ વ્યક્તિ જ્ઞાન સર્જન કરીને અને વિશ્વમાં તરતું મૂકી શકે છે, આ એક ઉત્તમ વ્યવસ્થા છે. આ વ્યવસ્થા જેટલું સબળ બનશે, એટલો જ ટેક્નોલોજીનો ઉપયોગ વ્યાપક અને સમૃદ્ધ બનશે.

(7) ઉપસંહાર

અધ્યયન અને અધ્યાપનમાં આધુનિક ટેક્નોલોજીનું આગમન જ શૈક્ષણિકક્ષેત્રે સુધારાની એક કાંતિ સર્જી છે. અનેક કમિટી એ શિક્ષણમાં ટેક્નોલોજીની અનેક ભલામણો કરી, જેમનું અમલીકરણ પણ થયું અને આજે કમ્પ્યુટર કે સ્માર્ટફોન આધારિત ઇન્ટરનેટ અને તે સંબંધિત વાસ્તવમાં ટેક્નોલોજી આધારિત અધ્યયન અને અધ્યાપન થઇ રહ્યું છે. આ આધુનિક ટેક્નોલોજીના ઉપયોગથી ઓનલાઇન એજ્યુકેશન કે ઇ-લર્નિંગના વિરાટ સ્વરૂપ આપણી સમક્ષ તાદર્શ્ય છે.

Reference:

- Pandiya, S. R. (2010) ***Learning and Teaching Stule***. New Delhi: APH Publication Corporation.
- Ram, S. (1998). ***Teching Method.*** Surat: Gavendra Prakashan. New Delhi: Sarup and sons Publication.
- Siddiavi, M. H. (2009). ***Techniques of Teaching.*** New Delhi: A.P.H. Publication Corporation.

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ભારતમાં "માનવતાના" કાયદાના ઊભરતા વલણો

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સારાંશ ; ભારતની સુપ્રિમ કોર્ટ અને વિવિધ હાઇકોર્ટ દ્વારા વર્તમાન સમયમાં "માનવીય મૂલ્યો"ના રક્ષક તરીકેનું કાર્ય કર્યું છે. માનવીને જિંદગી જીવવાના અધિકાર અંગે બંધારણના અનુચ્છેદ - ૨૧ માં પણ સ્પષ્ટ ઉલ્લેખ કરી "માનવતા" ના મૂલ્યોને બંધારણના ઘડવૈયાઓએ ઉજાગર કર્યા છે. "માનવતા" અંગેનો ખ્યાલ બીજા વિશ્વ યુધ્ધ પછીથી માનવજાત સામે આવ્યો હતો. ઈ.સ. ૧૨૧૫ માં વૈશ્વિક સ્તરે થયેલ મેગ્નાકાર્ટા કરાર, ફ્રેંચ ડેક્લરેશન ઓફ રાઇટ્સ ઓફ મેન એન્ડ ઓફ સીટીઝન્સ (૧૭૮૯) યુ.એસ.બિલ્સ ઓફ રાઇટ્સ (૧૭૯૧) જેવા વિવિધ લેખિત દસ્તાવેજોમાં પણ વિવિધ વ્યક્તિગત (માનવતા) ના અધિકારો પર ભાર મૂકવામાં આવ્યો છે. ૧૯૪૫ માં અસ્તિત્વમાં આવેલ સંયુક્ત રાષ્ટ્ર સંઘ દ્વારા પણ માનવ અધિકારોની સાર્વત્રિક ઘોષણા કરી "માનવતા" અંગેના ખ્યાલને મજબૂત કરવામાં આવ્યો હતો. ભારતીય અદલતો દ્વારા પણ વર્તમાન સમયમાં વિવિધ ચૂકાદાઓ આપીને "માનવતા" સર્વોપરી છે તેની સાબિતી આપી છે. સુપ્રિમ કોર્ટે વિવિધ ચૂકડાઓમાં ગરીબી દૂર કરવા, માનવીના આરોગ્ય અંગે સન્માન સાથે જીવન જીવવા, ભાષા અને અભિવ્યક્તિની સ્વતંત્રતા સહિતના મુદ્દાઓમાં "માનવતા" અંગેના સ્પષ્ટ વલણને ઉજાગર કર્યો છે.

માનવતા અને કાયદો :-

ભારતના બંધારણમાં "માનવતા" ના પ્રાવધાન અંગે વિશિષ્ટ અનુચ્છેદોનો ઉમેરો કરી નાગરિકોને રક્ષણ આપવામાં આવ્યું છે. ભારતીય બંધારણના ભાગ - 3 થી નાગરિકોને "મૂળભૂત અધિકારો" આપવામાં આવ્યા છે જેમાં વૈશ્વિક સ્તરે કરવામાં આવેલ ઘોષણાઓનો પણ સમાવેશ કરવામાં આવ્યો છે.

રાજનીતિના માર્ગદર્શક સિધ્ધાંતો દ્વારા "સંઘ અને રાજ્ય સરકારોને" આદેશ આપવામાં આવ્યા છે કે, નાગરિકોને જરૂરી મૂળભૂત પાયાના જરૂરિયાતો કોઈપણ સંજોગોમાં પૂર્ણ કરવી ઉપરાંત વિવિધ કાયદો છોડીને "માનવતા" ના ખ્યાલને ઉજાગર કરવામાં આવ્યો છે. જેમાં તરછોડાયેલી પત્નીને ભરણપોષણ આપવા અંગેના વિવિધ કાયદાઓ, જાહેર વિતરણ વ્યવસ્થા(નિયંત્રણ) ઓર્ડર - ૨૦૧૧, સાર્વજનિક સેવા અધિનિયમ - ૧૯૯૯, બાળ સુરક્ષા અધિનિયમ - ૨૦૦૫, માતાપિતા અને વરિષ્ઠ નાગરિકોની જાળવણી અને કલ્યાણ અધિનિયમ - ૨૦૦૭ સહિત વિવિધ કાયદાઓ ઘડી માનવતાના સિધ્ધાંતને સાર્થક બનાવ્યા છે.

માનવતાને લગતા શકવર્તી ચુકાદાઓ:

ભારતીય યંગ લોયર્સ એસોસિએશન વિ કેરળ રાજ્ય*1 (શબરીમાલા કેસ)ના કેસમાં સુપ્રિમ કોર્ટે જણાવ્યુ હતું કે, કેરળ હિંદુ પ્લેસીસ ઓફ પબ્લિક વર્શીપ (પ્રવેશની અધિકૃતતા) નિયમો, 1965 ની જોગવાઈઓએ 10 થી 50 વર્ષની વયની મહિલાઓને મંદિરમાં જવા પર પ્રતિબંધ મૂક્યો ગેરવ્યાજબી છે. ૫ જજોની બેન્ચે ૪;૧ થી મંદિરમાં જવાના પ્રતિબંધને દૂર કરી માનવતાને સર્વોપરી દર્શાવી હતી.

દેવીલાલ વિ. મધ્યપ્રદેશ રાજ્યના*2 કેસમાં અદાલતે વિચાર્યું હતું કે, જુવેનાઇલ જસ્ટિસ એક્ટ હેઠળના લાભને કેટલી હદ સુધી વધારી શકાય છે જ્યાં ગુનેગારની ઉંમર 16 વર્ષથી વધુ અને ગુનો કરવામાં આવ્યો તે દિવસે 18 વર્ષથી ઓછો હતો. કોર્ટે જણાવ્યું હતું કે આવા કિસ્સામાં, જો આરોપીઓ દોષિત હોય તો પણ, મામલો અધિકારક્ષેત્ર જુવેનાઇલ જસ્ટિસ બોર્ડને મોકલવો જોઈએ.

સુપ્રીમ કોર્ટે મોહમ્મદ સલીમુલ્લા વિ. યુનિયન ઓફ ઈન્ડિયા*3ના કેસમાં જણાવ્યું હતું કે, રોહિંગ્યા શરણાર્થીઓને દેશનિકાલ કરવાના નિર્ણયને પડકારતા કેસની સુનાવણી કરતી વખતે, જ્યારે આર્ટિકલ 14 અને 21 હેઠળ મૂળભૂત અધિકારો તમામ વ્યક્તિઓ માટે ઉપલબ્ધ છે, પછી ભલે તે નાગરિક હોય કે ન હોય, 'દેશનિકાલ ન કરવાનો અધિકાર' સહાયક છે અથવા અધિકાર સાથે સુસંગત છે. કલમ 19(1)(e) હેઠળ બાંયધરી આપવામાં આવેલ અને તે માત્ર નાગરિકો માટે જ ઉપલબ્ધ છે.

સુપ્રીમ કોર્ટે વિકાસ કુમાર વિ યુનિયન પબ્લિક સર્વિસ કમિશનના*4 કેસમાં સમાનતા ન્યાયશાસ્ત્રને આગળ વધારતા મુખ્ય ચુકાદાઓ જારી કર્યા. કોર્ટે જણાવ્યું હતું કે વિકલાંગ વ્યક્તિઓ માટે વાજબી આવાસ નક્કી કરવા માટે કેસ દ્વારા કેસ આકારણી જરૂરી છે. મહિલાઓ પર દેખીતી રીતે તટસ્થ નીતિઓની અસમાન અસરને ઓળખીને, કોર્ટે ભારપૂર્વક જણાવ્યું હતું કે અસમાનતાને સરભર કરવા માટે એક સામાન્ય રમતનું ક્ષેત્ર પૂરતું નથી અને તે નીતિઓએ વાસ્તવિક અર્થમાં સમાનતાને સુનિશ્ચિત કરવી જોઈએ. 40 ટકાથી વધુ દૃષ્ટિ/શ્રવણની ક્ષતિ ધરાવતી વ્યક્તિઓને ન્યાયિક સેવામાંથી બાકાત રાખવામાં આવી હતી. કોર્ટે ચુકાદો આપ્યો હતો કે ન્યુરોલોજીકલ સ્થિતિ, લેખકની ખેંચાણથી પીડિત વ્યક્તિ સિવિલ સર્વિસની પરીક્ષા લખવા માટે સ્ક્રિપ્ટ રાખવા માટે હકદાર છે. કોર્ટે એમ પણ જણાવ્યું હતું કે વી સુરેન્દ્ર મોહન વિ.

તમિલનાડુ રાજ્ય*5 માં અગાઉનો ચુકાદો જેમાં સિવિલ જજ તરીકે નિમણૂક માટે 40 ટકા અપંગતાની ટોચમર્યાદા જાળવી રાખવામાં આવી હતી, તે હવે સારો કાયદો નથી. મહત્ત્વની વાત એ છે કે, કોર્ટે એમ પણ કહ્યું હતું કે એક્ટમાં વ્યાખ્યાયિત કરાયેલ 'બેન્ચમાર્ક ડિસેબિલિટી' એ સ્ક્રિપ્ટ મેળવવા માટેની પૂર્વશરત નથી. આ ઉપરાંત પણ કોર્ટ દ્વારા માનવતાને લગતા અનેક ચુકાદાઓ આપી માનવ અધિકારોને સર્વોચ્ચ સ્થાને રાખ્યા છે｡

નિષ્કર્ષ :-

ભારતમાં માનવતા અને કાયદાને લગતા વિવિધ ભારતીય કાયદાઓ, ભારતીય બંધારણમાં નાગરિક અધિકારો તેમજ સુપ્રિમ કોર્ટ અને હાઇકોર્ટે આપેલ ચૂકાદાઓના અભ્યાસ પરથી એવું કહી શકાય કે,ભારતનું કાયદાકીય માળખમાં માનવતા સર્વોપરી છે.

સંદર્ભ :-

1. Indian Young Lawyers Association vs The State Of Kerala **Writ Petition (Civil)** ***scc 373, 2016***
2. Devilal **and ors.** ***vs. State of Madhya Pradesh*** **Criminal Appeal No.989 of 2007 SCC 2021**
3. Mohammad Salimullah v. Union **of** ***India*** **SCC Writ Petition (Civil) 793 of 2017**
4. Civil Appeal No. 273 of 2021 Special Leave Petition (C) No. 1882 of 2021
5. Vikash Kumar v Union Public Service Commission (UPSC) Civil Appeal No. 273 of 2021 Special Leave Petition (C) No. 1882 of 2021

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ભારતમાં સામાજિક વિજ્ઞાનમાં સંશોધનના વલણો

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સારાંશ :

સંશોધન એ દરેક રીતે સામાજિક વિજ્ઞાનના અભ્યાસ માટે કુદરતી વિજ્ઞાન જેટલું જ જરૂરી અને મદદરૂપ છે. કોઈપણ વિદ્યાશાખા કે જે આપણું બૌદ્ધિક ધ્યાન ખેંચી તેની ક્ષમતા અને સામર્થ્યનું પ્રદર્શન કરે છે, તેમાં સંશોધન કરવામાં આવે તો જ તે વિકસે છે અને અસરકારક તેમજ હેતુપૂર્ણ બનશે. સંશોધન વિના નવા તથ્યોની શોધ દ્વારા અથવા નવી શોધ, નવા અભિગમો, નવી પદ્ધતિ અને અનુભવના પ્રકાશમાં હાલના જાણીતા તથ્યોના નવા અર્થઘટન દ્વારા સામાજિક વિજ્ઞાનની ઊંડાઈમાં વધારો થશે નહીં. સામાજિક સંશોધનમાં સામાજિક વિજ્ઞાનના ક્ષેત્રમાં અને વર્તણૂકીય વિજ્ઞાનમાં પણ કરવામાં આવેલી વૈજ્ઞાનિક તપાસનો સમાવેશ થાય છે. સામાજિક સંશોધન એ ખૂબ વ્યાપક શ્રેણી છે જેમાં ઘણા પેટા વર્ગો છે. સામાજિક વિજ્ઞાન સંશોધનમાં બે વિપરીત વલણો પ્રચલિત છે. એક, સામાજિક સમસ્યાઓના સંદર્ભમાં સામાજિક વિજ્ઞાનમાં સંશોધનની માંગ ઝડપથી વધી રહી છે. સાથે સાથે સામાજિક સમસ્યાઓના નવા પાસાઓ પણ ઉભરી રહ્યા છે. બીજું, સામાજિક વિજ્ઞાન સંશોધનનો સ્કેલ અપૂરતો છે અને તે ગુણવત્તા અને અવકાશના માપદંડોને પૂર્ણ કરવામાં અસમર્થ છે. પશ્ચિમી સમાજોના વ્યાપારી મૂલ્યો સાથે ઇન્ટરફેસ, વિશ્વના ઉભરતા સમાજો ઇક્વિટી અને વૃદ્ધિ વચ્ચેના સંઘર્ષ, લોકોના હિત વચ્ચેના સંઘર્ષ અને સંસ્થાઓની તટસ્થતા સહિતની સમસ્યાઓનો સામનો કરી રહ્યા છે.

મુખ્ય શબ્દો: સામાજિક વિજ્ઞાન, સંશોધન, સામાજિક સમસ્યાઓ, તપાસ, ગુણવત્તા

ભારતમાં સામાજિક વિજ્ઞાનમાં સંશોધનના વલણો

પરિચય:

ભારતમાં સામાજીક વિજ્ઞાન સંશોધનનો ઇતિહાસ વિવિધ રંગી રહ્યો છે. દેશમાં આ ક્ષેત્રમાં સંશોધનનું સૌથી વધુ પ્રમાણ છે, અને તે અન્ય દેશો કરતાં નોંધપાત્ર રીતે આગળ છે, જથ્થા અને ગુણવત્તાની દ્રષ્ટિએ સમગ્ર દેશમાં સંશોધન પ્રવૃત્તિ અને આઉટપુટમાં વ્યાપક અસમાનતા છે, જ્યારે

મુખ્ય શહેરોમાં સ્થિત મુઠ્ઠીભર પ્રીમિયમ યુનિવર્સિટીઓ શૈક્ષણિક સંશોધન સંસ્કૃતિઓને પ્રોત્સાહન આપે છે જેમાં શિસ્ત અથવા આંતરશાખાકીય કાર્ય, પીઅર સમીક્ષા અને આંતરિક અને બાહ્ય બૌદ્ધિક નેટવર્ક અને વિદ્વાન સમાજો સાથે જોડાણ પર ધ્યાન કેન્દ્રિત કરીને વિશેષ પ્રકારના નિષ્ણાત જ્ઞાની અને જ્ઞાન ઉત્પાદનનો સમાવેશ થાય છે. મોટાભાગની સંસ્થાઓમાં સંશોધનની ગુણવત્તા ન તો આંતરરાષ્ટ્રીય શૈક્ષણિક ધોરણોને અનુરૂપ છે કે ન તો તેઓ દેશમાં સૈદ્ધાંતિક અથવા લાગુ અને નીતિ-લક્ષી, સામાજિક વિજ્ઞાન સંશોધનમાં નોંધપાત્ર યોગદાન આપવા સક્ષમ છે.

પી.વી., યંગના મતે, સામાજિક સંશોધન એ "નવા તથ્યો શોધવાની અથવા જૂના તથ્યો, તેમના અનુક્રમો, આંતરસંબંધોના આકસ્મિક ખુલાસાઓ અને તેમને સંચાલિત કરતા કુદરતી કાયદાઓ ચકાસવાની પદ્ધતિસરની પદ્ધતિ છે". સામાજિક સંશોધનમાં સામાજિક જીવનની સમજણ, અભ્યાસ અને પૃથ્થકરણ માટે પ્રવર્તમાન જ્ઞાનને સિસ્ટમ તરીકે સંશોધિત કરવા, સુધારવા અથવા ચકાસવા માટે વૈજ્ઞાનિક પદ્ધતિનો ઉપયોગ સામેલ છે. શોધન એ મૂળભૂત રીતે વ્યવસ્થિત રીતે હાથ ધરાયેલું સર્જનાત્મક કાર્ય છે જે જ્ઞાનના ભંડારમાં વધારો કરે છે અને સમાજને વધુ સારું સ્થાન બનાવતી નવી એપ્લિકેશનો તૈયાર કરવામાં મદદ કરે છે.

અભ્યાસના ઉદ્દેશ્યો:

1. ભારતમાં સામાજિક વિજ્ઞાન સંશોધનની સ્થિતિનું વિશ્લેષણ કરવું.

2. ભારતમાં સામાજિક વિજ્ઞાન સંશોધનના વલણો પર કેટલાક નિર્દેશકો સમજાવવા.

3. સમજવા માટે કે શું સામાજિક વિજ્ઞાન સંશોધન રોજગાર માટે વેન્ટ બની શકે છે? કેટલાક પ્રતિબિંબ

ડેટા અને પદ્ધતિ:

આ પેપર સામાજિક વિજ્ઞાન સંશોધનમાં ડેટાનું વર્ણન કરવાના હેતુથી બનાવવામાં આવ્યું છે. પ્રસ્તુત અભ્યાસ મુખ્યત્વે ગૌણ ડેટા પર આધારિત છે જેમાં પુસ્તકો, પ્રકાશનો, વાર્ષિક અહેવાલો, વેબસાઇટ્સ વગેરેનો સમાવેશ થાય છે.

ભારતમાં સામાજિક વિજ્ઞાન સંશોધન:

ભારત વિશ્વની સૌથી જૂની સંસ્કૃતિમાંની એક છે અને સંશોધન અને લેખનની સૌથી લાંબી પરંપરા ધરાવે છે. મનુ દ્વારા લખાયેલ ધર્મશાસ્ત્રને ભારતીય સમાજના વ્યાપક અભ્યાસ તરીકે ગણવામાં આવે છે કારણ કે તે સમયે તે અસ્તિત્વમાં હતું, તેમ છતાં તે સામાજિક અને આર્થિક ક્રિયાના નૈતિક અને આદર્શિક પાસાઓ પર વધુ ભાર મૂકે છે.

ભારતીય આર્થિક ચિંતન પરના પ્રારંભિક લખાણો મુખ્યત્વે કૌટિલ્યના અર્થશાસ્ત્રમાંથી આવે છે, જે ઘણા વર્ષો પહેલાં લખાયેલ એક તેજસ્વી ગ્રંથ છે, તે એક ઉત્તમ વિઝન પૂરું પડે છે. જે ગ્રંથ નાણાં, નાણાં અને સંસાધન વ્યવસ્થાપનની તીવ્ર સમજને સમાવે છે. કૌટિલ્યના વિશાળ લખાણ પર રોજર બોશેની ઉત્કૃષ્ટ કોમેન્ટ્રી આધુનિક ભારતીય વ્યૂહાત્મક વિચારસરણી માટે જરૂરી વાસ્તવિક દલીલો પૂરી પડે છે અને રાજકારણ તથા અર્થશાસ્ત્ર વચ્ચેના સંબંધની આપણી સમજ પણ વિકસાવે છે.

ભારત સદીઓથી એશિયન અને પશ્ચિમી વિદ્વાનો માટે સામાજિક વિજ્ઞાન સંશોધનનો વિષય પણ રહ્યું છે. ચંદ્રગુપ્ત મૌર્યના સમય દરમિયાન ભારતીય સમાજની રચના અને ભારતીયોના રિવાજોનું વિગતવાર વર્ણન, 324 BC - 300 BC, ગ્રીક રાજદૂત મેઘાસ્થેનિસ દ્વારા લખવામાં આવ્યું છે. 1030 એડીમાં ભારતની મુલાકાતે આવેલા પર્સિયન વિદ્વાન અલ-બિરુનીએ ભારતીય સામાજિક અને સાંસ્કૃતિક જીવન, હિંદુઓના રીતરિવાજો અને રીતભાતનું વર્ણન કરતું પુસ્તક લખ્યું હતું. ફ્રેંચ પ્રવાસી બેનિયર દ્વારા વૈજ્ઞાનિક તપાસ કરતાં વધુ વ્યક્તિગત અવલોકનો પર આધારિત અન્ય રસપ્રદ લખાણો મુઘલ રાજાઓ શાહજહાં અને ઔરંગઝેબ દરમિયાન 17મી સદીના ભારતીય સમાજ વિશે રસપ્રદ માહિતી પ્રદાન કરે છે.

19મી સદીમાં બ્રિટિશ વસાહતીકરણ પછી ભારતમાં મોડેમ સામાજિક વિજ્ઞાનનો વિકાસ થવા લાગ્યો. એશિયાટિક સોસાયટી ઓફ બંગાળ (1784), એકેડેમિક એસોસિએશન (1828), બેથ્યુન સોસાયટી (1851), બનારસ ઇન્સ્ટિટ્યૂટ (1861) અને બંગાળ સોશિયલ સાયન્સ એસોસિએશન (1867-1878) ની સ્થાપનાએ ભારતમાં સામાજિક વિજ્ઞાન સંશોધનને પ્રોત્સાહન આપ્યું.

આઝાદીના શરૂઆતના વર્ષો અને પછી સામાજિક વિજ્ઞાન સંશોધન પશ્ચિમી વિચારોથી પ્રભાવિત અભ્યાસ પર આધારિત હતું. પાછળથી આયોજિત સામાજિક-આર્થિક વિકાસ તપાસ અને સંશોધનનો જબરદસ્ત અવકાશ પ્રદાન કરે છે તે હકીકતને કારણે સ્થાનિક મુદ્દાઓ પર આધારિત અભ્યાસ કરવાની માંગ કરવામાં આવી હતી. દાદાભાઈ નારોજી, જી.કે.,ગોખલે, આર.સી. દત્ત વગેરે જેવા

મહાન આર્થિક અને રાજકીય વિચારકો દ્વારા હાથ ધરવામાં આવેલા સંશોધનની મદદથી મોડેમ ભારતીય સામાજિક વિજ્ઞાનના વિકાસનો માર્ગ મોકળો થયો.

સામાજિક વિજ્ઞાન સંશોધન મુખ્યત્વે બે દળો દ્વારા ચલાવવામાં આવે છે (i) સમાજના વિવિધ સામાજિક, સાંસ્કૃતિક અને આર્થિક પાસાઓમાં અને તેને આકાર આપતા પરિબળોમાં અને (ii) વિશ્વસનીય માહિતી અને વ્યાવસાયિક વિશ્લેષણ માટે સરકાર, નાગરિક સમાજ અને ખાનગી ક્ષેત્રમાં નીતિ નિર્માતાઓ અને સંચાલકોની વ્યવહારિક જરૂરિયાતોમાં .

પૂર્વ-સ્વતંત્ર સમયગાળામાં, આ બંનેનો સ્કેલ અને અવકાશ તદ્દન મર્યાદિત હતો. યુનિવર્સિટીઓ અને અન્ય શૈક્ષણિક સંસ્થાઓ,જેવા વિદ્વતાપૂર્ણ સંશોધનના મુખ્ય કેન્દ્રો તે સમયે પ્રમાણમાં ઓછા હતા. આ મુખ્યત્વે સ્કેલને કારણે છે અને સંશોધનનો અવકાશ મર્યાદિત હતો કારણ કે માહિતીની જરૂરિયાતો અને સરકાર માટે વિશ્લેષણ પણ ખૂબ મર્યાદિત હતું. આઝાદી પછીના પ્રથમ 15 વર્ષ દરમિયાન પણ આ વલણ ચાલુ રહ્યું, જ્યાં બોમ્બે સ્કૂલ ઓફ ઈકોનોમિક્સ અને મદ્રાસ યુનિવર્સિટી ડિપાર્ટમેન્ટ ઓફ ઈકોનોમિક્સ ખાસ કરીને સક્રિય હતા.

જો કે, સરકાર દ્વારા આયોજિત સામાજિક-આર્થિક વિકાસ અને પરિવર્તન અને તે જ સમયે ઔદ્યોગિક અને વાણિજ્યિક સાહસોમાં ઝડપી વૃદ્ધિ થવાને કારણે સંશોધનનો સ્કેલ અને અવકાશ વિસ્તર્યો. આ વિકાસને કારણે ભારતને સંબંધિત વિકાસલક્ષી મુદ્દાઓ પર માહિતી અને સંશોધન બંનેની માંગમાં ઝડપી વધારો થયો. 1950 અને 1960 ના દાયકામાં ભારતીય આંકડાકીય પ્રણાલીના વિસ્તરણ અને પુનઃરચના અને સંશોધનને પ્રોત્સાહન આપવાના પ્રયાસો પણ જોવા મળ્યા. નોડલ આંકડાકીય એજન્સીઓ સિવાય, ખાસ કરીને CSO અને NSSO, વ્યવહારીક રીતે કેન્દ્ર સરકારના તમામ વિભાગોએ નીતિ પર દેખરેખ રાખવા અને સલાહ આપવા માટે ડેટા સંકલિત કરવા માટે એકમો/નિર્દેશકો શરૂ કર્યા.

તે સમયગાળા દરમિયાન સ્થપાયેલી સૌથી મહત્વપૂર્ણ સંસ્થાઓમાં ગોખલે ઇન્સ્ટિટ્યૂટ ઑફ પોલિટિક્સ એન્ડ ઇકોનોમિક્સ, પૂણે, ટાટા ઇન્સ્ટિટ્યૂટ ઑફ સોશિયલ સાયન્સ, મુંબઈ, પ્લાનિંગ કમિશન, નવી દિલ્હી, દિલ્હી સ્કૂલ ઑફ ઇકોનોમિક્સ, દિલ્હી, ઇન્ડિયન ઇન્સ્ટિટ્યૂટ ઑફ પબ્લિક એડમિનિસ્ટ્રેશન, નવી દિલ્હી વગેરેનો સમાવેશ થાય છે. આ સમયગાળા દરમિયાન અર્થશાસ્ત્ર અને આંકડાકીય નિયામકની કચેરી, નવી દિલ્હી દ્વારા કૃષિ આર્થિક સંશોધન સંસ્થાઓની સ્થાપના પણ

જોવા મળી હતી અને વિવિધ સરકારી વિભાગોએ પણ વિશેષ સંસ્થાઓની સ્થાપના અથવા વિસ્તરણ કરવામાં રસ દાખવવાનું શરૂ કર્યું હતું.

આયોજન પંચ અને અન્ય સરકારી વિભાગોએ યુનિવર્સિટીઓમાં સંશોધન પ્રોજેક્ટને પ્રાયોજિત કરવાનું શરૂ કર્યું અને ચોક્કસ વિષયોમાં સંશોધન કરવા માટે હાલની યુનિવર્સિટીઓ અને સંસ્થાઓમાં ભંડોળ પૂરું પાડ્યું. જેથી ત્યાં કેટલીક વિશિષ્ટ સંસ્થાઓ અસ્તિત્વમાં હતી, પરંતુ મોટા ભાગના સામાજિક વિજ્ઞાન સંશોધન યુનિવર્સિટીઓમાં હાથ ધરવામાં આવ્યા હતા. જો કે, ભારતની આઝાદીના પ્રથમ તબક્કા દરમિયાન અને મોટા પ્રમાણમાં સંશોધન વિકાસના આર્થિક પાસાઓ પર અપ્રમાણસર રીતે કેન્દ્રિત હતું. સત્યમૂર્તિ (1984) અનુસાર, આ સમયગાળા દરમિયાન અર્થશાસ્ત્ર "સામાજિક વિજ્ઞાનની રાણી" હતું. જો કે, 1960 ના અંતમાં સમાજશાસ્ત્રથી શરૂ કરીને સામાજિક વિજ્ઞાનના અન્ય ક્ષેત્રોમાં સંશોધન પર ધ્યાન કેન્દ્રિત કરીને આ વિસંગતતાને સુધારી.

1950 અને 1960 ના દાયકાના સમયગાળા દરમિયાન સામાજિક વિજ્ઞાન સંશોધન માત્ર કેટલીક સંસ્થાઓ અને યુનિવર્સિટી વિભાગો સુધી મર્યાદિત હતું, જેઓ સ્થાનિક મુદ્દાઓ પર ધ્યાન કેન્દ્રિત કરવાને બદલે સામાજિક વિજ્ઞાનના વ્યાપક ક્ષેત્રો પર કામ કરતા હતા. વધુમાં, યુનિવર્સિટીઓ કે જેઓ સંશોધનનું મુખ્ય કેન્દ્ર હતી, તેઓએ સંશોધનને બદલે શિક્ષણ પર વધુ ધ્યાન કેન્દ્રિત કર્યું. આનાથી ભારતમાં સામાજિક વિજ્ઞાન સંશોધનની અસાધારણ વૃદ્ધિ થઈ. સામાજિક વિજ્ઞાન સંશોધનને વધુ વેગ આપવા માટે, 1960 ના દાયકાના અંતમાં કાઉન્સિલ ફોર સાયન્ટિફિક એન્ડ ઇન્ડસ્ટ્રિયલ રિસર્ચ (CSIR) ની રેખાઓ જેવી જ કાઉન્સિલની સ્થાપના કરવાની જરૂરિયાત અનુભવાઈ, જેના કારણે ભારતીય સામાજિક વિજ્ઞાન સંશોધન પરિષદની સ્થાપના થઈ. વર્ષ 1969માં સામાજિક વિજ્ઞાન સંશોધનના તમામ પાસાઓની તપાસ કરવા માટે એક સ્વાયત્ત સંસ્થા તરીકે ICSSRની સ્થાપના પછી સામાજિક વિજ્ઞાન સંશોધનમાં વળાંક આવ્યો. ત્યારથી આ ક્ષેત્રમાં યુનિવર્સિટી વિભાગો અને સંશોધન સંસ્થાઓની સંખ્યા અનેકગણી વધી છે. સામાજિક વિજ્ઞાનનું શિક્ષણ અને સંશોધન માત્ર યુનિવર્સિટીઓમાં જ હાથ ધરવામાં આવ્યું નથી, જ્યાં સામાજિક વિજ્ઞાન વિભાગો અસ્તિત્વમાં છે ત્યાં સમાજના ચોક્કસ સંદર્ભ સાથે કૃષિ અને ગ્રામીણ વિકાસને લગતા સંશોધન હાથ ધરવામાં આવે છે. એ જ રીતે, ઈન્ડિયન ઈન્સ્ટિટ્યૂટ ઑફ ટેક્નોલૉજી, નેશનલ ઈન્સ્ટિટ્યૂટ ઑફ ટેક્નોલૉજી, ઈન્ડિયન ઈન્સ્ટિટ્યૂટ ઑફ મેનેજમેન્ટ પણ સામાજિક વિજ્ઞાનમાં શિક્ષણ અને સંશોધન માટે માનવતા અને સામાજિક વિજ્ઞાનના વિભાગો ગોઠવે છે. ICSSR પોતે હાલમાં 27

સંશોધન સંસ્થાઓ તેની ભ્રમણકક્ષા હેઠળ છે જે સામાજિક વિજ્ઞાનના વિવિધ પાસાઓ પર સંશોધન કરે છે.

સામાજિક-આર્થિક સંશોધન માટે જાહેર ભંડોળની ઉપલબ્ધતાએ નિઃશંકપણે સરકારની બહાર સંશોધનને પ્રોત્સાહન અને સુવિધા આપી છે. તેણે સંશોધનના મહત્વના ક્ષેત્રો (જેમ કે જાતિ અભ્યાસ, પર્યાવરણ, દલિતો અને વંચિત વર્ગો) ખોલીને, જાહેર કાર્યસૂચિ પર નવા મુદ્દાઓ લાવી અને સામાજિક અને વિકાસ નીતિ પરની ચર્ચાને જીવંત બનાવીને મહત્વપૂર્ણ યોગદાન આપ્યું છે.

સામાજિક વિજ્ઞાન સંશોધન વર્તમાન સ્થિતિ :

સામાજિક વિજ્ઞાન સંશોધનમાં રોકાયેલી સંસ્થાઓની સંખ્યા, તેમના કાર્યના વિષયો અને ભંડોળના સ્ત્રોત અને સંશોધન આઉટપુટ વિશે માહિતી મેળવવી ખૂબ જ મુશ્કેલ છે. જો કે, ICSSR દ્વારા વર્ષ 2007માં સ્થપાયેલી ચોથી સમીક્ષા સમિતિએ સરકાર દ્વારા સીધા ભંડોળ પૂરું પાડવામાં આવતી આવી સંસ્થાઓ અને તેમાંથી નોંધપાત્ર અને નિયમિત નાણાકીય સહાય મેળવતી સંસ્થાઓ પાસેથી ડેટા એકત્ર કરવાનો અને સંકલન કરવાનો પ્રયાસ કર્યો છે.

સામાજિક વિજ્ઞાન સંશોધન કરતી સંસ્થાઓને નીચે જણાવેલ છ શ્રેણીઓમાં વર્ગીકૃત કરી શકાય છે.

1. યુજીસી હેઠળ યુનિવર્સિટીઓ અને અનુસ્નાતક કોલેજોમાં સામાજિક વિજ્ઞાન વિભાગો
2. વિશિષ્ટ યુનિવર્સિટીઓ - કૃષિ યુનિવર્સિટીઓ અને ટેકનોલોજી, મેનેજમેન્ટ વગેરે સંસ્થાઓ.
3. ICSSR સમર્થિત સંશોધન સંસ્થાઓ
4. સામાજિક વિજ્ઞાન સંશોધનમાં વિશિષ્ટ સ્વાયત્ત સંશોધન સંસ્થાઓ
5. સરકાર સમર્થિત સંશોધન એકમો;
6. ખાનગી કન્સલ્ટન્સી ફર્મ્સ.

આમાંથી પ્રથમ ચાર કેટેગરીમાં સૌથી વધુ સક્રિય કામગીરી થાય છે.

CSSR ની રચના એ અનુભૂતિ પર આધારિત હતી કે ભારતમાં સામાજિક વિજ્ઞાન સંશોધનમાં રાષ્ટ્રીય સંસ્થાનો અભાવ છે જે તેના નિયંત્રણ હેઠળ ન રહેતા સરકાર તરફથી સમર્થન અને પુનર્ગઠન મેળવવા સિવાય તેના વિસ્તરણ અને પ્રમોશન માટે સક્રિય રીતે કાર્ય કરી શકે. તેથી, સામાજિક વિજ્ઞાન સંશોધન અને નીતિ ઘડતરના તારણો વચ્ચે મજબૂત જોડાણ વિકસાવવાનો

પ્રયાસ કરતી વખતે, ICSSR ને સામાજિક વિજ્ઞાન સંશોધનને વિસ્તૃત કરવા અને તેની ગુણવત્તા સુધારવા માટે એક સ્વાયત્ત સંસ્થા તરીકે કલ્પના કરવામાં આવી હતી. જે સામાજિક વિજ્ઞાન સંશોધન અને તેના ઉપયોગને પ્રોત્સાહન આપવા માટે સમયાંતરે જરૂરી હોય તેવા પગલાં લે છે.

ભારતમાં ઉચ્ચ શિક્ષણને સામાન્ય રીતે વિજ્ઞાન અને કળાના બે વ્યાપક પ્રવાહોમાં વહેંચવામાં આવે છે. સામાજિક વિજ્ઞાનમાં આવી કોઈ ડિગ્રી નથી અને સામાજિક વિજ્ઞાન અને માનવશાસ્ત્રને આર્ટ સ્ટ્રીમ હેઠળ યુનિવર્સિટીઓમાં એકસાથે જૂથબદ્ધ કરવામાં આવે છે.

સામાજિક વિજ્ઞાનમાં વિવિધ શાખાઓનો સમાવેશ થાય છે. યુનિવેર્સિટી દ્વારા સામાજિક વિજ્ઞાનમાં અધ્યાપન અને સંશોધન હાથ ધરવામાં આવે છે. જે સમાજશાસ્ત્ર, અર્થશાસ્ત્ર, ઇતિહાસ, માનવશસ્ત્ર, ભૂગોળ, મનોવિજ્ઞાન, જાહેર વહીવટ અને રાજકીય વિજ્ઞાન જેવા પરંપરાગત શાખાના ક્ષેત્રમાં આપવામાં આવે છે. જે યુનિવર્સિટીઓમાં આર્ટ્સ સ્ટીમ હેઠળ ભણાવવામાં આવે છે.

ભારતમાં સામાજિક વિજ્ઞાન સંશોધનો વિશેષ વિધ્યાશાખાઓ દ્વારા પ્રભુત્વ ધરાવે છે. જેમાં અર્થશાસ્ત્રે પરંપરાગત રીતે અન્ય કરતાં વધુ ભંડોળ આકાર્ષ્યું છે. જ્યારે અનુસ્નાતક અને સંશોધન વિધ્યાર્થીઓમાં સમાજશાસ્ત્રનું વધુ આકર્ષણ જણાય છે. દેખીતી રીતે NGO ક્ષેત્રના ઝડપી વિકાસના કારણે ઇતિહાસ અને રાજકીય વિજ્ઞાન જેવા વિષયોમાં ઉચ્ચ શિક્ષણની માંગ ઘટી રહી હોવાનું જણાય છે. કારકિર્દીની મર્યાદિત તકો છતા ઇતિહાસ ભારતભરમાં સૌથી જૂની અને સૌથી વધુ શીખવવામાં આવતી વિધ્યા શાખા છે.

ઇન્ડિયન કાઉન્સિલ ફોર સોશિયલ સાયન્સ રિસર્ચ (ICSSR 2007) ની ચોથી સમીક્ષા સમિતિ અહેવાલ મુજબ સામાજિક વિજ્ઞાન સંશોધન બે પરિબળો દ્વારા ચલાવવામાં આવે છે: 1. સમાજના વિવિધ સામાજિક, સાંસ્કૃતિક, રાજકીય અને આર્થિક પાસાઓમાં અને તેમને પ્રભાવિત કરતા ચલોને સમજવામાં સમાજની કામગીરીમાં રસ, અને 2. વિશ્વસનીય ડેટા અને વ્યાવસાયિક વિશ્લેષણ માટે સરકાર, નાગરિક સમાજ અને ખાનગી ક્ષેત્રના નીતિ-નિર્માતાઓ અને સંચાલકોની વ્યવહારિક જરૂરિયાતો.

છેલ્લા બે દાયકાઓમાં સામાજિક વિજ્ઞાન સંશોધન પરંપરાગત શિસ્તની સીમાઓથી આગળ વધીને એવા ક્ષેત્રોમાં વિકસ્યું છે જે દેશના વર્તમાન સામાજિક -આર્થિક અને રાજકીય સંદર્ભને અનુરૂપ છે. વૈશ્વિકીકરણ અને વિકાસ મુખી ક્ષેત્રો તરીકે ઊભરી આવ્યા છે. વિવિધ સંસ્થાઓમાં શિક્ષણ અને

આરોગ્ય પર સંશોધન કરવામાં આવી રહ્યું છે. ઇન્સ્ટીટ્યુટ ઓફ ઇકોનોમિક ગ્રોથ, સેન્ટર ફોર ડેવલપિંગ સોસાયટી, મદ્રાસ ઇન્સ્ટીટ્યુટ ઓફ ડેવલપિંગ સોસાયટીઝ અને સેન્ટર ફોર પોલિસી રિસર્ચ જેવી સંખ્યાબંધ સંશોધન સંસ્થાઓએ સંબંધિત ક્ષેત્રોમાં વિવિધ સંશોધન પ્રોજેક્ટ હાથ ધર્યા છે. સમાન અને ટકાઉ વિકાસ, ગરીબી અભ્યાસ અને શહેરીકરણ પણ સંશોધન માટેના મુખ્ય ક્ષેત્રો તરીકે ઉભરી આવ્યા છે. યુનિવર્સિટીઓ, સંશોધન સંસ્થાઓ અને એન.જી.ઓ. દ્વારા કરવામાં આવેલા સંશોધનમાં નારિવાદી અભ્યાસો અને જાતિ અભયાસોમાં નવી દિશાઓ જોવા મળે છે.

વિકાસશીલ રાષ્ટ્રના સંદર્ભમાં અન્ય સામાજિક વિજ્ઞાનથી વિપરીત, એક શિસ્ત તરીકે અર્થશાસ્ત્રને ઘણી વખત વધુ ઉપયોગિતાવાદી કાર્ય તરીકે ઓળખવામાં આવે છે અને તે રાજ્યના વિકાસમાં સીધો ફાળો આપે છે. પાછલા દાયકાઓમાં લાગુ પ્રયોગમૂલક સંશોધન પર વધુ ધ્યાન કેન્દ્રિત કરવામાં આવ્યું છે, જે ઘણી વખત સરકાર સહિત વિવિધ હિસ્સેદારો દ્વારા સોંપવામાં આવે છે, સૈદ્ધાંતિક અર્થશાસ્ત્રને બદલે જે અન્ય સામાજિક વિજ્ઞાનને આગળ ધપાવે છે અને શિસ્તના દાર્શનિક આધારથી લઈને સંસ્કૃતિના પ્રશ્ન સુધીના વિષયોની વિશાળ શ્રેણીને સંબોધિત કરે છે. જેમકે લિંગ અથવા વૈશ્વિકરણનું રાજકારણ.

ભારતમાં સામાજિક વિજ્ઞાનના સંશોધનમાં જ્ઞાતિ હંમેશા એક કેન્દ્રીય શ્રેણી રહી છે અને તેના આર્થિક, રાજકીય અને સામાજિક અસરો પર કામનું એક નોંધપાત્ર અને વધતું જતું જૂથ છે. કેન્દ્ર અને રાજ્ય સ્તરે ઉચ્ચ શૈક્ષણિક સંસ્થાઓ અને સરકારી નોકરીઓમાં વંચિત જાતિ જૂથો માટે અનામતનો મુદ્દો કેટલાક સમયથી અનામત તરફી અને વિરોધી ચળવળો વચ્ચે મોટી ઉથલપાથલ અને અશાંતિ તરફ દોરી ગયો છે.

સાંસ્કૃતિક અભ્યાસના ઉદભવ સાથે, ખાસ કરીને ભારતીય શાળા, સબલ્ટર્ન અભ્યાસ તરીકે ઓળખાય છે, તે પણ વિકસિત થયું છે. પોસ્ટ-કોલોનિયલ અને સામાજિક ઈતિહાસકારો દ્વારા રજૂ કરાયેલા, સબલ્ટર્ન અભ્યાસોએ આધુનિક ભારતીયના લખાણને દર્શાવતા મજબૂત ચુનંદા પૂર્વગ્રહનો વિરોધ કર્યો છે.

ખાનગી સંશોધન કંપનીઓ ઘણા કારણોસર ઉભરી આવી છે અને નોંધપાત્ર વિવિધતા ધરાવે છે. બહુપક્ષીય દાતાઓ, ખાનગી કોર્પોરેટ સંસ્થાઓ અને અમુક સમયે સરકાર દ્વારા શરૂ કરાયેલ પ્રયોગમૂલક/મોજણી આધારિત સંશોધન. કંપનીઓ સામાન્ય રીતે ટૂંકા ગાળાના કરાર પર કામ કરે છે અને સંશોધનમાં લાંબા ગાળાની રુચિ ધરાવતી નથી. સૈદ્ધાંતિક માળખું, પદ્ધતિસરના સિદ્ધાંતો,

સ્ત્રોતો અને ડેટાની ગુણવત્તા અને આ કંપનીઓ દ્વારા ઉપયોગમાં લેવામાં આવતી અનુમાનની પદ્ધતિઓ ઘણીવાર જાહેર ચકાસણી અને ચર્ચાને આધિન નથી અને ભાગ્યે જ રજૂ કરવામાં આવે છે.

સામાજિક વિજ્ઞાન સંશોધનમાં બે વિપરીત વલણો પ્રચલિત છે. એક, સામાજિક સમસ્યાઓના સંદર્ભમાં સામાજિક વિજ્ઞાન સંશોધનની માંગ ઝડપથી વધી રહી છે. સામાજિક સમસ્યાઓના નવા પાસાઓ ઉભરી રહ્યા છે. બીજું, સામાજિક વિજ્ઞાન સંશોધનનો સ્કેલ અપૂરતો છે અને તે ગુણવત્તા અને અવકાશના માપદંડોને પૂર્ણ કરવામાં અસમર્થ છે.

સામાજિક વિજ્ઞાન સંશોધનમાં વર્તમાન પ્રવાહોનું પૃથ્થકરણ કરવું અને સંશોધન પ્રક્રિયાને ટકાઉ રીતે વેગ આપવા માટે નીતિઓ અને સંસ્થાઓને તૈયાર કરવાનાં પગલાં સૂચવે છે.

સામાજિક વિજ્ઞાન સંશોધનમાં વલણો તરીકે કેટલાક નિર્દેશકો છે:

1. સમાજના વિવિધ ઘટકો એટલે કે રાજનીતિ, અર્થતંત્ર, શાસન, સામાજિક ઘડતર, સાંસ્કૃતિક ફેબ્રિક, મનોવિજ્ઞાન વગેરેની પરસ્પર જોડાણ હોવા છતાં, સામાજિક વિજ્ઞાનમાં સંશોધન કાર્યક્રમ વ્યક્તિગત ઘટકના આધારે, એક અલગ રીતે, વ્યક્તિવાદી રીતે હાથ ધરવામાં આવે છે. પરિણામે આપણે સામાજિક વિજ્ઞાનના સંશોધનોમાંથી જે સત્ય સુધી પહોંચીએ છીએ તે અધૂરું છે. અડધું સત્ય હંમેશા અસત્ય કરતાં ખતરનાક હોય છે.
2. સામાજિક વિજ્ઞાન સંશોધનમાં સિદ્ધાંત અને અનુભવવાદ વચ્ચેનો મેળ ખાતો નથી. બીજા શબ્દોમાં કહીએ તો, અમુક વિષયોમાં, સૈદ્ધાંતિક ફ્રેમનો વધતો ઉપયોગ જોવા મળે છે. કેટલાક વિષયોમાં અનુભવવાદનું પ્રમાણ વધતું જોવા મળે છે. આ બંને વલણો બાંયધરી આપતા નથી. વ્યાપક પરિણામો અને તથ્યો માટે સામાજિક વિજ્ઞાન સંશોધનમાં સિદ્ધાંત અને પ્રયોગમૂલક અભિગમ બંનેનું ન્યાયપૂર્ણ મિશ્રણ જાળવી રાખવાની જરૂર છે.
3. સામાજિક વિજ્ઞાન સંશોધનમાં ઘણી બધી નકલો/ડુપ્લિકેશન સ્પષ્ટ છે. ઉદાહરણ તરીકે ગ્રામીણ વિકાસના ક્ષેત્રમાં સંશોધન. વ્યક્તિવાદી આધાર પર સંશોધન કરવાને બદલે, સમાન સમસ્યાનો વિવિધ વિદ્યાશાખાના વિવિધ ખૂણાઓથી અભ્યાસ કરવો વધુ સારું છે, જેથી નજીકના સંપૂર્ણ સત્યને પ્રાપ્ત કરી શકાય.

બજાર સુસંગતતા વિરુદ્ધ સામાજિક સુસંગતતા:

સામાજિક વિજ્ઞાન એ માત્ર શૈક્ષણિક વિષયો નથી. તેઓ માત્ર પુસ્તકો અને જર્નલ્સના સ્વરૂપો નથી. તેઓ માત્ર દસ્તાવેજી પુરાવા નથી. તે પ્રક્રિયાઓ છે પરંતુ અલગ પ્રક્રિયાઓ નથી. તેઓ સામાજિક પરિવર્તનની મોટી પ્રક્રિયાઓનો ભાગ છે. આ દૃષ્ટિકોણથી જોવામાં આવે તો, સામાજિક વિજ્ઞાન અને તેમની વર્તમાન સ્થિતિ અને ભવિષ્યની દિશા એ સામાજિક પરિવર્તનના પ્રતિબિંબ છે.

પશ્ચિમી સમાજોના વ્યાપારી મૂલ્યો સાથે ઇન્ટરફેસ, વિશ્વના ઉભરતા સમાજો ઇક્વિટી અને વૃદ્ધિ વચ્ચેના સંઘર્ષ, લોકોના હિત વચ્ચેના સંઘર્ષ અને સંસ્થાઓની તટસ્થતા સહિતની સમસ્યાઓનો સામનો કરી રહ્યા છે. આમ, સામાજિક વિજ્ઞાનને સમાજમાં નિહિત હિતોની જરૂરિયાતોને અનુરૂપ રીતે પુનઃપ્રગટ કરવાની અપેક્ષા છે.

1. શૈક્ષણિક શિસ્ત તરીકે સામાજિક વિજ્ઞાનના વિકાસ પર જનતાની બદલાતી મૂલ્ય પ્રણાલીની અસર.

2. જોબ માર્કેટમાં સામાજિક વિજ્ઞાનની અસરકારકતા.

3. વિજ્ઞાન વિષયોની પસંદગીની સરખામણીમાં સામાજિક વિજ્ઞાન વિષયો વિદ્યાર્થીઓ માટે નબળી પસંદગી કેમ બની.

4. શું તે બજારની સુસંગતતા છે કે સામાજિક સુસંગતતા? સામાજિક વિજ્ઞાન માટે કયું સૌથી મહત્વનું છે?

સામાજિક સુસંગતતાના દૃષ્ટિકોણથી, સામાજિક વિજ્ઞાન વિષયો ખૂબ જ સુસંગત છે. બજારની સુસંગતતાના દૃષ્ટિકોણથી, સામાજિક વિજ્ઞાન સૌથી ઓછું સુસંગત બન્યું છે. વિદ્વાનો દ્વારા વારંવાર પ્રશ્નો ઉઠાવવામાં આવે છે કે શું મારું સંશોધન મને નોકરી આપશે? મારા સંશોધન પ્રયાસની ગુણવત્તા અને સુસંગતતા બંને સુનિશ્ચિત કરવા માટે મારા સંશોધન કાર્ય પર 10 થી 15 વર્ષ પણ ખર્ચવામાં મને કોઈ વાંધો નથી પરંતુ તે સમયગાળા પછી મને નોકરી મળશે? સદનસીબે તે પ્રશ્નો સરકારને નહીં પરંતુ પરોપકારી સંશોધન નિરીક્ષકો અને પ્રોફેસરોને પૂછવામાં આવે છે. પ્રોફેસરો તેમના પ્રશ્ન માટે વિદ્યાર્થીઓ તરફ સ્મિત કરે છે, તેમનું સ્મિત તેમના આનંદનું નહીં પણ તેમની લાચારીનું પ્રતીક છે. કમનસીબે જ્ઞાનની સામગ્રી કરતાં જ્ઞાનના સ્વરૂપને સર્વોચ્ચ અગ્રતા આપવામાં આવે છે. ડાયેટ કૉલેજમાંથી પ્રમાણપત્ર ધરાવતા મધ્યવર્તી વિદ્યાર્થીને પૂર્ણ થયા પછી તરત જ

નોકરી મળશે પરંતુ પીએચડી સ્કોલરને પીએચડી પૂર્ણ કર્યા પછી નોકરી મળશે નહીં કારણ કે તે વર્તમાન સમયની જરૂરિયાતો માટે અનિચ્છનીય છે.

આથી, એવું સૂચન કરવામાં આવે છે કે અમારા પીએચડી વિદ્વાનો તેમના સંશોધન પ્રયાસોમાંથી વધુ સારી કારકિર્દી બનાવી શકે તે સુનિશ્ચિત કરવા માટે જોબ પ્રોફાઇલ્સ નોલેજ પ્રોફાઇલ સાથે સંપૂર્ણ પત્રવ્યવહારની રીતે સામેલ હોવી જોઈએ.

આથી, તેની વિકાસની નીતિઓ, વ્યૂહરચના અને કાર્યક્રમો વ્યાપક હોવા જોઈએ અને તે મહિલાઓ સહિત તમામ હાંસિયામાં ધકેલાઈ ગયેલા વર્ગોના સમાવેશી વિકાસને લક્ષ્યમાં રાખીને ઘડવામાં આવે છે. સામાજિક વિજ્ઞાન ભારતમાં તેના સંબંધિત સંશોધન ઇનપુટ્સના રૂપમાં સર્વસમાવેશક વૃદ્ધિને સુનિશ્ચિત કરવામાં મહત્વપૂર્ણ ભૂમિકા ભજવે છે.

1.રાજકીય વિજ્ઞાનના વૈજ્ઞાનિકોએ તેમના સંશોધન પર ધ્યાન કેન્દ્રિત કરવું જોઈએ કે કેવી રીતે ન્યાયી (સમાન નહીં) રાજકીય સત્તા વિતરણની ખાતરી કરવી.

2.અર્થશાસ્ત્રીએ ઇક્વિટી સાથે વૃદ્ધિ કેવી રીતે સુનિશ્ચિત કરવી તેના પર ધ્યાન કેન્દ્રિત કરવું જોઈએ.

3. પબ્લિક એડમિનિસ્ટ્રેશનના વૈજ્ઞાનિકોએ લોકોને સ્વ-શાસન માટે સક્ષમ બનાવવા માટે તેમના સંશોધન પ્રયાસો પર ધ્યાન કેન્દ્રિત કરવું જોઈએ.

4.સમાજશાસ્ત્રીએ તેમના સંશોધન પર ધ્યાન કેન્દ્રિત કરવું જોઈએ કે કેવી રીતે સામાજિક રીતે બાકાત રાખવામાં આવેલા લોકોને સમાવી શકાય તેમને મુખ્ય પ્રવાહમાં લાવવાના પ્રયાસ કરવા જોઈએ.

5. આમ, સામાજિક વિજ્ઞાનને ભૌતિક અને જીવન વિજ્ઞાનની જેમ સમાન રીતે મહત્વપૂર્ણ તરીકે ઓળખવામાં આવે છે.

સમસ્યાઓ મોટે ભાગે માળખાકીય છે. મૂળભૂત ખામીઓમાંની એક યોગ્ય સંસ્થાકીય સહાય અને ભંડોળનો અભાવ છે. યુનિવર્સિટી સિસ્ટમ સંશોધન કરતાં શિક્ષણ પર ભાર મૂકે છે. સંખ્યાબંધ ભારતીય સામાજિક વૈજ્ઞાનિકોએ આંતરરાષ્ટ્રીય સામાજિક વિજ્ઞાન સમુદાયમાં પ્રતિષ્ઠા હાંસલ કરી હોવા છતાં, ચોક્કસ સંસ્થાઓએ હજુ આંતરરાષ્ટ્રીય શૈક્ષણિક સમુદાયમાં પોતાની છાપ ઊભી કરવાની બાકી છે. સંશોધન સંસ્થાઓ યુનિવર્સિટી સ્નાતકોની ભરતી કરે છે, પરંતુ વધુ સંશોધન

ક્ષમતા નિર્માણ અને તાલીમમાં રોકાણ કરતી નથી. કન્સલ્ટિંગ ફર્મ્સ ઘણીવાર આકર્ષક કારકિર્દી વિકલ્પો હોય છે પરંતુ નીતિ વિષયક પેપર્સ અથવા બ્રિફ્સ બનાવવાનું પ્રાધાન્ય છે પરંતુ રેફરેડ જર્નલમાં શૈક્ષણિક લેખો પ્રકાશિત કરવા માટે કોઈ પ્રોત્સાહનો વિના.

જ્યારે મોટાભાગનું સામાજિક વિજ્ઞાન સંશોધન યુનિવર્સિટીઓ અને જાહેર ભંડોળવાળી સંશોધન સંસ્થાઓમાં હાથ ધરવામાં આવે છે, ત્યારે યુનિવર્સિટી વહીવટ સંશોધન માટે અનુકૂળ નથી અને ત્યાં કોઈ પ્રોત્સાહન નથી. શિક્ષકોને સંશોધન હાથ ધરવા પ્રોત્સાહિત કરવા - માળખાકીય અથવા વ્યાવસાયિક -. પ્રાદેશિક યુનિવર્સિટીઓમાં ડોક્ટરલ થીસીસની બહુમતી તેમની નબળી ગુણવત્તાને કારણે પ્રકાશિત કરી શકાતી નથી. 433 માંથી માત્ર 15-20% યુનિવર્સિટીઓએ શિક્ષણ અને સંશોધનમાં આંતરરાષ્ટ્રીય ધોરણ હાંસલ કર્યું છે. સમગ્ર દેશમાં સંસ્થાકીય પ્રકૃતિ, મહત્વાકાંક્ષા અને સંસાધનો તેમજ વ્યક્તિગત સંશોધન લીડર ઓરિએન્ટેશન અને ક્ષમતામાં વ્યાપક ભિન્નતા છે.

ભારતમાં સામાજિક વિજ્ઞાન સંશોધન હાથ ધરતી વિવિધ સંસ્થાઓ વચ્ચે ખૂબ જ ઓછું સંકલન છે જે સંશોધનને નોંધપાત્ર રીતે ઓવરલેપ અને ડુપ્લિકેશન તરફ દોરી જાય છે. સમર્થનના વિવિધ પ્રવાહોને જોતાં, GOI ભારતમાં સામાજિક વિજ્ઞાન સંશોધન પર ખર્ચે છે તે ભંડોળની ચોક્કસ રકમનો અંદાજ કાઢવો મુશ્કેલ છે પરંતુ સામાન્ય રીતે ભંડોળ ઓછું છે.

સંશોધન સંસ્કૃતિ વિકસાવવી અને ઉચ્ચ ગુણવત્તાવાળા સંશોધન હાથ ધરવા માટે સંશોધકોની ક્ષમતા વિકસાવવી. સંશોધન સંસ્થાઓ અને યુનિવર્સિટી વિભાગો વચ્ચે સક્રિય કડીઓ બનાવવાનો નક્કર પ્રયાસ કરવો, માત્ર એટલું જ નહીં, યુનિવર્સિટીઓમાં શિક્ષકોને ચોક્કસ સંસ્થાઓના સંશોધન કાર્યક્રમોમાં ભાગ લેવા સક્ષમ બનાવશે પરંતુ સંસ્થાઓમાં સંશોધકોને ઉચ્ચ ગુણવત્તાવાળા શૈક્ષણિક સંશોધન સાથે જોડાવા માટે તકો આપશે.

સંશોધન અને સંશોધન પદ્ધતિની તાલીમ.

સામાજિક વિજ્ઞાનમાં સંશોધન અને વિભાવનાઓને વ્યવસ્થિત બનાવવાની જરૂર છે. સામાજિક વૈજ્ઞાનિકને આવશ્યક સંશોધન કરવા શીખવવું જોઈએ. શાળા સ્તરથી યુનિવર્સિટી સ્તરે સંશોધન અને સંશોધન પદ્ધતિના અભ્યાસક્રમો હોવા જોઈએ. વિદ્યાર્થીઓએ સંશોધન ઇન્ટરવ્યુ, પ્રાથમિક નમૂના લેવાની પ્રક્રિયા, સરળ આંકડાકીય જેવી મૂળભૂત સંશોધન તકનીકોથી પરિચિત થવું જોઈએ. પદ્ધતિઓ, પ્રશ્નાવલીનું નિર્માણ અને દસ્તાવેજી સામગ્રીને પૂરા પાડવામાં આવેલ સમયપત્રકનો

ઉપયોગ. ખાસ કરીને સામાજીક વૈજ્ઞાનિકો દ્વારા સંશોધનના શિક્ષણમાં ધ્યાન રાખવું જોઈએ કે વિદ્યાર્થીઓનો રોલ મોડલ અભ્યાસી તરીકે રહેવો જોઈએ અને શૈક્ષણિક સંશોધક નહીં.

સંશોધન તાલીમ કેટલાક વિદ્યાર્થીઓને સંશોધન તરફ આકર્ષિત કરી શકે છે. જ્યારે સંશોધન અભ્યાસક્રમો અને અનુભવ વિકાસ સાથે સંબંધિત છે

સામાજિક વૈજ્ઞાનિક વલણ, અને આને મજબૂત બનાવવું જોઈએ, ખાસ કરીને પદ્ધતિઓનો અભ્યાસક્રમ. ઉલ્લેખનીય છે કે પુસ્તકાલય વિજ્ઞાને વિદ્યાર્થીઓને સંશોધન પદ્ધતિ તેમજ માહિતી પુનઃપ્રાપ્તિમાં તાલીમ આપવાનું કાર્ય પોતાના પર લીધું છે. ભારતમાં પહેલીવાર એવું બન્યું છે કે યુનિવર્સિટીના અભ્યાસક્રમોમાં સંશોધન પદ્ધતિ અને જ્ઞાનના બ્રહ્માંડમાં વિવિધ વિષયોમાં સાહિત્યના પ્રવાહોનો અભ્યાસ કરવા માટે પેપર નિર્ધારિત કરવામાં આવ્યું છે જ્યાં માહિતી પુનઃપ્રાપ્તિની અદ્યતન તકનીકો માટે તાલીમ પણ આપવામાં આવે છે - જ્ઞાનના બ્રહ્માંડમાં વિવિધ શાખાઓમાં સંશોધનને પ્રોત્સાહન આપવું જરૂરી છે. વાસ્તવમાં ઘણી હદ સુધી લાઇબ્રેરી સાયન્સ પોતે જ સામાજિક અસરો સાથે એક શિસ્ત ગણી શકાય.

સામાજિક વિજ્ઞાન સંશોધનને પ્રોત્સાહન આપવા માટેના સૂચનો સામાજિક વિજ્ઞાન સંશોધનની હાલની સ્થિતિ તદ્દન સંતોષકારક નથી. તે પર્યાપ્ત પ્રયોગશાળા અને પુસ્તકાલય સુવિધાઓ, દસ્તાવેજીકરણ સેવાઓ, અમૂર્ત અને અનુક્રમણિકા સેવાઓ અને અનુવાદ સેવાઓના અભાવને કારણે છે. વિષયમાં સંશોધનને પ્રોત્સાહન આપવા માટે નીચેના સૂચનો કરવામાં આવ્યા છે

1. જ્યાં પણ સંશોધન કાર્યકર્તાઓને તાલીમ આપવામાં આવે છે ત્યાં યુનિવર્સિટી શીટો સ્થાપના;

2. સમુદાય, ઉદ્યોગ અને સંસ્થાઓના સહયોગથી સંશોધન કાર્ય લાગુ કરવાની જરૂર છે. સમુદાયને રોજગાર મળે છે અને સામાજિક ચિંતાઓ વધે છે, ઉદ્યોગને ઉત્પાદન મળે છે અને વિદ્યાર્થીને ડિગ્રી મળે છે. તે રાષ્ટ્રીય સંસાધનોના શ્રેષ્ઠ ઉપયોગનો કેસ હોવો જોઈએ.

3. સંશોધન કર્મચારીઓના વિનિમયની જોગવાઈ.

4..પ્રતિષ્ઠિત સંશોધકો હેઠળ એપ્રેન્ટિસશીપ.

5..એક સક્ષમ ઉદ્યોગસાહસિક તરીકે સંતોષકારક પ્લેસમેન્ટ અને સંશોધન કાર્યની ખાતરી કરવી.

6.. નવા વિચારોને સ્વીકારવા, આત્મસાત કરવા, સમાયોજિત કરવા જે જ્ઞાન અર્થતંત્રમાં નવા ખ્યાલો, સિદ્ધાંતો અને તેના જેવા જરૂરી ઉત્પાદન તરફ દોરી શકે છે.

નિષ્કર્ષ:

આપણા દેશમાં સામાજિક વિજ્ઞાન એક નવા યુગમાં પ્રવેશી રહ્યું છે. તેની પ્રવૃત્તિ અને રસ, સંશોધનમાં દાયકા કે તેથી વધુ સમયગાળા દરમિયાન દસ ગણો વધ્યો છે. આ સ્થિતિ વધુ વ્યાપક બનવી જોઈએ જ્યાં સુધી દરેક સક્ષમ સામાજીક વૈજ્ઞાનિક તેના ભાગને અસરકારક રીતે, ઉદ્દેશ્યપૂર્વક અને સમર્પણની ભાવના સાથે કરવા માટે સભાન ન બને ત્યાં સુધી સામાજિક વિજ્ઞાનના આ યુગમાં સામાજિક વિજ્ઞાન સંસ્થાએ મહત્વનો ભાગ ભજવવો જોઈએ. સામાજિક વિજ્ઞાન સંશોધન પરના વિવિધ તથ્યો અને આંકડાઓનું સંકલન દર્શાવે છે કે, ભારત વિશ્વની સૌથી જૂની સંસ્કૃતિમાંની એક છે અને સંશોધન અને લખાણોની સૌથી લાંબી પરંપરાઓમાંની એક છે. આ સંદર્ભમાં, ત્રીજી સદીના મનુ દ્વારા ધર્મશાસ્ત્ર અને 2,400 વર્ષ પહેલાં લખાયેલા કૌટિલ્યના અર્થશાસ્ત્રનો સંદર્ભ આપવામાં આવ્યો છે. ભારતમાં આધુનિક સામાજિક વિજ્ઞાન સંશોધન બ્રિટિશ વસાહતીકરણ પછી શરૂ થયું અને સંશોધન અમુક યુનિવર્સિટીઓ પૂરતું મર્યાદિત હતું. ભારતની આઝાદી પછી, 1950 અને 1960 ના દાયકામાં ભારતીય આંકડાકીય પ્રણાલીના મોટા વિસ્તરણ અને પુનઃરચના અને સંશોધનની વૃદ્ધિ જોવા મળી. નોડલ આંકડાકીય એજન્સીઓ સિવાય, ખાસ કરીને CSO અને NSSO, વ્યવહારીક રીતે કેન્દ્ર સરકારના તમામ વિભાગોએ નીતિ પર દેખરેખ રાખવા અને સલાહ આપવા માટે ડેટા સંકલિત કરવા માટે એકમો/નિર્દેશકો શરૂ કર્યા.

તે સમયગાળા દરમિયાન સ્થપાયેલી સૌથી મહત્વપૂર્ણ સંસ્થાઓમાં ગોખલે ઇન્સ્ટિટ્યૂટ ઑફ પોલિટિક્સ એન્ડ ઇકોનોમિક્સ, પૂણે, ટાટા ઇન્સ્ટિટ્યૂટ ઑફ સોશિયલ સાયન્સ, મુંબઈ, પ્લાનિંગ કમિશન, નવી દિલ્હી, દિલ્હી સ્કૂલ ઑફ ઇકોનોમિક્સ, દિલ્હી, ઇન્ડિયન ઇન્સ્ટિટ્યૂટ ઑફ પબ્લિક એડમિનિસ્ટ્રેશન, નવી દિલ્હી વગેરેનો સમાવેશ થાય છે. 1969 દરમિયાન ICSSR ની સ્થાપના પછી સામાજિક વિજ્ઞાન સંશોધનમાં વળાંક આવ્યો. બદલામાં કાઉન્સિલે વિવિધ સંશોધન કરવા માટે સમગ્ર દેશમાં 27 સંશોધન સંસ્થાઓની સ્થાપના કરી. એવું જોવામાં આવ્યું છે કે સામાજિક વિજ્ઞાન સિવાયના અન્ય વિષયોમાં વધુ તક છે અને જો આપણે સામાજિક વિજ્ઞાન પર ધ્યાન કેન્દ્રિત કરીએ તો ભારતમાં વધુ તકો નથી પરંતુ ભારત સરકાર દ્વારા ફાળવવામાં આવેલા બજેટના યોગ્ય અમલીકરણ સાથે ICSSR જેવી વિવિધ સંસ્થાના ભંડોળની સહાયથી, UGC અને અન્ય ખાનગી

ભંડોળ એજન્સીઓ તેમાં સારી રીતે કામ કરી રહી છે જેથી ભારતના સંશોધક ખાસ કરીને સામાજિક વિજ્ઞાન જેવા વિષયમાં સંશોધનમાં તેની કારકિર્દી બનાવી શકે.

સંદર્ભો:

૧. મુક્ત શબ્દ જર્નલ વોલ્યુમ IX, અંક VII, જુલાઈ/2020 ISSN નંબર : 2347-3150 પાનું

૨. Mapping of social science research in India DFID SARH, Sep 2011

૩. Government of India. 2011. *Report of the committee constituted by the Government of India to review the functioning of ICSSR*. New Delhi: Ministry of Human Resource Development.

૪. Young P.V, Scientific Social Surveys and Research. New Delhi ; Prentice Hall of India, 1975, pp 90-33,

૫. Young P.V, Scientific Social Surveys and Research. New Delhi ; Prentice Hall of India, 1975, pp 90-33,

૬. Satyamurty, T. (1984). Development research and the social sciences in India. International Social Science Journal, 36,673-697.

૭. Dr. D. Adeppa, Trends of Social Science Research in India- Mukt Shabd Journal- ISSN NO : 2347-3150

૮. Kothari, C. R., & Garg,- *Research Methodology: Methods and Techniques. Third Edition.*By G (2014).New Delhi: New Age International (P) Limited, Publishers.

૯. U. G. Moti, - *Research Methodology in the Social and Management Sciences* -(2005). Kaduna:Joyce Graphic Printers & Publishers Company.

10. મોહનરાજન, સંશોધન -1990 .

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IMPORTANCE OF PHYSICS IN EMERGING TRENDS IN ELECTRONICS AND COMMUNICATION

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Abstract

As we all know, electronics and communication has become a part and parcel of our daily life. In the past decades, we were seen various applications of electronics in communication devices such as Phones, Computers, Xerox, Tabs, etc, which make communication with one another faster and effective, from anywhere in the world. Advanced technologies like high-performance computing–servers, supercomputers, and artificial intelligence greatly rely on such processor designs. In Electronics, High Tech Radars, Satellites communication, etc. are found as the important applications in Defence Research and Development projects.

Physics is the fundamental block in the semiconductor industry which leads the design and development of electronic gadgets like Phones, Computers, GPRS navigation systems and hospital gadgets viz., ECG machines, automated blood pressure apparatus and accelerators which are the power back up for various electronic devices. Development of 'chips' requires concepts of semiconductors, transistors and thermodynamics. In recent decades, nanotechnology has been employed in the devices, as they have very compact size, consume less energy, reduce weight of the device and are capable of managing large data and storing large amount of information. In all of these technologies one of the most important factors is that the concept of Physics used in it. We could not approach any given problem statement related to electronics and communication without applying the concepts of Physics.

The main objective of this article is to throw light on the role of Physics in the field of Electronics and Communication. The paper highlights some laws and phenomena of Physics in the development of advanced technology in defence, medical sectors etc.

Key words: Physics, Electronics and Communication, defence, radar, nanotechnology.

INTRODUCTION

Understanding laws of Physics is a fundamental part of one's life and it attempts to explain everything that goes into it. Since many generations, physics has been an integral part of the electronics industry. Physics is used in almost all day-to-day devices like the Alarm Clock, that works on the concept of Quantum Mechanics, The Camera lens works on the principle of Optics, LASERs based on stimulated emission of radiation, Total internal reflection used in the construction of optical guides, amplification of signals by transistors, coding and de coding the signals on the logic gates, and many more. The fundamentals of physics in electronics came into hand with the invention of Telephone by Alexander Graham Bell in 1876, in which the theory propagation and electromagnetism were used.

In this article we would see how the electronics and communication field has not only used the concepts and theory of physics, but has also physics been used to innovate and design new ideas for a better living.

IMPACT OF PHYSICS IN ELECTRONICS AND COMMUNICATION

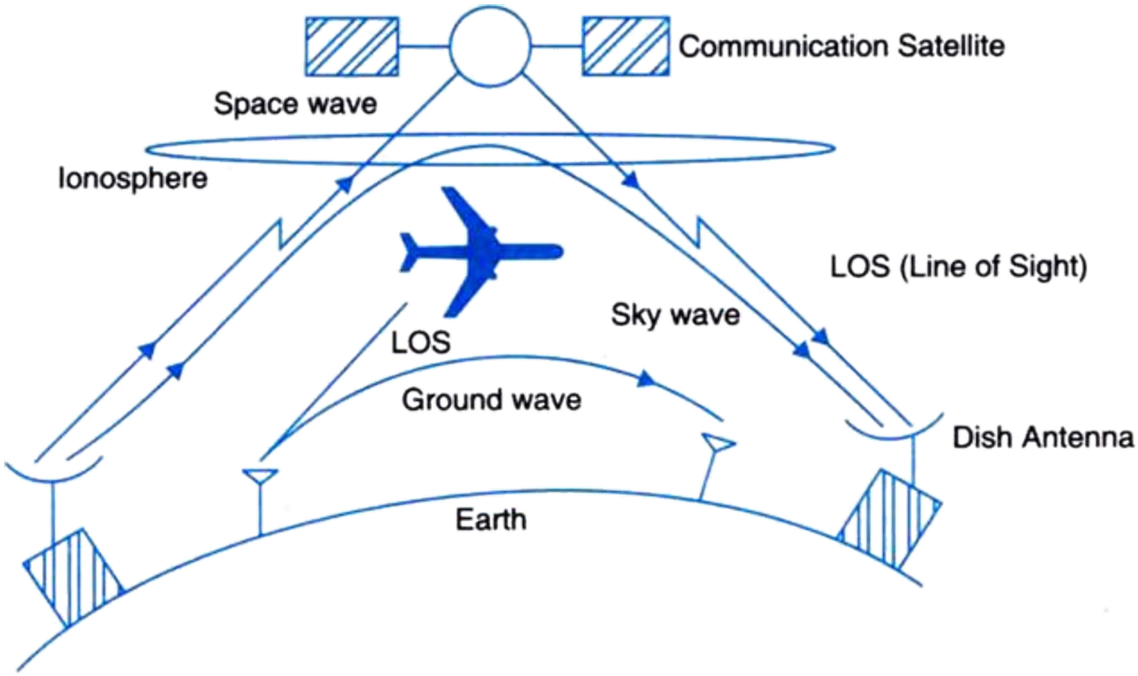
1.DEFENCE RADAR SYSTEMS

In defence, primarily we need to hit the target at 'first hit' chance without enemy personnel's knowledge. If the object (target) and defence vehicle-DV (source) are relatively at rest, then it was found to hit at first sight. But if the target and DV are relatively approaching or receding i.e not stationary, it was not so easy as we think off. This kind of versatile difficulties could be overcome by the applications of doppler effect in sound. Radar is one such example works on the principle of Doppler effect in physics. RADAR stands for Radio Detection and Ranging. Radars are electromagnetic detection systems that work by radiating electromagnetic waves and then analysing back scattered waves. Radars are primarily used to detect targets as it has the capability to communicate effectively over a long distance in real-time.

Doppler Radars are special type of Radars that work on the principle of Doppler's effect in physics. If the target or source or both is/are relatively not stationary, then there would be a change in the apparent frequency of the signal that is radiated from the Radar and hence, it records data regarding the velocity of a target at a particular distance and it would be helpful in setting the enemy target accurately. These Radars applications also found in detection and location of objects like aircraft, space vehicles, ships, etc. Electronics and Radar Development Establishment (LRDE), is a premier DRDO Laboratory, which is responsible for development of different kinds of Radars used in the Defence. Few examples are the INDRA-I and INDRA-II, Rajendra Radar, AEROSTAT Radar.

2.RADIO SYSTEMS

Radio communication is a type of communication that helps to transmit signals and picture information and data over long distances. A radio communication station consists of one or more receivers and a transmitter that is imperative at one location for carrying the necessary radio signals. These radio signals are produced by making electrons vibrate in an antenna. The radio signals received by the device is converted into mechanical vibration in the speaker that produces the sound wave. The radio waves received by the device are in the form of electromagnetic waves that are converted into electric current called the Audio Frequency (AF). In radio communication, there is another type of wave propagation of signals known as the Sky wave propagation in which the waves are reflected back from the ionosphere to the Base station on Earth and hence, is used for very long-range communication or for inter-continental communication. Shortwave frequency bands are used for such communication.



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3.RADIO ASTRONOMY

Radio Astronomy deals with the study and research of Celestial bodies with the help of radio frequencies. The very first Radio wave was detected in the year 1933 at the Bell Telephone Laboratories, this Radio wave radiation was found to be coming from a Celestial body present in the Milky-Way.

Radio Telescope and Radio Antenna are main components involved in the Radio Astronomy. The Radio Telescope is used for measuring broad bandwidth continuum radiation and narrow bandwidth Radio waves found in the spectrum of the Celestial object. The Telescope consists of a Concave Metal Reflector, the waves directed by the astronomical object is collected on the dish and is reflected to the receiver, where the Radio waves can be analysed.

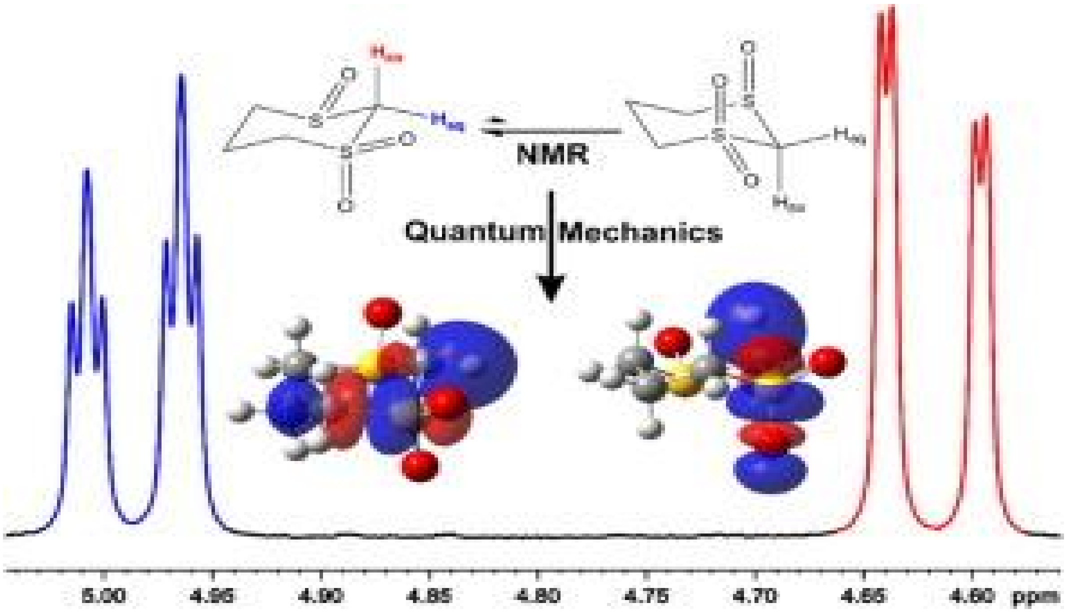
Radio Interferometry is a set of separate telescopes or radio antennas that work as a big single telescope or antenna for providing better and higher resolution of images of the Celestial bodies like the Stars, the Galaxies, the Nebula etc. The modern Radio Interferometer's have largely separated telescopes and antenna observing the Astronomical bodies that are coupled together using optical fibres, coaxial cables, or other types of transmitting cables, this helps to increase the total radio signals being collected. The main principle on which Radio

Interferometer is based is on superimposition of the waves, the waves having same phase coincides with each other and adds up.

Source:

4.QUANTUM MECHANICS

Quantum Mechanics is used in construction of almost all the electronic equipment's for example global positioning system (GPS), lasers, magnetic resonance images (MRI), sensors like etc. Quantum Mechanics deals with the properties of subatomic and atomic particle related to the radiation, light, and particle nature of the matter. Many laws, theories and concepts like the quantum tunnelling, band theory, discrete energy level, particle principle etc are used heavily in electronics devices. Computers and Mobile Phones are the biggest revolution in the field of electronics and computing, Quantum Mechanics has played a vital role in the development of this. A mobile phone has many small semiconductors Integrated Circuits, transistors, chips etc, Quantum Mechanics has helped to design it into silicon-based materials such that it produces higher output while having a compact size. All the cameras consist of Charged Coupled Device (CCD), these sensors work on the principle of photoelectric effect, quanta of light and photon, given by Albert Einstein. Global Positioning System (GPS) involves the use of Quantum Tunnelling which is another such concept of the Quantum Mechanics which states that the conducting material consist of small tiny balls which acts as a wall to the electric current supplied, as the tiny balls are deformed or squashed by a finger's pressure the charge passing or tunnelling through it increases, and thus there is even increase in the flow of current through it as the pressure on the screen by your finger slightly increases. In the Medical field, MRI (Magnetic Resonance Imaging) also deals with Quantum Mechanics. The phenomenon of Nuclear Magnetic Resonance works on the concept of spin-up and spin-down and transition in the energy level of the atomic particle due to which there can be emission or absorption of the electromagnetic radiation which can penetrate through the human skin and helps the MRI machine to scan the patient's body.



Source:

5.NANOTECHNOLOGY

Nanotechnology refers to the atoms, matters etc. of the size 1-100nm range in at least one dimension, which can be used in almost every field of science. The concept of nanotechnology was first coined by Richard Feynman in the year 1959. He gave the concept of manipulation of matter in the atomic level. Nanotechnology was first used by a Japanese scientist, Norio Taniguchi in the year 1974 to give recount about the semiconductor processes that occur in nanometre scale. Nanoparticles like graphene, carbon nano tubes, nanometal ions etc., has attracted increasing attention recently because of its fascinating physical and electrochemical properties.

These nanoparticles used in nanotechnology have played a very important role in the development of electronics and computing devices. In modern world, nanotechnologies are used in the devices, as it has very compact size, consumes less energy, reduces weight of the device and are capable of managing large data and storing large amount information.

Transistors are the prime example for nanotechnology. In early years transistors were large, about 130-250 nanometres in size. In recent years, multinational companies like IBM and Intel have developed too thinner and smaller, and much efficient transistors that are 7 nanometre and 14 nanometre in size. Lawrence Berkeley National Lab has even created a transistor of 1 nanometre in size. Dielectric materials like ZrO_2, Al_2O_3, NiO, PANI, CuO etc have high value of dielectric window. As the nanoparticles have the wavelength shift property and the Stokes shift, they are used in various photosensitive UV light detectors and ZnS:Mn, Cu-Cy, CdTe are few nanoparticles which have capability for high energy particle detection. Nanoparticles have also been widely used in the Medical science, Aerospace application, Environmental sciences, etc.

MAJOR MILESTONES

- Nicholas Callan invented the transformer in 1836.
- Johann Philipp Reis invented the Microphone in 1860.
- Alexander Graham Bell invented the first intelligble voice transmission over electric wire in 1876.
- Heinrich Rudolf Hertz invented the first the generation and experimental proof of electromagnetic waves in 1886-1888.
- Edouard Branly discovered the Radioconduction in 1890.
- Jagdish Chandra Bose invented the semiconductor junction for detection of radio waves in 1894.
- Paul Langevin and constantin Chilowsky invented the Sonar in 1915.
- Edwin Howard Armstrong invented the standard AM radio receiver in 1919.
- Kenjiro Takayangi developed the first fully electronic television receiver in 1926.
- C.V Raman and Kariamanickam Srinivasa Krishnan discovered the Raman Scattering in 1928.
- Akira Nakashima, Claude Shannon and Viktor Shetakov developed the concept of Switching Circuit Theory in 1934.
- Robert Watson-Watt developed the concept of Radar in 1936.
- Edwin Armstrong also invented the FM radio receiver in 1939.
- John Bardeen and Walter Houser Brattain and William Shockley developed the Transistor in 1947.
- Narendra Singh Kapany invented the Optical Fibre in 1954.
- Junichi Nishizawa invented the Semiconductor Laser in 1957.

- Jack kilby developed the Integrated Circuit in 1958.
- Mohamed Attalla and Dawon Kahng at the Bell Lab developed the MOS transistor (MOSFET) in 1959.
- Phillip Emeawali created the first pseudo time application to supercomputing in 1989.

In all the above listed milestones, laws and phenomenon of physics like doppler effect, photoelectric effect, reflection and refraction of signals, laws of conservation of energy, momentum, & spin, principle of superposition of waves, etc were employed.

CONCLUSION

Physics is the fundamental building block of all advancement in the field of electronics and communication. Application of concepts of physics has led to development of technologies today which have not only touched our lives in a positive manner, they have made technology more affordable and effective. Over the decades, electronics and communication has taken quantum leaps in terms of capacity, capabilities and possibilities. Seamless integration of technology into our lives has made every field of our day to day life more predictable, more optimally manageable and created a bridge for more advancement in the future.

REFERNCE

- https://www.worldcat.org/title/analyzing-the-physics-of-radio-telescopes-and-radio-astronomy/oclc/1122682261
- https://www.researchgate.net/publication/353539280_Application_Research_of_Electronic_Technology_in_Communication_Engineering_in_Communication_Engineering
- https://study.com/academy/lesson/applying-physics-to-communications-technology.html
- https://www.bartleby.com/essay/The-Effect-of-Electronics-on-Communication-P3737XZVC
- https://pubs.acs.org/action/doSearch?AllField=electronics+and+communication&startPage=&rel=nofollow&ArticleSubjectFacetField=Communications
- https://iopscience.iop.org/article/10.1088/0305-4624/19/5-6/303
- https://www.researchgate.net/publication/344472329_Analog_Optical_Links_Theory_and_Practice
- https://www.igi-global.com/gateway/book/236571

- https://www.researchgate.net/publication/343384220_Nanotechnologies_The_Physics_of_Nanomaterials_Volume_I_The_Physics_of_Surfaces_and_Nanofabrication_Techniques
- https://www.rle.mit.edu/sclaser/major-research-themes/nanoparticle-physics/
- https://www.photonics.com/Articles/Enhanced_Photosensors_Exploit_Wavelength-Shifting/
- https://www.britannica.com/science/quantum-mechanics-physics
- https://www.redorbit.com/news/technology/1820840/quantum_tunneling_leads_to_new_touchscreen_technology/
- https://www.forbes.com/sites/chadorzel/2015/08/13/what-has-quantum-mechanics-ever-done-for-us/?sh=610af4d94046

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Is Employability is Associated with place of Education? An Economic Analysis

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Abstract

Education is the powerful tool to reduce the unemployment problem by converting the human resources to human capital. India is one of the largest higher education systems in the world from traditional to new education practices. On the platform of commerce and industry especially professional education, employability is a vital word in consideration. The expectation of the industry is mismatching with the output of the system. It has witnessed skill gaps into the students wish to join industry or to any work. In this context the present study had intended to make an attempt to articulate the views of employability skills, employer's perspectives on employability skills, employability skills gap and the relationship among employability and place of education. The paper may also reveal few hypotheses to researchers wish to work in this area.

Keywords: Employability, Employment Generation, Value of Education, Literacy, Employability Skill Gap, Employer.

Introduction

The concern for employability is growing more day to day with the advancement in educational sector on the magnitude of new reforms. When it comes to quantitative dimensions of education, Questions are raised on employability. Different issues like employability skills, employment related questions, success and failure in work, understanding the skills needed by management qualified employees entering in the workforce and their relation to education and the like, remained in the discussion.

There are many reasons which reveals why education is important, this report focuses on its contribution to economic growth and outcomes. Education 'can be defined as the stock of skills, competencies, and other productivity-enhancing characteristics' (WEF 2016). And the poor infrastructure which institutes and universities provide leads for further challenges before employability. In Indian institutes and universities standards also detracted, more than 60% of institutes and 90% of universities in India are of poor standard. Therefore, the quality and employability of aspirants is low, making them less employable, Cause of the out-dated syllabus, less interaction between industry and institutes resulting wide gap in academia, industry and students' employability whereas Indian higher education is in need of radical reforms. A focus on enforcing higher standards of transparency, strengthening of the vocational and doctoral education pipeline, and professionalization of the sector through stronger institutional responsibility would help in reprioritizing efforts and working around the complexities. In present era the rise of IT sector and engineering education in India has boxed students into linear path without giving them a chance to explore and discover their passions. Concerted and collaborative efforts are needed in broaden student choices through liberal arts education.

Literature Review

Employability is a vital word in consideration on the platform of commerce and industry and higher education especially professional education **Sarang S (2013).** Education is a leading determinant of economic growth, employment, and earnings. Ignoring the economic dimension of education would endanger the prosperity of future generations, with widespread repercussions for poverty, social exclusion, and sustainability of social security systems **(Woessman 2015).** Human capital has long been considered the most distinctive feature of the economic system and further work has proven the impact of education on productivity growth empirically **Catherine Grant (2017).** The role of national and international policy was very significant in structuring the consequences of student employment for academic performance. The students' performance more poorly than do full-time students on standardized achievement tests whereas national and international contexts help to explain the gap in the academic performance between working and non-working graduates. **Soo-Yong- Byun (2015).** Use of investment controlling has an impact into better business performance and Valuation based on investment controlling is only one of several ways of approaching valuation, where it shows approach has its benefits **Martina Merkova (2015).** There is a need of plans require to find out the solutions that combined employers, youths needs of expectations from various stake holders i.e., students, Educational Institutions, NGO's, parents and Government. **Gouri Manik Manas (2020).** Implementation of employability skills in the instructional process is to integrate them into the classroom for all subjects. The Employers employability skills needed in the career field and the way to integrate it into the instructional process **Nuryake Fajaryati (2020).**

Objectives

1. To know the Significance of Employment Generation and Value of Education.
2. To study the Different approaches of Rural and Urban Students in availing of Education.
3. To assess the association Results between Employability and the Place of Education.

Hypotheses

H_0: There is no relationship among employability and place of Education.

H_1: There is a relationship among employability and place of Education.

Methodology

The study has been conducted on the basis of both primary and secondary sources. Primary data has been collected with the help of telephonic interview and the same has administered to 50 respondents of urban and rural part graduate and post graduate holders of Davangere District. Secondary data has been collected through various sources such as Journals, Books and from official Websites.

Both Descriptive and Analytical method has been used for data analysis. Different statistical tools like Percentage and Ratios have been used and also tool such as chi-square test has been applied for testing the hypothesis of the study.

Employability:

"Employability skills as including personal image, interpersonal skills, and good habits and attitudes."(Lankard; 1990) "Employability is the capability to move self-sufficiently within the labour market to realise potential through sustainable employment." (Hillage J., 1998)

Employability Skills Gap

The employability skill scarcity has its origins in the education system, cause of high rate of drop-out at primary and secondary school level and deprived admission levels in higher education lead to a thin educated workforce.

Challenges faced by the Indian Higher Education System:

- ✓ Very low rural enrolment in higher education.
- ✓ Poor infrastructure is another challenge to the higher education system of India, in particularly the institutes run by the public sector suffers from poor physical facilities and infrastructure.
- ✓ Large numbers of NET/Ph.D. candidates are unemployed even though there are a lot of vacancies in higher education.

- ✓ The inability of the state to fund the expanding higher education system has resulted in the rapid growth of private higher education in Urban rather than Rural.
- ✓ At present, there is no mechanism for ensuring the accountability and performance of professors in universities and colleges.

Management of the Indian education system has seen various challenges of over centralisation, bureaucratic structures and lack of accountability, transparency, and professionalism. **(Kumar, 2015).**

Creation of job is a fundamental aspect of any economic recovery program. Many activities are having rubric of job creation, including immediate short-term opportunities that yield quick impact, or the development of more enduring livelihoods in the civil service or private sector. It is important to distinguish between these different activities, recognizing that sustainability and long-term impact should be duly considered in implementing any employment generation program which promotes Economic Development. Furnishing jobs is vital on many levels. Politically, employment opportunities give the population a stake in the peace process by providing young workers with alternatives to violence whereas economically, employment provides income to poor families, revives domestic demand for goods and services, and stimulates overall growth. Socially, employment can also promote social healing, encourage the return of displaced persons, and improve social welfare in the long run.

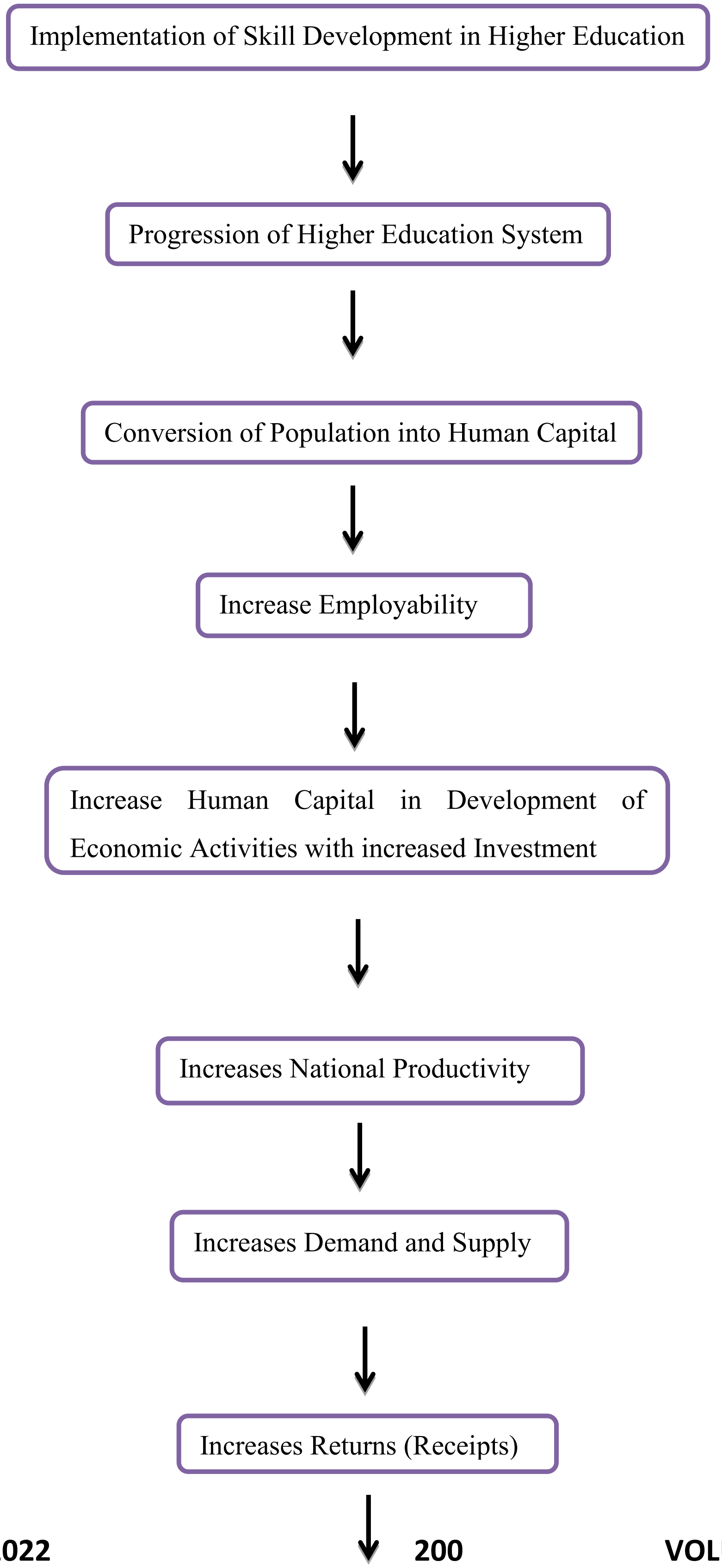
Employability reduces Poverty:

- ✓ Relationship between unemployment and poverty: If employment opportunities are generated, then more people will be employed which leads to increase in income level. Thus, it reduces the level of poverty.

- ✓ Availability of basic facilities: Due to an increase in the employment opportunities, there will be a rise in income and poor people will be able to access education, basic health facilities, sanitation, etc.

- ✓ Assets creation: Employment generates schemes which aim to create assets such as irrigation facilities, water harvesting, construction of dams etc. These assets help to develop socio-economic conditions of the rural poor and thus, eradicate poverty.

Relationship among Employability and Economic Development



Increases Nation's GDP

↓

Can Achieve Economic Development

Significance of Education

Next to the United States and China, India's higher education system is the third largest in the world. The main governing body at the tertiary level is the University Grants Commission, which has been enforces its standards, advises the government, and helps coordinate between the centre and the state. Here Accreditation for higher learning is overseen by 15 autonomous institutions established by the University Grants Commission (UGC). As per the latest 2011 Census, about 8.15% (68 million) of Indians are graduates, with Union Territories of Chandigarh and Delhi topping the list with 24.65% and 22.56% of their population being graduates respectively.

Education increases knowledge. Furthermore, it makes people independent. Strengthens the mind, and forms character. Moreover, education enables people to put their potentials to optimum use of their Knowledge and Education is also a type of reform for the human mind. Without education, the training of the human mind would always remain incomplete.

Education makes a person an efficient decision-maker and a right thinker where this is possible only with the help of education. A person that receives education shall have more ability for the life of his choice. Ultimately an educated person will be able to make decisions in the best possible manner. This is why at present era there is such a high demand for educated people over uneducated people for the purpose of employment.

Negative Impact of Lack of Education

Without education, a person would feel trapped. Education enables a person to access the open world. Furthermore, a person without education is unable to read and write, consequently a person without education would remain closed to all the knowledge and wisdom an educated person can gain from books and other mediums.

The literacy rate of India stands at around 60% in comparison to more than 80% literacy rate of the rest of the world. The female literacy rate is 54.16% in accordance with the 2001 population census. These figures certainly highlight the massive problem of lack of education in India. The result of 2011 census reveals that there has been an increase in literacy in the country. The literacy rate in the country is **74.04** per cent, 82.14 for males and 65.46 for females. The progression ratio has been increased about 9.21 percentage points among that significantly the female literacy level saw a significant jump as compared to males. But this progression not that considerable compared to developed countries. Here to promote education, the government of India takes it as a national policy. The intention of the government is to target the very cause of illiteracy. As such, the government intendant to eradicate illiteracy, which in turn would lead to the eradication of poverty.

Education in Urban and Rural Areas

Very significantly several educational researchers across the globe have examined the contrast between rural and urban life scenarios. They have revealed that urban students often secure better grades than those students from rural regions. The factors that affect performance among rural students are lack of resources and limited opportunities available to them. On the other hand, the outstanding performance of urban students can be associated with better academic infrastructure and access to a wider range of information available across digital platforms. Several challenges such as poor road connectivity, power shortage, poor internet connectivity, etc. in rural areas of India have amounted to students lagging behind, and are left with limited exposure from the world outside, hurting their knowledge on current affairs as well.

The Differences which were affect adversely on Employability in particularly Rural Education.

- Lack of Communication Skill.
- Hesitation to work with other cultural diversity.
- Lack of IT skill information literacy.
- Lacking in internships volunteer networking.
- Lacking in analytical research skills.
- Lacking in attitude and adaptability and out-dated syllabus.
- Lacking in the ability of applied knowledge and skills to real-world setting.

Association between Employability and Place of Education

The research consisted from qualitative – nominal variables, their relationship cannot adequately describes the correlation analysis, so the association between variables we examined with contingency, researchers applied Non-Parametric tool chi-squared test, which is commonly used for testing the independence between two categorical variables mainly Employability and Place of education.

Association		Employment Status			
		Full time Employed	Part time employed	Unemployed	Total
Place of Education	Rural area	12	05	09	26
	Urban area	17	02	05	24
	Total	29	07	14	50

To know and assess all these circumstances and more overly to identify the Association between Employability and Rural urban Education the Non- Parametric test Chi-square test has taken through 50 respondents in both the Rural and Urban areas of Davangere Taluk.

Urban (Davangere)			Rural (Davangere)			Chi-Square
Full Time Employed	Part time Employed	Unemployed	Full Time Employed	Part time Employed	Unemployed	0.01
17	02	05	12	05	09	
24			26			

Association		Employment status			
		Full Time Employed	Part Time Employed	Unemployed	Totals
Place of Education	Rural	24%	10%	18%	52%
	Urban	34%	4%	10%	48%
	Totals	58%	14%	28%	100%

The test statistic value or calculated value is 0.01 at α (alpha) level of significance, and the table value or critical value is 5.99 where at 2 degrees of freedom at 5% level of Significance.

Here $Cal_{val} < Tab_{val} = 0 < 5.99$

So fail to reject H_0.

Hence there is no any relationship among Employability and the place of Education. The place of Education whether Rural or Urban, it does not made any effect on employability.

Results

- Employability plays very significant role in Economic Development of a country.

- Out of 50 respondents 12 were employed full timely, 5 were employed part timely and 9 were found as unemployed, totally 26 Respondents in Rural Davangere.
- Out of 50 respondents 17 were employed full timely, 02 were employed part timely and 05 were found as unemployed, totally 24 Respondents in Urban Davangere.
- Out of 50 respondents, 29 were employed fill timely from both Rural and Urban Davangere.
- Out of 50 Respondents, 7 were employed part timely from both Rural and Urban Davangere.
- Out of 50 respondents, 14 were found as unemployed from both Rural and Urban Davangere.
- The ratios of fulltime employed were high in Urban Davangere Compared to Rural Davangere. And the ratios of unemployed were high in Rural Davangere compared to Urban Davangere. It reveals that the Employability is more effective in Urban Davangere than Rural.
- 58% were full timely employed from both Rural and Urban Davangere, 14% were part timely employed from both Rural and Urban Davangere, 28% were found unemployed from both Rural and Urban Davangere.

Suggestions

- ✓ In higher education level there is a need to implement the innovative and transformational approaches in Both Rural and Urban areas simultaneously.
- ✓ There is need to improve the quality and reputation in higher education level in Both Rural and Urban areas.
- ✓ Government must promote collaboration between Indian higher education institutes with top most International institutions.
- ✓ There is need of Universities and colleges in both public and private must and should away from the political affiliations.
- ✓ Favouritism, money making process should be out of education system where it leads to improve simultaneous progression in both Rural and Urban areas.

Conclusion

Finally looking at after all these relations, consequences, situations and results we could conclude that achieving employability does not get disturbed by any externalities. We could say so many external things may effects on achieving employability, such as majorly rural education and urban education, Communication skill, and so on beyond that achieving employability is that related to a person's personal soft skills which enhance to achieve employability. But some more Extend Government Policy on soft skill development on particularly rural education System is much needed.

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Reference

- ✓ Dharma deSilva. (2015). Management Education and Employability Skills: Business' Looking for More than a Quality Major in Graduates: Can Academe Get-with-it? Yes. Sri Lankan Journal of Human Resource Management. Vol.5, No.1, 2015.
- ✓ Gouri Manik Manas. (2020). ISSUES AND CHALLENGES IN HIGHER EDUCATION IN INDIA. International Journal of Research in Economics and Social Sciences (IJRESS), Vol. 10 Issue 6, June- 2020 ISSN(o): 2249-7382 | Impact Factor: 6.939.
- ✓ Martina Merkova. (2015). Use of Investment Controlling and its Impact into Business Performance. Elsevier Peer-review. doi: 10.1016/S2212-5671(15)01675-5.
- ✓ Sarang S Bhola, Sunil S Dhanawade. (2017). Higher Education and Employability- A Review, *SSRN Electronic Journal*, January 2013 DOI: 10.2139/ssrn.2290103.
- ✓ https://www.toppr.com/guides/essays/value-of-education-essay/
- ✓ https://blog.mygov.in/shaping-the-bright-minds-of-tomorrow-education-in-urban-and-rural/
- ✓ https://geographyandyou.com/employability-higher-education/
- ✓ https://www.tandfonline.com/doi/full/10.1080/03057925.2020.1810895
- ✓ https://www.worldscientific.com/doi/10.1162/ADEV_a_00042
- ✓ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4497582/

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Factors Influencing Retail Investors' Trading Behavior in Indian Stock Market

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ABSTRACT

A retail investor is an individual who invest small amounts in the different investment options that too unprofessionally and also with the influence of the others in order to get sustainable return by taking moderate or low risk. Investment behaviour is guided by various underlying factors and it may be demographic, economic, psychological factors. Awareness and investment may not be perfectly positively correlated but yes awareness and investment are somewhere positively related, as an individual who is aware of some investment avenues has more chances of investing in it to a person who is not even aware of. In view of .above, this paper studies the behaviour of the retail investors and how they choose the different investment options with respect to their income level. For this purpose the data has been collected through the 73 retail investors and data has been collected through the structured questionnaire. For checking the reliability of the data reliability test is also applied and the value of the Cronbach's Alpha shows that the data is reliable. The objective of the study is to know the association between income and different investment options and through the analysis of data with the help of chi-square test we can conclude that there is sufficient evidence that there is association between income and various investment options.

Key words: Retail investors, Trading behavior, Income of retail investors, investment avenues, Demographic profile.

INTRODUCTION:

Stock markets are the important part of any economic scenario across the borders and the growth of any countries is estimated through the stock market and Indian market is extending markets all over the world. In India there are two main exchanges which provide the electronic terminal for the trading and size of the NSE is $3.55 trillion. NSE established in 1992 while BSE established in 1875. Retail engagement in Indian stock market has got up in a very remarkable way. Retail investors, small investors or Individual investors, recall from any name, it simply mean that an individual who invest their money with the help of the trading of securities and the major purpose behind the investment in stock market is to earn the higher rate of return than any other means of investment and this attraction towards the investment in stock market is due to the overwhelming growth of the stock market.

REVIEW OF LITERATURE:

- (Rai D, 2020) Has conducted a research on "A study on the retail investors awareness of the various investment avenues and the factors affecting their investment behaviour." Here in this study researcher tried to find the relationship between demographic factors and investments awareness and for that purpose researcher has conducted exploratory and descriptive research and questionnaire has been used to collect the data from 140 samples. For the analysis of the data percentage analysis has been used to draw the conclusion and he has concluded that some demographic factors affect awareness and investments of individuals.
- ((Kamaruniza, 2020)) Made a research on "Awareness level of retail investors on stock market in Chennai City." Here the researcher study the awareness of investors on stock market and data has been collected through the structured questionnaire and data has been collected from the 100 retail investors. Researcher has concluded that post graduates, professionals, high income level investors are aware of investment patterns and they are also aware about fundamental and technical analysis.
- (Hawaldar I, 2019) Has made study on "Investors perception towards stock market: An exploratory approach." This research is undertaken to understand that what were the factors that affect the investment decision and different investment categories. For the purpose of data analysis researcher has used chi-square test to understand the association between variables. Researcher has concluded that most of the investors invest in stock market through their own decision whereas some may influenced by workshops, seminars etc.
- (Sakthi R, 2017) Conducted a research on "A Study on investors' awareness of stock market." The main objective of the research is to study the impact of the investors awareness in the stock market. Primary data has been collected through the structured questionnaire from 120 respondents. For the purpose of data analysis researcher has used T-test and one way ANOVA.

OBJECTIVES OF THE STUDY:

The following are the objectives of the research:

1] To check the association between level of income and various investment avenues.

2] To measure the association between savings and various investment avenues.

3] To examine the demographic variables of the investors.

RESEARCH METHODOLOGY:

Research Type: This study is exploratory in nature.

Sampling Technique: Non –probability sampling technique has been used in this research.

Sampling Type: Convenience sampling has been used to collect the data from the respondents

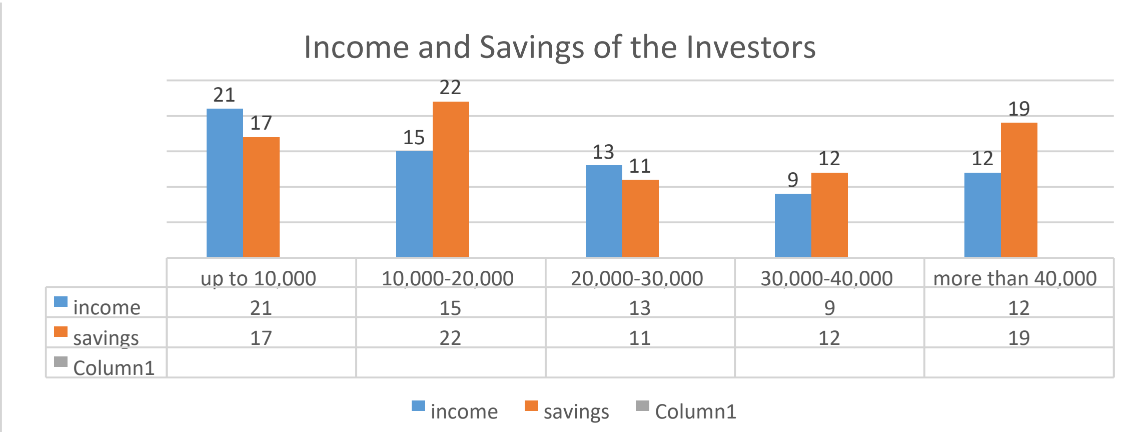
Sampling Unit: Retail individual investors are the respondents of the study.

Sample Size: Data has been collected from the 70 retail investors.

Data Used: This study is based on the primary data which is collected through the well-designed questionnaire.

Area under Study: Here the geographical area covered by the researcher is Rajkot city.

Figure 1: Demographic Profile of the Investors



RESULT AND DISCUSSION:

As the data is primary in nature, the researcher, for authenticity of questions conducted the reliability test before going into further analysis. The results of the reliability tests are as below.

Reliability analysis with respect to income and savings of the investors.

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.795	2

- The above table shows that data of income and savings of the investors is reliable as the value of Cronbach's alpha is 0.795 which shows that data is reliable.

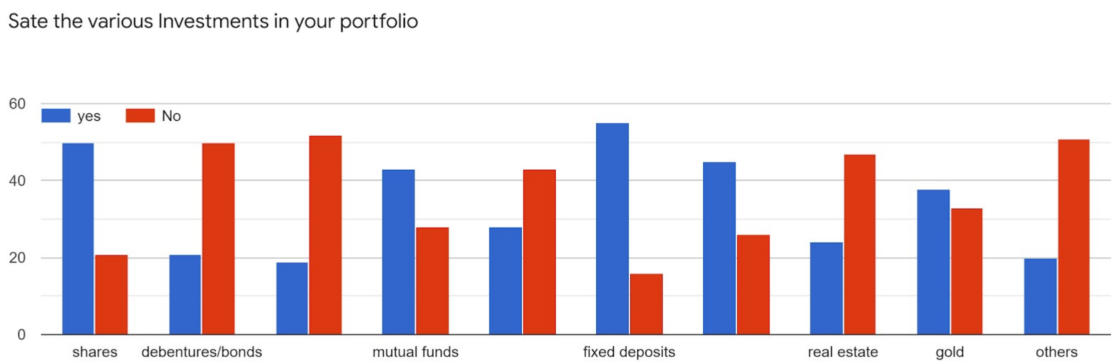
The following table shows reliability test of the different investment options:

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
.626	10

The above table shows that data of the different investment options is reliable as the value is 0.626 which is acceptable level for the reliability test.

Figure 2: Various Investments of the Investors in Their Portfolio:



Interpretations:

From the above chart we can see the portfolio of the investors and researcher can conclude that most of investors invest in Fixed deposits with highest percentage that is 50% of the investors invest in fixed deposits followed by investment in shares that is 45% of the investment consist of the investment in shares. 42% of the investment consist of the investment in mutual funds while only 22% investment consist of the investment in real estate.

Hypothesis of the Study:

Hypothesis 1

H0: There is no significant association between level of income and investment in shares.

H1: There is significant association between level of income and investment in shares.

Table: 3 Chi-Square Test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.606[a]	10	.000
Likelihood Ratio	20.288	10	.027
N of Valid Cases	73		

Interpretations:

Here the value of the Chi-Square test is less than the P value so the null hypothesis is rejected and we can conclude that there is significant association between level of income and investment in shares.

Hypothesis 2

H0: There is no significant association between level of income and investment in debenture or debt security.

H1: There is significant association between level of income and investment in debenture or debt security.

Table: 4 Chi-Square Test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.566[a]	10	.000
Likelihood Ratio	17.910	10	.057
N of Valid Cases	73		

Interpretations:

From the above calculated table, we can conclude that there is significant association between level of income of the retail investors and their investment in debt securities as the significance value is less than 0.05 so null hypothesis is rejected.

Hypothesis 3

H0: There is no significant association between level of income and investment in Mutual Funds.

H1: There is significant association between level of income and investment in Mutual Funds.

Table: 5 Chi-Square Test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	82.105[a]	10	.000
Likelihood Ratio	22.719	10	.012
N of Valid Cases	73		

Interpretations:

From the above chi-square table we can conclude that there is significant association between level of income of the retail investors and their investment in mutual funds as the significance value is less than 0.05 so alternate hypothesis is accepted.

Hypothesis 4

H0: There is no significant association between level of income and investment in National saving certificate/ public provident fund.

H1: There is no significant association between level of income and investment in National saving certificate/ public provident fund.

Table: 6 Chi-Square Test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	78.190[a]	10	.000
Likelihood Ratio	15.764	10	.107
N of Valid Cases	73		

Interpretations:

From the above chi square test researcher can concluded that there is significant association between level of income and investment in National saving certificate as the chi-square value is less than 0.05 so null hypothesis is rejected and alternate hypothesis is accepted.

Hypothesis 5

H0: There is no significant association between level of income and investment in fixed deposits.

H1: There is significant association between level of income and investment in fixed deposits.

Table: 7 Chi-Square Test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	75.913[a]	10	.000
Likelihood Ratio	13.691	10	.188
N of Valid Cases	73		

Interpretations:

From the above chi square calculation researcher can conclude that there is significant association between level of income of the investors and their investment in fixed deposits as the significance value is less than 0.05 so there is significant evidence that null hypothesis is rejected and alternate hypothesis is accepted.

CONCLUSION:

Here we have tried to find out the association between level of income of the retail investors with different investment options and from the chi-square table we can conclude that there is evidence which support this statement that there is significant association between level of income and the different investment options like investment in shares, debentures, mutual funds, gold, fixed deposits, insurance policies etc. so we can say that retail investors choose to investment in the different avenues as per their income so the income is the significant determinant for the different investment options.

REFERENCES:

Hawaldar I, R. H. (2019). Investors PerceptionTowards Stock Market: An Exploratory Approach. *International Journal Of Scientific & Technology Research, 8*(12), 2567-2574.

Kamaruniza, A. (2020). Awareness Level of Retail Investors on Stock Market in Chennai City. I*nternational Journal of Recent Technology and Engineering (IJRTE), 8*(4S5), 14-16.

Rai D, S. D. (2020, september). A Study on Retail investors awarness of the varouios investmnet avenues and the factors affecting their investment behaviour. *IJCRT, 8*(9), 2471-2475.

SAKTHI R, W. R. (2017). A Study On Investors Awareness Of Stock Market. *IJARIIE, 3*(6), 849-854.

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DIGITAL DIVIDE AND LIBRARY: CONCEPTUAL STUDY

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ABSTRACT

Digital divide refers to the gap between those with regular, effective access to digital and information technology, and those without this access. This paper focus on encompasses both physical access to technology hardware and, more broadly, skills and resources which allow for its use. Factors like gender, physical disability, physical access, age, access to the contents, and lack of ICT skills contribute to the digital divide. Digital libraries can address the issue of bridging the knowledge divide in developing nations, attempt is made to highlight some initiatives taken in India by building digital libraries and bridge this gap.

KEY WORD: Digital Diversity, Digital Divide, digital era, Digital divide and library

1. INTRODUCTION:

The Digital Divide represents the gap between those who have access to digital technology and those who do not. The term assumes that such access gaps lead to social disparities due to the different interests of users and non-users. The term is drawing attention as most countries around the world are beginning to see this inequality as a hindrance to overall economic development. The widening inequality caused by this phenomenon has attracted the attention of both planners and critics around the world.

According to the National Telecommunications and Information Administration (NTIA), the digital divide is the divide between a person who does not have access to a computer and the Internet and a person who has access to a computer. In the process, the concept of the digital divide and the logical implications of being able to address social issues by providing computers and internet accounts seemed to become more and more problematic (http://www.ntia.docgovernment/).

Differences are not necessarily determined by access to the Internet, but by access to ICT (Information and Communication Technology) and media available at various levels of society. Access is only one aspect of the Internet. Other factors such as connection quality and related services need to be considered. The most discussed topic is the availability of access at an affordable cost.

The library has a computer connected to the internet and is open to the public for free. In addition, the valuable resources provided by the library, the librarians who help visitors find their way, provide technology in a friendly and convenient way. I want to be able to access the Internet as soon as possible at home or at work. Through trade unions, working people can work together to make the community better for everyone. Access to the Internet allows workers to connect and collaborate with government officials, nonprofits, and the general public they serve to improve the quality of public services and health care in their communities. The library has what many working families need to realize this vision of access that leads to community behavior and improvement.

2. DEFINITION:

According to [OECD, 2001] the term digital divide refers to the gap between individuals, households, businesses and geographic areas at the different socio-economic levels with regard to their opportunities to access information and communication technologies (ICTs) and their use of Internet. It reflects differences among and within countries.

This definition is exclusively focused at national and international level. Digital divide is defined as by [Cullen, 2003] as the metaphor use to describe the perceived disadvantage of those who either are unable or do not choose to make use of ICT in their daily life.

From the above definitions, world can be divided into two sets of people who have and who do not have access to ICT (information and communication technology) or ability to use technologies, Internet, and other modern artifacts, such as telephone, television. Such differences are more prominent among rural and urban population, poor and rich people, and among developing and developed countries across the globe. Besides, digital divide exists based on race, gender, geography, economic status and physical ability; in skills, knowledge and ability to use information and other technologies. In broader sense, the digital divide exists in global, regional, national, and state level.

(I) **Global digital segregation**: "The concept of 'global digital segregation' focuses on the inequality of computer and internet access in all countries, especially the differences between developed and developing countries" (Singh.et al: 2013).

(II) **Regional digital divide**: This refers to the differences between countries within a region. For example, there is a wide range of access to information and communication technology within Asia. Countries like South Korea, China surpass India and Pakistan in internet usage.

(III) **National digital segregation**: At the national level, there are often urban and rural divisions. There are also differences between the provinces in access to and use of information technology within India (Rao: 2005, Furuholt and Kristiansen: 2007).

3. OBJECTIVES:

1. Identify the responsible features of digital separation in the Library.
2. Identify the responsible factor of digital divide.

4. REVIEW OF RELATED BOOKS:

Singh, S. (2010) .The following article focuses on India and aims to study the issue of digital segregation, particularly in rural and urban areas. Income inequality between rural and urban areas is referred to in this article as the number of subscribers, the availability of mobile phones and internet access. That "computer hole" idea has received a lot of attention lately, and it has started a lot of discussion and speculation about its financial, social, and political implications. According to existing experiments, the improved hole develops segregation, jeopardizes social closure, and hinders financial development. At the national level, there are various divisions: within countries, for example, there are gender divisions, young and old, economic segments, and, most importantly, rural and urban. His term "fragmentation" refers to the gap between rural and municipal areas regarding the overcrowding of myths, the availability of cell phones and the availability of the internet. According to the report, requirements such as ignorance, lack of skills, structure, interest in the regions of the country should be addressed in the event that India closes regional divisions. On the parliamentary side, an effort must be made to do this: merging, changing content, limiting development, and establishing and exploiting high-level segments, reducing costs, technological improvements, localization, and responsibility to the poor and oppressed can all help by closing the age gap.

Bansode, S. Y., & Patil, S. K. (2011). The issue of closing the gap between information in less developed countries can be addressed through digital libraries. An effort is being made to highlight the approaches of India to close this gap by building digital libraries. A simple questionnaire method used to analyze data. Among the factors that lead to this difference are: Men have limited access to the Internet at a lower rate (38%) than women (41%). This difference may be due in part to the assumption that IT is an active topic left to men, and several women avoid it as a result. Blind and blind people are now unable to make full use of computers due to technological advances like the Jaws, one of the few screen readers. Many people in disadvantaged groups are unable to use ICT due to a lack of computer and technology skills, as well as, most importantly, learning skills. Working people can benefit from the help of library staff and other library professionals to get acquainted with computers and use the Internet. In addition to providing a variety of customer terminals to clients, many libraries and libraries also provide training to users so that they can access information online. Many libraries have created digital and institutional archives so that users can access books for free.

McDonald, J. D., & Levine-Clark, M. (Eds.). (2017). Individuals, communities, and countries with an unequal share of data and web resources, and online information are called "digital segregation." Originally intended to address concerns about physical access, such as whether someone had or did not have an online or online account at home, the survey was expanded to include other topics. The term is increasingly used to refer to challenges such as whether people have the necessary technology and knowledge to use the media and digital information effectively. To address the digital divide, a number of local and international projects have been established. During the 1990's, governments and corporations around the world were concerned about unequal access to new technologies, whether among citizens or between provinces. To illustrate the difference in accessibility, the term "digital divide" was coined. In this view, it is not just a single digital divide, but a lot of you, and overcoming it will require concerted efforts on several fronts.

Soomro, Kamal A., Kale, Ugur, Curtis, Reagan, Akcaoglu, Mete, & Bernstein, Malayan (2020). This research focuses on personal access, motivation, skills, and direct use of digital knowledge, among other aspects of Computing. The lucrative and ever-changing work of emerging technology in education is no longer a hidden concept. IResearchers researchers look at how Pakistani higher education teachers use ICT in terms of motivation, physical ability, skills, and effective use in this research. 322 public and private university professors who completed a variety of courses completed the study. The study found that not all intelligent members have access to ICT, reflecting the existence of digital diversity based on personal and professional factors such as age, gender, and education. The internet between public and private university intelligence was shown to be particularly prominent at the level of skills in terms of age and type of institution, body level in relation to university type, and level of use in relation to age and gender. The findings and information collected from this experiment have significant significance for plans of action in Pakistani higher education for faculty professional development and other ICT initiatives. The results of this study will help other researchers gain a better grasp of the demographic features that predict the development gaps among academic staff.

5. RESEARCH METHOD:

The current study adopted the descriptive method used. This method describes and interprets what currently exists. It is mainly concerned with existing relationships or situations, existing habits, beliefs, existing ideas or attitudes, ongoing processes, failures or growing trends. The books were collected through documentary sources and various web sites were searched online.

6. DISTRIBUTION OF DIGITAL AND BIBLE LIBRARY:

Digital segregation can be divided into three levels:

(a) Globalization,

(b) Social divisions and

(c) democratic diversity.

The main focus of digital diversity is on access to computers and the internet. Absence from these discussions has been what information and activities are available online- "where" online. Recent reports on the state of digital diversity, while optimistic, still show that strong growth in new technologies has not occurred equally across geographical boundaries, race, socioeconomic status, level of education, disability, gender, age, technological capabilities. it is already important for stable, high-paying jobs. As the information economy continues to evolve, the opportunity to develop skills in advanced technology will be a key component of what is needed to ensure that all sections of society participate fully in the Digital Age. Making the transition to the Digital Age and the technology of information technology requires new policies to ensure that people who are not well served currently have the necessary skills in the information sector. Key questions are as follows: -

1. How does technology affect human rights, public participation and social inclusion?
2. How does technology affect development?
3. What is in the social and political context of access to technology?

Implementation of ICTs is possible; in a situation where cultural and institutional barriers are not properly addressed. A common perception is that if one buys just a few computers and modems, the post-industrial society can have an amazing effect. ICTs were generally regarded as a basic tool for survival in the next century. ICTs have been shown to improve efficiency in the workplace. There was a strong belief in the ability of ICT to increase the ease and speed of social media and at the same time prevent the problem of transportation. It helps to solve socio-economic problems. The most relevant technologies are seen as those that have enabled communities and organizations to communicate effectively. ICTs promote primary education at all levels; rapid availability of data on ICTs; the future of education depends heavily on ICT; Access to the Internet helps to produce, innovate and thrive businesses; ICTs are useful for job search for young people; and ICTs are important in the information age. The variety of factors identified as hindering the use of new ICTs is the high cost of ICTs leading to the denial of access to new technologies; lack of repeal of laws and government legislation that gives a few information technology companies independence; poverty and poor economic conditions; infrastructure problems such as lack of telephone wiring and disconnection of access to the Internet; a commitment to health and social well-being that makes it difficult to focus on ICTs; lack of basic education and computer skills; and a political culture that does not encourage the sharing of information freely. In every country and region we have found that the growth and development of ICT is driven by private companies with government support. Public library A non-profit public library for the public library, and any library (schools, institutions, community organizations, individual communities, etc.) is designed to provide free public access to learning materials, with a view to volunteering. of educational enlightenment and better human welfare. Many libraries work with the technology of a particular subject or focus (legal libraries, science libraries, etc.). A public library as a rescue for unborn children who experience the impact of digital segregation on their well-being. The rules and efforts of public libraries to close the digital gap are not well known.

7. DISTRIBUTION OF THE DIGITAL ON THE TABLE AND THE INTERNET

As the library computer is popular with sponsors and libraries the primary purpose of investing in libraries was to help "bridge" computers not enough to bridge the digital divide, skills and knowledge to effectively use information technology are equally important. One should have an interest in learning so that the library site meets these needs with their heritage as community learning centers and most importantly through the experts themselves. One-on-one informal assistance from libraries has the added benefit of teaching basic computer skills in the context of client search. Research into literacy and user behavior has shown that technical skills are better learned when considered in a problem-solving environment. An insecure library sponsor who wishes to integrate online resources presents a great opportunity for training where library staff contribute to digital segregation. (Www.pewinternet.org), (www.ntia.doc.gov, 22 dec, 2003).

8. CHALLENGES AND OBSTACLES TO DEALING WITH DIVISION SEPARATION

An important need to reduce the digital divide in countries is to prioritize the development of their telecommunications infrastructure and to provide accessible and accessible information to individuals in all parts of the country. There are a number of barriers to digital diversification. Although neglected communities in India gain access to computers and the internet its benefits are limited due to the following factors.

- **Infrastructure barriers**

Despite the dramatic growth of the internet since the early 1990s, India still lacks strong telecommunications infrastructure with sufficient reliable bandwidth of internet connection. Due to the high cost the necessary development of hardware and software is difficult; therefore, despite the rapid spread of the internet the gap is widening as the level of technology grows even more. Fast networks, state-of-the-art equipment, sophisticated software and more skilled technicians are needed, but in many countries, including India, funding is not available to support these developments.

Libraries and information centers, with their commitment to freedom of access to information and the promotion of lifelong learning in India, still need to have strong infrastructure. Public libraries that can provide access to the Internet do not have computers and internet access. Although cyber-cafes have been on the rise, poor people have no access because of the high cost.

- **Barriers to literacy and skills**

Literacy and literacy will play an important role in keeping the community fragmented and informed. From the perspective of digital segregation, IT literacy is critical to allow access to digital information. In a country like India where about 50 percent of the people lack literacy skills working in everyday life, IT literacy is out of the question. Typically, online content and information are designed for intermediate or advanced reading students and those with the optional resources to use it.

Literacy education will play an important role in keeping society afloat into a mass of what you have and what you do not have. Lack of computer skills and communication technology also prevents people from accessing digital information.

- **Economic barriers**

Lack of access to computer and communication technology also leads to digital fragmentation. In India the ability to buy or rent a digital access device is limited among the masses. The low-income group has no choice but to use it at cyber-cafes or to access their own internet connection to access digital information.

- **Content barriers**

The Internet allows ideas and information to be shared freely from citizen to citizen around the world. In many ways the power of the Internet is the work of a number of people and organizations that create quality content. Since there is no Internet-enabled business, anyone with access to the Internet has the power to provide information. Therefore, in order to resolve the digital divide, steps must be taken by the government to ensure that all citizens have access to a variety of content related to their lives and to the production of their content for their communities and across the Internet.

- **Language barriers**

India is a land of many cultures and languages. Today most of the online information is written in English, which is a barrier to people whose main language is not English.

9. DISTRIBUTION OF DIGITAL: Libraries AND INSULTS

In this age of information, it is recognized that knowledge is at the heart of all development activities where libraries play a vital role in the overall collection, storage, and dissemination of information. But libraries do not receive the attention and attention they need when deploying digital segmentation applications. Many educational institutions now run an in-house training program for their library professionals. The efforts of the education network and the special network play a positive role in this regard and many rural libraries are now available at the scene. They face a technical staff crisis and a lack of funding. Some of their main obstacles are

1. The problem of finding enough baggage

2. Staff development problem

3. The problem of running a staff-training program - improving performance

4. Problem finding soft furniture for housekeeping

No digital access to resources leads to a lack of appropriate information services. Government and local authorities must therefore pay close attention to these areas. An app should be developed to improve local libraries. In the past public libraries provided government leaflets and other documents. But when the emphasis is shifted from textbooks to digital libraries and especially public libraries there are many barriers to changing the status quo by retrieving and disseminating digital information. This has created a digital divide between libraries and library staff working in different areas of the organization as public libraries have a very close connection with the rural community.

10 CONCLUSION:

Equal access to information and communication technology has led to digital diversification not only in developing countries but also globally. Although India has made encouraging efforts to close this gap by launching a number of projects and programs in rural and remote areas, much remains to be done to put people in the information community. What is needed is a strong commitment among the people, good policymakers and political support to prevent digital divisions. Libraries and libraries play a special role in providing information to all people to reduce the gap between them.

REFERENCES :

1. Abraham, L.T, (2008). Tackling Digital Divide in Kerala and the possible role of libraries, Library Herald, Vol.46-No-2, p.128.

2. Bansode, S. Y., & Patil, S. K. (2011). Bridging digital divide in India: Some initiatives. Asia Pacific Journal of Library and Information Science, 1(1).
3. Kharade, J. (University of M., & Sharma, G. (Sndt U. (2011). Bridging the digital divide in India: challenges andopportunities. 5th National Conference Indiacom, Computing for National Development, 1–5.
4. Mason, S. M., & Hacker, K. L. (2003). Applying Communication Theory To Digital Divide Research, 1(5), 40–55.
5. McDonald, J. D., & Levine-Clark, M. (Eds.). (2017). Encyclopedia of library and information sciences. CRC Press
6. Naidoo, S. and Raju, J. (2012). Impact of digital divide on information literacy training in a higher education context. South Asian Journal of Library and Information Science, 78(1), 34-44.
7. Panda, M. I., Chhatar, D. C., & Mharana, B. (2013). A Brief View to Digital Divide in Indian Scenario, 3(12), 1–7.
8. Serrano-Cinca, C., Muñoz-Soro, J. F., & Brusca, I. (2018). A multivariate study of internet use and the digital divide. Social Science Quarterly, 99(4), 1409-1425.
9. Singh, S. (2010). Digital divide in India: Measurement, determinants and policy for addressing the challenges in bridging the digital divide. International Journal of Innovation in the Digital Economy (IJIDE), 1(2), 1-24.
10. Soomro, K. A., Kale, U., Curtis, R., Akcaoglu, M., & Bernstein, M. (2020). Digital divide among higher education faculty. International Journal of Educational Technology in Higher Education, 17(1), 1-16.
11. Tapashi, Dasgupta (2018). A study on aspects of India's digital divide. Research Review International Journal of Multidisciplinary, 3(11), 689-693.

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Problems of Human Trafficked women and Girl-child in India: A Sociological study

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ABSTRACT

Human trafficking is a worldwide problem. All ages and backgrounds of the people can become victims of this crime. It is a growing phenomenon in the world, which affects rich and poor people and also countries. Over the last decade, the volume of human trafficking has increased. Almost all countries were affected by human trafficking. Human trafficking has become a serious global issue of unforeseen proportions of the twenty-first century. It is an illegal trade and international smuggling and it is one of the most criminal trades, next to drugs and smuggling. It was undertaken by highly organized criminals. Women and Girl children are considered most vulnerable to human trafficking. 71 percent of all trafficking victims, 99 percent for sexual exploitation. The trafficked women and children using for prostitution, marriage, domestic work begging, adoption, child pornography and organ transplant, etc. Annually, about 600,000 to 800,000 people are trafficked It is a serious violation of human rights, that needs to be fought, the complex and widespread operations of human trafficking make prosecution and punishment of traffickers. Trafficking involves thousands of men, women, and children falling into the hands of traffickers every year. Women and Girls are kidnapped, forced, and sold for the purposes of sexual or commercial sex work exploitation, laboring, etc,. The women and children are often raped and abused by their recruiters and then sent to brothels or underground prostitution rings where they are sometimes literally held under lock and key. These women are usually tightly controlled by the head of the brothels. Traffickers recruit or buy women from destitute areas, promising them to take a new country to find work as domestic servants. Apart from these, traffickers are often using violence and fake promises of education and job opportunities to trick and coerce their victims. Human trafficking is a crime in India, although illegal under Indian law. People are frequently illegally trafficked through India for the purposes of commercial sexual exploitation and forced/bonded labor. So far, available literatures on human trafficking are largely focused on sex trafficking or sex work. It is considered the second-largest organized crime in India. The government, civil society, and law and order agencies must take concrete steps the prevention of women and girls' child trafficking in India. Despite various enactments general penal codes for preventing and combating trafficking in human beings in

India. Southeast Asia is the largest international human trafficking hub in the world. It is also a widespread and serious problem in India. North East India emerged to be a hot spot zone of trafficking in women and girl children in India. The India, 90 percent of trafficking occurs domestically (intra-state or inter-state), and only 10 percent occurs across national borders (Inter-National). Though the exact trafficking numbers are not known; About 225,000 women and Girl children are trafficked every year. Health officials insist that the trafficking of women and girl children for the purpose of prostitution causes significant health risks to the general public, especially in terms of sexually transmitted diseases. Government data showed almost in 2016, 20,000 women and children were victims of human trafficking in India. According to the UNO Office of Drugs and Crime (UNODC), South Asia, with India at its center, is the fastest-growing region for human trafficking. Millions of persons are trafficked domestically and internationally in India every year. According to NCRB Report in the year, 2020 total of 59262 children were missed. Compared to the year 2013 rate of children missing was hiked. (Vijaya Karnataka Kannada daily 29.may 2022page 8)

Key works- Human trafficking global problem, women and girl child trafficking, illegal criminal national and international trade, Govt. Measures, UNODC

INTRODUCTION:

Human trafficking is a worldwide problem. All ages and backgrounds of the people can become victims of this crime. It is a growing phenomenon in the world, which affects rich and poor people and also countries. Over the last decade, the volume of human trafficking has increased. Almost all countries were affected by human trafficking. Human trafficking has become a serious global issue of unforeseen proportions in the twenty-first century. It is an illegal trade and international smuggling and it is one of the most criminal trades, next to drugs and smuggling. It was undertaken by highly organized criminals. Women and Girl children are considered most vulnerable to human trafficking. Children from extremely poor and marginalized communities are exposed to the risk of human trade. It is a serious violation of human rights, that needs to be fought, the complex and widespread operations of human trafficking make prosecution and punishment of traffickers. Trafficking involves thousands of men, women, and children falling into the hands of traffickers every year. Women and Girls are kidnapped, forced, and sold for the purposes of sexual or commercial sex work exploitation, laboring, etc,. The women and children are often raped and abused by their recruiters and then sent to brothels or underground prostitution rings where they are sometimes literally held under lock and key. These women are usually tightly controlled by the head of the brothels. Traffickers recruit or buy women from destitute areas, promising them to take a new country to find work as domestic servants. Apart from these, traffickers are often using violence and fake promises of education and job opportunities to trick and coerce their victims. Human trafficking is a crime in India, although illegal under Indian law. People are frequently illegally trafficked through India for the purposes of commercial sexual exploitation and forced/bonded labor. So far, available literature on human trafficking is largely focused on sex trafficking or sex work. It is considered the second largest organized crime in India. The government, civil society, and law, and order agencies must take concrete steps the prevention of women and girl child trafficking in India. Despite various enactments general penal codes for preventing and combating trafficking in human beings in India. Southeast Asia is the largest international human trafficking hub in the world. It is also a widespread and serious problem in India. North East India emerged to be a hot spot zone of trafficking in women and girl children in India. The India, 90 percent of trafficking occurs domestically (intra-state or inter-state), and only 10 percent occurs across the national borders (Inter-National).

Though the exact trafficking numbers are not known; Annually about 600,000 to 800,000 people are trafficked. About 225,000 women and Girl children are trafficked every year. Health officials insist that the trafficking of women and girl children for the purpose of prostitution causes significant health risks to the general public, especially in terms of sexually transmitted diseases. Government data showed almost in 2016, 20,000 women and children were victims of human trafficking in India. According to the UNO Office of Drugs and Crime (UNODC), South Asia, with India at its center, is the fastest-growing region for human trafficking. Millions of persons are trafficked domestically and internationally in India every year.

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Concept of human trafficking:

The concept of human trafficking refers to the criminal practice of exploiting human beings by treating them as commodities for profit. Even after being trafficked victims are subjected to long-term exploitation. The crime of trafficking shows, that trafficking a person is a serious crime and a grave violation of human rights. (Source www. India times). It is known as modern slavery, which involves the use of force, fraud, or coercion by giving or receiving payments or benefits. Moreover, for the purpose of exploitation, recruits, transports, harbors, and transfers, a person or persons, by using threats, force, abduction, practicing fraud, etc include. The exploitation shall include any act of physical or sexual exploitation. Slavery or practices similar to slavery, or servitude. Govt. of India, 2013). According to the UNODC (United Nation organization declaration), Human Trafficking is the recruitment, transportation, transfer, harboring, or receipt of people through force, fraud, or deception, with the aim of exploiting them for profit. According to The Punjab Prevention of Human Smuggling Act, 2012 human smuggling" shall mean and include illegally exporting, sending or transporting persons out of India or any type of facilitation there to by receiving money from them or their parents, relatives or any other person interested in their welfare, by inducing, alluring or deceiving or cheating; etc

Girl and Women Trafficking in India:

The present study mainly focused on the trafficking of women and girl children. Women and girl children are the most common victims of trafficking. There are various factors for women and child trafficking in India.

A**) Girl Child Trafficking:**

Girl child Trafficking is all-pervading. About 60,000 children are trafficked in India every year. The National Crime Record Bureau (NCRB) has reported children have disappeared, one every eight minutes. According to UNICEF child trafficking means, any person under 18 years of age is recruited, transported, transferred, harbored or received for the purpose of exploitation, either within or outside a country. Girl children are trafficked for marriage, sex work, criminal activity, begging, adoption and organ trade.

B) Women Trafficking:

Traffickers target Indian women and girls, but also fraudulently recruit significant numbers of Nepali and Bangladeshi women and girls to India for sex trafficking. According to a recent survey in India, Trafficked women in India were sold to other countries from different parts of India. These girls and women are sourced from Dindigul, Madurai, Tiruchirapalli, and Chengalpattu of Tamil Nadu state. Gaya, Kishanganj, Patna, Katihar, Purnea, Araria, and Madhubani from Bihar state., Murshidabad, and 24 Parganas in West

Bengal state, Maharajgunj from UP, Dholpur, Alwar, Tonk from Rajasthan, Mangalore, and Gulbarga and Raichur from Karnataka state. These women and girls were supplied to Thailand, Kenya, South Africa, and Middle East countries like Bahrain, Dubai, Oman, Britain, South Korea, and the Philippines. They are forced to work as sex workers undergoing severe exploitation and abuse.

Objectives of the Study

1. To know the meaning causes and impact of the human trafficking
2. To mainly focus on Girl child and women trafficking in India
3. To focus on Government effort, Legal and constitutional provisions to combat the women and Girl child trafficking in India.

Historical Background:

The earliest type of global trafficking began with African Slave Trade. It was the first known international flow of human trafficking. The term traffic was first used to refer to the so-called 'white slave trade' in women around 1900. The Trade of white women from Europe to Arab and Eastern states as concubines/prostitutes was a concern for men, women, and governments of European countries. At this time, traffic meant the movement of women for an immoral purpose i.e., prostitution. Initially, this definition required the crossing of country borders, but by 1910 it changed to traffic in women within national boundaries. Traffic in women was seen as related to slavery, but also closely linked to prostitution. The problem of trafficking can also be traced back to the time of Greek City-states. Its history is full of attempts on the part of the States to regulate, control, and limit certain sections of the society and certain kind of activities like prostitution. (Source Wikipedia)

Profile of the Trafficking Women and Children- Facts

Traffickers are trained to identify vulnerability and use expert manipulation tactics to persuade and control their victims. People who are vulnerable to trafficking include those experiencing economic hardship, lack of social security, unemployment, and natural disasters. It makes vulnerable to them. Over the past five years, human traffickers exploit domestic and foreign victims in India. Traffickers exploit victims from India abroad. Internal forced labor constitutes India’s largest trafficking problem. Traffickers exploit millions of people in commercial sex within India. Scheduled caste females were sometimes exploited through the traditional Jogithi system. in which Dalit women and girls are ceremoniously married to a local temple deity but in practice are used as sex slaves for higher caste villagers. Traffickers target Indian women and girls for sex trafficking. In addition to this trafficked women are using traditional red light areas, dance bars, spas, and massage parlors. Women and children are used for sex trafficking in small hotels, vehicles, huts, and private residences. Nowadays commercial sex increasingly took place through the internet and social media platforms. In addition, traffickers utilize digital payment applications. Traffickers exploit women and girl children in sex trafficking in religious pilgrimage centers and in tourist destinations. Some traffickers kidnap children from public places, including railway stations, entice girls with drugs, and force girls as young as 5 years old in sex trafficking to take hormone injections to appear older. Some traffickers force women and girls to conceive and deliver babies for sale. Some law enforcement officers protect suspected traffickers and brothel owners from law enforcement efforts and take bribes from sex trafficking establishments and sexual services from victims. But still not up to the mark.

Human Trafficking in Karnataka:

Karnataka's capital Bangalore is the main hub of women and child trafficking in Karnataka. In addition, these traffickers supply women and children from Mangalore, Gulbarga, and Raichur to other countries viz, Thailand, Kenya, Bahrain, Dubai, Oman, Britain, South Korea, and the Philippines. Over the last five years, 854 cases detected in Karnataka. But no one gets punished because of a lack of evidence.

Size of Human Trafficking in India:

Human trafficking is a worldwide problem. Regardless of their financial and social status have to get trafficked. It is an illegal trade between countries to countries. Trafficking is everywhere but the lack of evidence very difficult to trace. very difficult to assess the trafficked number, But NCRB and other official reports attempt to made explain the size of human trafficking in India. According to Legal Services in India, every hour, four girls in India enter into prostitution, three of them against their will. The Ministry of Women and Child Development told the parliament that 19,223 women and children were trafficked in the year -2014, and 15,448 in the yea- 2015. The highest number of victims was recorded in West Bengal. Rajasthan. The second-highest number of trafficked children and women in 2016. National Crime Record Bureau (NCRB) report shows that West Bengal is the hub of human trafficking in India, followed by Tamil Nadu, Andhra Pradesh, Karnataka, and Maharashtra with Delhi as the transit point. According to this report, in 2015, a total of 3490 girl children trafficking cases were registered. According to the National Human Rights Commission of India (NHRC), 40,000 children are abducted every year, leaving 11,000 untraced. (Source: Crime in India Report). According to a report by Free, a Girl Foundation Nagpur, (NGO) around 700-800 children are stuck in the red light area of Nagpur, (India). According to Reuters study estimated 20 million commercial prostitutes in India, and 16 million women and girls are victims of sex trafficking.

Human Trafficking Cases

Cases Reported Cases (Year-From 2018 to 2020) and victims trafficked in- 2020

Sr. no	State or Union Territory	Total Cases Reported year wise			Victims Trafficked year-2020	
		2018	2019	2020	Trafficked Below 18 Years	Trafficked Above 18 Years
1	Maharashtra	311	282	184	49	463
2	Andrapradesh	240	245	171	23	212
3	Assam	308	201	124	84	93
4	Telangana	242	137	184	32	407
5	west Bengal	172	120	59	53	18
6	Jharkhand	140	177	140	114	187
7	Rajasthan	86	141	128	815	03
8	Bihar	127	106	75	123	56
9	Kerala	105	180	166	184	35
10	Karnataka	27	32	13	2	39
11	Delhi (UT)	98	93	53	202	22

(Source: Crime in India-2020, National Crime Record Bureau Report 2020, Ministry of Home Affair, Govt of India, Vol.III, Page 986 and 987)

The above table shows that, during- 2018 and 2019, Maharashtra state had the highest number of Trafficking cases. In 2020 Maharashtra and Telangana states are more cases reported. (Source: Wikipedia).

Conditions for Vulnerability of Women and Girl Children for Trafficking in India:

Human trafficking is the fastest-growing criminal industry in the world. The majority of the trafficking victims are poor rural women and children. They are lured to the towns and cities each year by traffickers who promise good jobs. But they sell them into modern slavery. Some trafficked were pushed into prostitution, brothels begging, smuggling, domestic work, and small industries like textiles, workshops, and farming. Women and girl children are more vulnerable to trafficking because, of a lack of education, gender disparities, and lack of social safety nets. Women engaged low earning work and violence against women. Women who are unaware of their legal rights. Traditional and religious practices (Jogathi, Devadasi). Patriarchal system, Lack of strong political will and weak law enforcement mechanisms, and impoverished parents selling off their daughters to get the economic benefit. The main causes of trafficking are,..

1. Poverty: A widow or single mother living in poverty, who struggles to provide basic needs of her children. A trafficker might offer her a job to feed her children. She may accept and be willing to do whatever the trafficker asks of her.

2. Unemployment: Traffickers targets unemployed individuals peruse them to leave home and take a job in another city or country. Traffickers may assure to pay for transportation, shelter, clothing, food, etc so people easily accept their offer.

3.Displacement: War, political instability, and natural disasters can displace individuals or entire families. When people experience financial hardship, homelessness, and the loss of their parents, traffickers target and provide protection to them.

4. Social causes: Familial causes, violence, desertion, marriage, marriage disputes, innocence, ignorance, illiteracy, frustrations, etc factors are the immediate causes for pushing them into the trafficker's hands.

5. Broken Families: Individuals who are cast out of their homes, and abandoned are highly vulnerable to human trafficking. Runaways, experiencing homelessness, and living in isolation are the main factors. Some traffickers offer love and acceptance.

6. Cultural Practices: In traditional cultures where arranged marriages are common, girls are sometimes forced into child marriage. Religious practices like Jogathi and the Devadasi system push women to trafficking.

7. Regional imbalance: Some regions of the country are very backward. It leads to trafficking

8. Economic disparities: Economic situation on the contrary is very poor, there is a high level of poverty and unemployment. It encourages trafficking.

9. Desire for material benefits: The main cause of the trafficking in women's desire for money and material benefits.

10. Influence of the peer group: Peers are easily influenced by their age group for making money. So falling to traffickers.

11. Lack of Knowledge or Experience: A teenager may accept a trafficker offer an attractive job, easy money-making, etc easily. A trafficker will quickly take advantage of these types of situations.

Effects of Human Trafficking on Society and Individuals:

Human trafficking is a multi-dimensional threat. It deprives human rights and freedom of the people and it fuels the growth of organized crime. Human trafficking has a devastating impact on, those who suffer physical and emotional abuse like rape, threats against self and family, passport theft, and even death. But the impact of human trafficking goes beyond individual victims; it undermines the safety and security of all nations it touches. Trafficking is understood to have medical, social, legal, and economic effects on victims. Affected persons are reportedly traumatized by their experiences. Suicidal thoughts are common. Besides, they are stigmatized, face moral and legal isolation, vulnerable to HIV/AIDS infections, drug addiction, high-risk abortions, and teenage pregnancies, It may affect their reproductive health. Many traffickers also experience trauma because of what they see and do to others, and many traffickers have been victimized at some point in their lives. The Vienna Forum will explore the impact of human trafficking on the lives of individuals and their communities. Participants will share experiences and focus on the consequences of human trafficking to victims, including the violence they experience and the risk of re-victimization.

Main Effects of Human Trafficking on the Victims:

1. Mental illness or Trauma: Victims of human trafficking can experience devastating psychological effects during and after their trafficking experience. Many survivors may end up experiencing post-traumatic stress, difficulty in relationships, depression, memory loss, anxiety, fear, guilt, shame, and other severe forms of mental trauma.

2 Physical injuries: Many victims also experience physical injuries. Those who have been sexually exploited and abused by their traffickers and customers. They may be raped, beaten, and parcel-like goods some are lost their lives before reaching the destination. High risk of getting sexually transmitted diseases, infections, diabetes, cancer, and other illnesses. A lack of proper medical care often affects an individual’s health permanently.

3. Social Consequences: They are usually not respected by society. Difficult to girl get married, affects children's status and marriage. Children may never have a school education. They are shame to share trafficking events with others, which affects Their family status.

A. Exclusion from the Community: Individuals who are being trafficked can quickly become isolated from friends, family, and other social circles. Victims become isolated and withdrawn from contact with relatives and society.

B. Social stigma: Due to a stigma, who returned home or escape a trafficking situation may even be excluded from their family and friends, and social groups.

C. Impact on Child Socialization: Socialization is a learning process. Child victims who a trafficked at a young age are unable to attend school or college. They may not know how to behave, what are the social values, individual roles, etc, Victims become dependent.

Legal and Constitutional Safeguards:

To combat this social menace, India does not lag behind. It has taken various steps to eradicate this problem. There are a number of enactments that refer to the protection of women and girl children from traffickers and exploitation.

Legal Measures: Protection of women and Children from Trafficking:

There are a few legal measures to prohibit human trafficking. These are

1. The Immoral Traffic (Prevention) Act, 1956 (ITPA): It is the premier legislation for the prevention of exploitation of trafficking commercial sex workers. This act criminalized various offenses relating to commercial sexual exploitation.

2. Bonded Labour Abolition Act, 1976: The main focus of this act is, the abolishment of bonded labor and the freedom of every laborer. Extinguishes liability to repay a bonded debt. Frees all property of bonded laborers from the mortgage. These prescribed penalties of three to five years imprisonment.

3. The Karnataka Devadasi's (Prohibition Of Dedication) Act, 1982: To prevent the dedication of women as Devadasi's in the State of Karnataka, as the practice is leading to prostitution and exploitation.

4. Transplantation of Human Organs Act, 1994: Punishment for commercial dealings in human organs offers to supply any human organ for payment; Penalties: The act specifies various penalties. All offenses are cognizable i.e. police officers can arrest without a warrant and are non-billable. Note that if a person is found guilty under the act and also under any other law, the punishment which is higher will apply.

5. The Juvenile Justice (Care and Protection of Children) Act, 2015

child" means a person who has not completed eighteen years of age; Whoever, having control over a child, assaults, abandons, abuses, exposes or willfully neglects the child or causes or procures the child to be assaulted, abandoned, abused, exposed or neglected in a manner likely to cause such child unnecessary mental or physical suffering, shall be punishable with imprisonment for a term which may extend to three years or with fine of one lakh rupees or with both.

5. Protection of Children from Sexual offenses (POCSO) Act- 2012: which has come into effect on 14th November 2012 is a special law to protect children from sexual abuse and exploitation below 18 years of age (Both Boy /Girl). It provides precise definitions for different forms of sexual abuse, including penetrative and non-penetrative sexual assault, and sexual harassment.

6. The Punjab Prevention of Human Smuggling Act, 2012

According to this act, human smuggling penalties are. - (1) Whoever, uses the device for human smuggling, shall be punished with imprisonment for a period not less than three years, which may extend to seven years, and with a fine which may extend to five lakhs rupees.

7. Supreme court order: Supreme court issued directions, that all State Governments must direct their law enforcement authorities to take appropriate speedy steps against the evil and directed to set up advisory committees with experts from all fields to make suggestions regarding measures for eradicating girl child prostitution, for care and rehabilitation of rescued girls, for setting up of rehabilitative homes,

8. The Trafficking of Persons (Prevention, Protection, and Rehabilitation) Bill, 2018

Trafficking person's bill-2018 create a law for the investigation of all types of trafficking, and rescue, protection, and rehabilitation of trafficked victims. These include trafficking for forced labour, bearing children for sale, begging, or inducing early sexual maturity. Aggravated trafficking attracts a higher punishment.

Indian constitution:

The Indian Constitution provides many provisions for the improve the conditions of women and girls' children in India.

Article -15(3) of the constitution the state is empowered to make special provisions for women and children. Article- 23 of the constitution, prohibits trafficking in human beings and forced labor. It states that trafficking of human beings for begging and other similar forms of forced labour are prohibited. Article -51A(e) of the constitution, states imposes a duty on every citizen of India. It is mandatory for renounce practices derogatory to the dignity of women. The IPC sections: Under the Indian pineal code of 1860 punishing who trafficking women and children as, IPC Sec- 366-A – states procreation of minor girls, Sec-366-B importation of girls from a foreign country, Sec-372 selling of girls for prostitution, Sec-373 buying of girls for prostitution, IPC Sec- 370 & 370A-Human Trafficking

The Government Social Security Measures in India:

With a view to tackling the menace of human trafficking, the Ministry of Home Affairs, Government of India has undertaken a number of measures, such as:

1. Anti Trafficking Cell (ATC): Anti-Trafficking Nodal Cell was set up in the Ministry of Home Affairs (MHA) CS Division in 2006 to act as a focal point for communicating various decisions and following up on action taken by the State Governments to combat the crime of Human Trafficking.

2. Ministry of Home Affairs' Scheme: Ministry of Home Affairs under a Comprehensive Scheme Strengthening law enforcement response in India against Trafficking in Persons through training and capacity building, has released funds for the establishment of Anti Human Trafficking Units for 270 districts of the country.

A. Strengthening the capacity building: To enhance the capacity building of law enforcement agencies, create awareness from various Training of the Trainers (TOT), workshops for Police officers, and for Prosecutors at the Regional level, State level, and District levels were held throughout the country.

B. Judicial Colloquium: In order to train and sensitize the trial court judicial officers, a judicial colloquium on human trafficking is held at the High court level. The aim is to sensitize the judicial officers about the various issues concerning human trafficking.

3. India implemented International Conventions (UNO) to combat Trafficking:

India has ratified the United Nations Convention on Transnational Organized Crime (UNCTOC) which has as one of its Protocols Prevention, Suppression, and Punishment of Trafficking in Persons, particularly Women and Girl children.

4. SAARC Convention: India has ratified the SAARC Convention on preventing and combating trafficking in women and children for prostitution. A Regional Task Force was constituted to implement the SAARC Convention. In India, the Anti Human Trafficking Units (AHTUs) established in various districts of the country.

5. Bi-lateral Mechanism (MOU) June 2015: For dealing with cross-border trafficking and to address the various issues relating to the prevention of trafficking, victim identification, and repatriation, and make the process speedy and victim-friendly between India and Bangladesh, a Task Force of India and Bangladesh was constituted. A Memorandum of Understanding (MOU) between India and Bangladesh on Bi-lateral Cooperation signed in June 2015.

6. The Vienna Forum for Fight Human Trafficking Feb 2018: The Vienna Forum was held from 13 to 15 February 2008 to fight against human trafficking. The Forum is a unique opportunity to bring together representatives from member states. The aims of the forum are to raise awareness of all forms of trafficking.

Conclusion:

Human trafficking is a global problem. Women and girl children are more vulnerable to trafficking. Traffickers target Indian women and girls for sex trafficking. Trafficked women are using traditional red light areas, dance bars, spas, and massage parlors and using for sex trafficking in small hotels, vehicles, huts, and private residences. Now a day's commercial sex increasingly took place through the internet and social media platforms. In addition, traffickers utilize digital payment applications. Traffickers exploit women and girl children in sex trafficking in religious pilgrimage centers and in tourist destinations, Force women to conceive and deliver babies for sale (BadigeThayi). Law enforcement officers fail to protect trafficking women and children. Human trafficking consistently results in the denial of fundamental human rights acknowledged in international treaties and customs, states have an obligation to address these vulnerabilities.

Bibliography:

1. Dr. Sunanda Goenka, Immoral Trafficking of Women and Children, (Deep & Deep Publications Pvt Ltd, New Delhi, 1st edition, 2011)
2. Elaine Pearson, Human Rights and Trafficking in Persons' Handbook (Indochina Publishing, 2000)
3. G.S. Janani, Human Trafficking In India 120(5) International Journal of Pure and Applied Mathematics 44(2018)
4. Banerjee, S. (2000) Under the Raj: Prostitution in Colonial Bengal. New York: Monthly Review Press.

Websites:

1.United Nations Office on Drugs and Crime, "Protocol to prevent, suppress and punish Trafficking in persons, especially women and children," in United Nations Convention (a) (2003).
2.http://jajharkhand.in/wp/wp-content/uploads/2017/01/05_human_trafficking.pdf
3.http://www.ohchr.org/Documents/Issues/Women/WRGS/OnePagers/IntInstrumentsconcerning Traffickingpersons_Aug2014.pdf
4.https://popcenter.asu.edu/sites/default/files/exploitation_of_trafficked_women.pdf
5.https://www.ohchr.org/Documents/Publications/FS36_en.pdf.https://www.unodc.org/documents/data-and-analysis/glotip/Annex_II_-
6.https://www.unodc.org/documents/human-trafficking/An_Introduction_to_Human_Trafficking

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An Exploratory Research on Consumer Behavior Towards the Various Products Of Khadi and Gramodyog Of Selected Regions Of Gujarat State

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Abstract:

The Khadi and Gramodyog is heritage of the nation. A clothe of Khadi is not just produced by the spinning wheel but connected with spirit of Gandhiji. Today, in this research paper research scholar wants to explore on consumer behavior towards the various products of Khadi and Gramodyog with Selected Regions of Gujarat like- North, South and Central Regions of Gujarat State.

Key Words: Consumer Behaviour, Khadi and Gramodyog, North, South and Central Regions of Gujarat State.

1. INTRODUCTION TO KHADI AND GRAMODYOG AND CONSUMER BEHAVOIR:

"Consumer is the king of the market"- said by the Shri Vinoba Bhave. Market is totally depending on the Consumer. Recently, analyzed by the marketers during COVID- 19 and its post effects are in market. To sustain in the market seller must know the consumer behavior well. Behaviour is reaction towards the situation, it is totally based on perception of individual which change by time to time. For sustaining in cut - throat competition the Khadi and Gramodyog know the consumer behavior first.

2. REVIEW OF LITERATURE:

- Ansuya, D.B.(2016), researcher only focus on Coimbatore District with Sample size 200 as result of Chi-Square consumer is delighted with the Products of Khadi and Gramodyog of Coimbatore district of Tamil Nadu State.
- Nair, S.(2010), her book focus on consumer behavior with Indian prospective. Cover each segment of Consumer Behaviour.

3. RESEARCH METHODOLOGY:

3.1 Title of the Study:

"An Exploratory Research on Consumer Behaviour towards the Various Product of Khadi And Gramodyog of Selected Regions of Guajart State."

3.2 Objectives of Study:

- To know the Level of awareness of consumer towards the various products of Khadi And Gramodyog of Selected Regions of Gujarat state.
- To identify the perception of consumer towards the various products of Khadi And Gramodyog of Selected Regions of Gujarat State.
- To know the level of satisfaction.

3.3 Hypothesis of study

Null Hypothesis:

H0: There is no significant association between level of awareness and occupation of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.

H0: There is no significant association between level of perception and educational qualification of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.

H0: There is no significant association between level of satisfaction and age of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.

Alternative Hypothesis:

H1: There is a significant association between level of awareness and occupation of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.

H1: There is a significant association between level of perception and educational qualification of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.

H1: There is a significant association between level of satisfaction and age of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.

3.4 Population of Study and Sample size:

For the above research work, research scholar chooses the Selected Regions of Gujarat. This includes North Region, South Region and Central Region of Gujarat State. The size of sample is 50.

3.5 Tools and Techniques used for Study:

The source of data is primary. The data is collected through the structural questionnaire with convince sample method and snow- ball sampling method. For data coding and simple calculations researcher used the Microsoft Excel 2007. Appling the ANOVA test and for advance statistics researcher used the SPSS also.

4. DATA ANALYSIS AND INTERPRETATION:

Total sample size of recent research work is 50 samples.

4.1 Data analysis and interpretation based on Demographic Profile:

Demographic Variables	No. of Respondents	Respondents in %	Analysis and Interpritation of Data
Age: Up to 35 Years Beween 35 - 60 Years Above 60 Years	**22** **16** **12**	**44.00%** **32.00%** **24.00%**	As from the research 44 % of consumers of Khadi and Gramodyog is Youth.
Educational Qualification: Up to S.S.C / H.S.C Graduate Post- Graduate Above Post- Graduate	 **24** **21** **04** **01**	 **48.00%** **42.00%** **08.00%** **02.00%**	Consumption and level of lilteracy are not co- relateed. Consumption depends on the level of comfort zone.
Monthly Family Income: Up to Rs.35,000 Between Rs.35,001- 75,000 Above Rs.75,001	 **15** **19** **16**	 **30.00%** **38.00%** **32.00%**	Consumer with Income More than 35,000 are consumed with high percentage of 38% and 32%. Beacuase products are costly with premium quality.
Occupation: Student Salaried House -wife Business Other	**15** **13** **05** **17** **00**	**30.00%** **26.00%** **10.00%** **34.00%** **00.00%**	Now, a days Khadi also become the code of professionalisem too with 34%. Students are consumed with 30% due to awarness of eco- friendliness of products. Salaried are next to them with 26%. Least consumed by house wife and others.
Regions: North Gujarat Cenral Gujarat South Gujarat	**18** **16** **16**	**36.00%** **32.00%** **32.00%**	The products of Khadi and Gramodyog is generally highly consumed by North Regions due to near to Kutch- Bhuj as one of the hub center with 36%

4.2 Data Analysis and Interpretation Based on the Subjective Profile:

Null Hypothesis (H0)	Alternative Hypothesis (H1)	Result of ANOVA	Data Analysis and Interpritation
H0: There is no significant association between level of Awarness and occupation of consumer towards the varios products of Khadi and Gramodyog of Selected Regions of Gujarat State.	H1: There is a signifiacant association between level of Awarness and occupation of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Guajrat state.	Sig. 0.945 H0 Accepted	There is no significant association between level of awarness and occupation, beacuase today behaviour of consumer is not just depends on awarness but also on the satisfaction level .
H0: There is no significant association between the level of perception and educational qualification of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.	H1: There is a significant association between the level of perception and educational qulification of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.	Sig. 0.383 H0 Accepted	Perception is not always based on educational qualification. Ethic , Moral values, status of individual and habits also played the powerful role. And perception is change by experinces too. It change from time to time and from place to place.
H0: There is no significant association between the level of satisfaction and age of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.	H0: There is a significant association between the level of satisfaction and age of consumer towards the various products of Khadi and Gramodyog of Selected Regions of Gujarat State.	Sig. 0.044 H1 Accepted	99% of consumer behaviour is depends on the satisfaction. The level of satisfaction and age are dependend. At some age consumer like some products before/after the age they may dislike same product which they like before/ after.

5. FINDINGS, RECOMMENDATIONS AND LIMITATIONS FROM THE STUDY:

Findings:

Awareness, occupation, perception, educational qualification is somehow not associated with consumer behavior while satisfaction and age of consumer directly associated with consumer behavior.

Recommendations:

KVIC must produce that type of products which consumer which preferred to KVIC to cover the specific market or segment. KVIC also use niche- marketing to cover their royal consumers.

Limitations of the study:
Study is based on the primary source; consumers may have biased.
Convince sampling and Snow-ball Sampling method.
Only cover the Selected Regions of Gujarat State- North Gujarat, Central Gujarat and South Gujarat with sample size of 50.

REFERENCES

Ansuya D.B (2016). Study on Consumer Satisfaction towards the Khadi and Village Industrial Production in Coimbatore District.
Nair, S. (2010). Consumer Behaviour in Indian Perspective. Mumbai, Maharashtra, India: Himalaya Publishing House.

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A STUDY ON CORPORATE GOVERNANCE IN BLOCKCHAIN TECHNOLOGY & DECENTRALIZED GOVERNANCE BASED BUSINESS

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Abstract:

Corporate governance is the system by which companies are controlled and directed. Distributed ledger technology, also known as the blockchain, is gaining traction globally. Block chain offers a revolutionary application of cryptography and information technology to old financial record keeping issues while forging great hopes with regard to lower cost, greater liquidity, transparency of ownership, and more accurate record keeping. Corporates started showing heavy reliance on use of block chain technology in their activities. Blockchain offers a secure validation mechanism and decentralized mass collaboration. Cryptocurrencies make use of this technology as a new asset class for investors worldwide. Cryptocurrencies are being used by companies to raise capital via initial coin offerings (ICOs). The substantial inflow of unregulated capital into a transactional and transnational industry has aroused interest from not just investors, but also national securities and monetary regulatory agencies. The same time an expanded use of new technology may introduce new risks and far-reaching changes in corporate governance. Thinking about the challenge of impacting corporate law and corporate governance, it is useful to consider the different ways by which a blockchain regime might impair shareholders rights and managers behaviour like they are currently defended by corporate law and developed by corporate governance recommendations. This study aims to provide a detailed review report on Corporate Governance in use of blockchain technology and decentralized governance and Complex Crypto Currencies in India and across the Globe.

Keywords: blockchain; disruptive technology; corporate governance; corporate voting; tokenisation; smart contracts blockchain-related topics.

Introduction

In this paper, we present a comprehensive study to understand the decentralized autonomous governance framework and link traditional corporate governance theories to blockchain adoption in Initial Coin Offerings (ICOs) or Complex Crypto currencies. The aim of this paper is to provide broad level information to all stakeholders on the interplay between blockchain applications and Corporate Governance. Its contents should, in no way, be treated as the official view of any regulators/country/region. The examples or possible situations related to compliance/governance issues discussed in the paper are purely hypothetical in nature. Any case relating to the blockchain will be assessed on the merits thereof This paper is merely an intellectual exercise and not a regulatory or investigative guidance. Readers should take appropriate legal and other professional advice, wherever necessary.

1. BASIC CONCEPTS ABOUT BLOCK CHAIN TECHNOLOGY

BLOCKCHAIN is essentially a decentralized peer-to-peer (P2P) network of transaction confirmations and ownership transfers, without a central authority or intermediary. Computers on the network ("the nodes") use cryptographic algorithms and smart contracts to confirm the transactions that are then written into blocks, and chains of such blocks form a ledger. When transactions occur, records of ownership (assets and their values) are permanently entered in ledgers and there are as many identical ledgers as the number of related nodes. In theory, there is no need for an authorized intermediary to confirm the transactions and hence there is no need for a central database or repository of transactions and records. This mechanism results in a decentralized / distributed database of ledgers with a continually growing record of transactions. As illustrated in Figure, this is in sharp contrast to a traditional centralized network, where all transactions are verified, and ownership records kept by a central authority. (In what follows, the term "blockchain" is used synonymously with "distributed ledger.") (Referannexure.1).

Decentralized networks may be customized for any degree of decentralization with respect to user access and usage rights. A blockchain network can be in one of two formats:

Public ("permission-less") blockchain: There is no one owner / operator and anyone is able to enter and exit freely. Everyone on a ledger has access to the same copy of the ledger and hence there are as many identical copies of a ledger as the number users. (Bitcoin is a typical example of a public blockchain.)

Private ("permissioned") blockchain: There are one or multiple owners / operators, who supply access interface to permissioned users. Only permissioned users hold a copy of a given ledger. Financial institutions seem to prefer this type of setup (two examples are RippleNet and NASDAQ LINQ).

Cryptocurrencies: - are powerful applications of the blockchain and their use has revealed much about the current and potential weaknesses and strengths of the technology. Bitcoin is in fact the first real applied example of a blockchain although a similar idea was first envisaged in a paper by Haber and Stornetta (1991). In 2008, Satoshi Nakamoto introduced

Bitcoin that was the first proposed cryptocurrency introducing the blockchain as a distributed infrastructural technology. It allowed users to transfer securely crypto currencies, known as "bitcoins ", without a centralized regulator.

Bitcoin is a decentralized digital currency, without a central bank or single administrator, that can be sent from user to user on the peer-to-peer bitcoin network without the need for intermediaries. (source-Wikipedia).It is coin: A Peer-to-Peer Electronic Cash System" (https://bitcoin.org/bitcoin.pdf). The main purpose of the Bitcoin is to settle a global database permitting the exchange of a new digital currency called "the Bitcoin".

Smart Contracts are self-executing contractual clauses that are stored on the blockchain. These allow transactions between parties based on predefined rules, without the inefficiency or risk of intervention created by an intermediary counter-party agent. A smart contract can be implemented for several accounts of different types, and an exchange of assets takes place as soon as an event triggers the application with these terms. For example, a smart contract can provide for automated payment of dividend and interest, and collateral payments on the occurrence of certain events. These events can be the receiving of a margin call based on an agreement clause related to such payments.

Cryptographye: The transaction sent to a blockchain network is cryptographically encrypted, so that the content remains confidential and can only be decrypted by the recipient. For any transaction, the sender will have a randomly generated private key, as well as a corresponding public key. The sender can now use his private key to encrypt or digitally sign the message, and send his public key to the recipient, and the recipient with his own private key can duly decrypt and read the message.

2. HOW A TRANSACTION TAKES PLACE IN A BLOCKCHAIN?

A transaction is requested and authenticated

⇩

A block representing that transaction is created

⇩

The Block is sent to every node (i.e participant) in the network.

⇩

Nodes Validate the Transaction.

⇩

Nodes receive a reward for Proof of work, typically in cryptocurrency

⇩

The Block is added to existing block chain.

⇩

The update is distributed across the network.

⇩

The truncation is completed.

Authentication: The original blockchain was designed to operate without a central authority (i.e. with no bank or regulator controlling who transacts), but transactions still have to be authenticated. This is done using cryptographic keys, a string of data (like a password) that identifies a user and gives access to their "account" or "wallet" of value on the system. Each user has their own private key and a public key that everyone can see. Using them both creates a secure digital identity to authenticate the user via digital signatures and to 'unlock' the transaction they want to perform.

Authorisation: Once the transaction is agreed between the users, it needs to be approved, or authorised, before it is added to a block in the chain. For a public blockchain, the decision to add a transaction to the chain is made by consensus. This means that the majority of "nodes" (or computers in the network) must agree that the transaction is valid. The people who own the computers in the network are incentivised to verify transactions through rewards. This process is known as 'proof of work'.

Proof of Work: Proof of Work requires the people who own the computers in the network to solve a complex mathematical problem to be able to add a block to the chain. Solving the problem is known as mining, and 'miners' are usually rewarded for their work in cryptocurrency. But mining isn't easy. The mathematical problem can only be solved by trial and error and the odds of solving the problem are about 1 in 5.9 trillion. It requires substantial computing power which uses considerable amounts of energy. This means the rewards for undertaking the mining must outweigh the cost of the computers and the electricity cost of running them, as one computer alone would take years to find a solution to the mathematical problem.

The Power of Mining: The Cambridge Bitcoin Electricity Consumption Index estimates the bitcoin mining network consumes almost 70 terawatt-hours (TWh) of electricity per year, ranking it the 40th largest consumer of electricity by 'country'. By way of comparison, Ireland (ranked 68th) uses just over a third of Bitcoin's consumption, or 25 TWh, and Austria at number 42 consumes 64.6 TWh of electricity per year, according to 2016 data compiled by the CIA.

The Problem with Proof of Work: To create economies of scale, miners often pool their resources together through companies that aggregate a large group of miners. These miners then share the rewards and fees offered by the blockchain network. As a blockchain grows, more computers join to try and solve the problem, the problem gets harder and the network gets larger, theoretically distributing the chain further and making it ever more difficult to sabotage or hack. In practice though, mining power has become concentrated in the hands of a few mining pools. These large organisations have the vast computing and electrical power now needed to maintain and grow a blockchain network based around Proof of Work validation.

Proof of Stake: Later blockchain networks have adopted "Proof of Stake" validation consensus protocols, where participants must have a stake in the blockchain - usually by owning some of the cryptocurrency - to be in with a chance of selecting, verifying & validating transactions. This saves substantial computing power resources because no mining is required. In addition, blockchain technologies have evolved to include "Smart Contracts" which automatically execute transactions when certain conditions have been met.

ICO- Initial coin offering: Initial coin offering (ICO) is a new model of public offering, where the initial offer price is either in a cryptocurrency (mostly) or a traditional currency and where investors do not acquire any shareholder rights. (As a case of regulatory blackhole, Telegram corporation filed a Form D disclosure with the U.S. SEC stating that the funds raised were "purchase agreements for cryptocurrency." Telegram has raised about $1.7b through its ICO this year.) Again, based on data from www.coindesk.com and www.coinschedule.com, cumulative ICO funding has grown from nothing in 2014 to $5b in 2017, $8b to date, and it is expected to close the year by about $12b. These figures are to be compared with about only $1b of blockchain equity funding in 2017, via IPO's or private equity. Venture capital in blockchain development companies has reached a cumulative level of about $2.5b in 2017. Due to lack of regulation in most countries, ICO business seems to move in the few countries like Estonia where regulation is more supportive, and rules of compliance are easier.

3.FINANCIAL INSTITUTIONS EVALUATING BLOCKCHAIN

Applications of distributed ledger technology, artificial intelligence/machine learning, big data analytics or cloud computing have significant potential to alter the lifecycle of bonds, from issuance, trading to settlement, and impact the functioning of financial markets. The recent steps taken by financial market participants across the globe is detailed here to provide a non-exhaustive overview of selected practical examples in fixed income primary, secondary, repo and collateral markets. The information and content provided herein have been obtained from public sources.

PRIMARY MARKETS

15 February 2022 – FQX and SIX Digital Exchange to collaborate on Blockchain-based short-term debt instruments-Switzerland's SIX Digital Exchange (SDX), the world's first fully FMI licensed digital asset exchange, and FQX, a SIX Fintech Ventures portfolio

company, have agreed to collaborate to enable the use of FQX's blockchain-based short-term debt instruments, eNotes™, on SDX. Today's short-term financing markets are vast with an estimated $65tn+ in annual transaction volumes globally. Due to legacy systems and a lack of global standardization, these markets are widely fragmented and inefficient, causing liquidity silos. FQX's infrastructure for a standardized, digital debt instrument, the eNoteTM, in combination with SDX's digital financial market infrastructure, work hand in hand to break these silos. Thus, locked up liquidity is released while trust and transparency are enhanced. (An eNote™ is an unconditional promise to pay a specific sum to another party at a specific future date and can be modularly structured to fit any financing purpose. The eNote™ is based on blockchain technology and can be easily transferred to any third party (i.e. an investor). When compared to other financing tools, eNotes™ excel through their modularity and global transferability, based on a standardized legal framework. Single eNotes are stored as NFTs on a blockchain. By issuing multiple eNotes, an issuer can obtain financing in a way comparable to commercial papers.) source: https://www.sdx.com/news/fqx-and-six-digital-exchange-collaborate-blockchain-based-short-term-debt-instruments

SECONDARY MARKETS

9 February 2022 - Charles River and LedgerEdge announced collaboration to provide DLT-enabled corporate bond liquidity and trading services-Charles River Development, a State Street Company, announced a collaboration with LedgerEdge to provide investment firms with access to corporate bond liquidity from the LedgerEdge ecosystem via the Charles River Inventory Hub and Order and Execution Management System (OEMS). LedgerEdge leverages distributed ledger technology (DLT) to modernize institutional-grade trading services and protocols in the $41 trillion global corporate bond market. Clients exercise full control of their data while gaining greater clarity into available liquidity, counterparties and execution quality. Charles River's Inventory Hub delivers an aggregated, venue and dealer agnostic view of liquidity that helps firms reduce execution costs and facilitate price discovery. Traders can view inventory in the OEMS, receive updated indications of interest and quotes, and place orders for a full range of products. source: https://www.crd.com/news/press-releases/2022/charles-river-and-ledgeredge-announce-collaboration,https://ledgeredge.com/news/charles-river-and-ledgeredge-announce-collaboration-to-provide-dlt-enabled-corporate-bond-liquidity-and-trading-services/

REPO AND COLLATERAL MARKETS

13 September 2021 - Securities finance trade of a digital bond issued on a public blockchain initiated by Societe Generale and SG-Forge-Societe Generale and its subsidiary Societe

Generale-Forge have realized a security finance transaction on a digital bond issued on a public blockchain, in cooperation with a German asset manager. Initially, the European Investment Bank (EIB) issued in April 2021 its first ever digital bond on the public blockchain Ethereum, in collaboration with Societe Generale and its regulated subsidiary Societe Generale-Forge. Societe Generale placed some of the digital bonds to a top tier German-based Asset Manager. Following the placing transaction, Societe Generale offered the client to enter into a collateral upgrade trade to optimize the holding of the EIB digital bond. This is the first time that a Digital Bond was borrowed via the blockchain and collateralized on a triparty agent on the back of a traditional contractual setup.In the coming months, issuances of bonds on a public blockchain are expected to increase sharply. With this new transaction, Societe Generale Group, thanks to its structuring and engineering capability within its capital markets departments and Societe Generale-Forge, has built experience down the value chain in borrowing back a digital bond issued and distributed a few months ago. SOURCE:https://www.sgforge.com/securities-finance-trade-digital-bond-on-public-blockchain/

CROSS-CUTTINGS

31 January 2022 - LuxSE admits first financial instrument registered on DLT on LuxSE SOL.The Luxembourg Stock Exchange (LuxSE) and Societe Generale marked the admission of the very first financial instruments registered on a public Distributed Ledger Technology (DLT) on LuxSE's Securities Official List (LuxSE SOL). The three series of security tokens admitted on LuxSE SOL are digital covered bonds (OFH Tokens) and structured products that have been issued and deployed by Societe Generale's digital assets arm, Societe Generale - FORGE (SG - FORGE), natively on the Ethereum and Tezos public blockchains respectively. They are characterized as financial instruments and debt securities under French law and are compliant with the CAST open-source interoperability and securitization framework.The admission takes place within a larger context marked by the acceleration of market digitalisation using blockchain technology, notably through the imminent adoption of the EU Pilot Regime, which is expected to enter into force in 2022, and which will permit the processing of security tokens through market infrastructures in compatibility with applicable EU regulations within a transitional period. Native security tokens issued on DLT allow for a fully digital issuance process and lifecycle. Due to their innovative characteristics, native security tokens have the potential to significantly improve efficiency and transparency in financial markets and make transactions safer and more resilient – all while offering benefits similar to those of financial instruments issued in a conventional way. To clarify the

eligibility criteria and guide issuers of security tokens through the admission process, LuxSE published Guidelines for the registration of DLT financial instruments onto SOL. To be considered for admission on LuxSE SOL, security tokens will need to respect these guidelines as well as the LuxSE SOL Rulebook. source: https://www.bourse.lu/pr-luxse-admits-security-tokens-by-societe-generale &

https://www.societegenerale.com/en/news/press-release/luxse-admits-security-tokens-issued-societe-generale

26 January 2022 – ADB to develop a prototype for cross-border securities transaction system using blockchain-The Asian Development Bank (ADB) has launched a project to make cross-border securities transactions in Asia and the Pacific more efficient and secure through the use of blockchain technology. Working with leading blockchain companies, ADB will seek to develop ways to directly connect central banks and securities depositories in the ASEAN+3 region within a blockchain network. The region consists of the Association of Southeast Asian Nations plus Japan, the People's Republic of China, and the Republic of Korea. Directly connecting the institutions within a blockchain network could reduce both transaction costs and settlement risks—the possibility that securities are not exchanged within an agreed time frame. Cross-border securities transactions in the ASEAN+3 region are currently processed through a global network of custodians and correspondent banks, which go through global centres in either the United States or Europe. As a result, intraregional transaction settlements in ASEAN+3 take at least 2 days, due to time differences as well as varying operating hours for markets within the same time zone. The project will be carried out in 2 phases: a designing phase, to be completed by the end of March 2022, and a prototyping phase, scheduled for the second quarter of 2022. The results will be discussed with ASEAN+3 government officials and members of the Cross-Border Settlement Infrastructure Forum of the Asian Bond Markets Initiative, made up of central banks and securities depositories from across the region. Source: https://www.adb.org/news/adb-develop-prototype-cross-border-securities-transaction-system-using-blockchain

3 November 2021 - Goldman Sachs Taps Digital Asset to Build Open Platform for Tokenized Assets-Digital Asset, a leading software and services provider helping enterprises build economic value through interconnected networks, announced that Goldman Sachs will use Daml, Digital Asset's core technology, to develop its end-to-end tokenized asset infrastructure supporting the end-to-end digital life cycle across multiple asset classes on permissioned and public blockchains. Daml is a platform for building multi-party applications that run seamlessly across new technologies and legacy infrastructure. It is the

first system to fulfill the key requirements of a network-of-networks for global commerce. Daml solutions have been selected for production rollout at several of the world's top exchanges, as well as powering the daily processing of around $35B in repo transactions.

Source:
https://hub.digitalasset.com/hubfs/DA%20Goldman%20Sachs%20Press%20Release%2011.1_V8.docx.pdf

4.GLOBAL CRYPTOCURRENCY REGULATORY LANDSCAPE

In this note, we have discussed three categories of countries based on their approach to regulating cryptocurrency-

(a) countries that have legalized cryptocurrency by regulating it;

(b) countries that have proposed to regulate it, and

(c) countries that have banned cryptocurrency.

A detailed presentation is annexed in annexure -2

Indian perspective: India may derive economic benefits from the use of blockchain technology. Research and development on blockchains, including their different applications, their scaling up and future development are already underway. Theoretically, it is expected that once blockchain applications cross the pilot and proof of concept stage, they will compete with other systems/technologies providing similar services that may not be based on blockchain technology. This is already being experienced to some extent in the financial services sector where blockchain technology was first applied. An example could be the market for providing cross-border payments where traditional banks may have to compete with solutions such as Ripple79, which is a blockchain concept-based tool that enables users to make cross-border payments in various currencies. Ripple may put competitive pressure on the traditional banking system given that it is faster, cheaper and transparent. Blockchain technology is an important innovation that can promote competition across different sectors of the Indian economy. Given the nascent stage of its development, removal of regulatory uncertainties and addressing policies that put blockchain applications at a competitive disadvantage may help in fostering the growth of this technology.

5.The need for regulation- Cryptocurrencies or Virtual Currencies ("*VCs*")

VCs have so many benefits, and the question is why are the Governments sceptical of considering them as legal tender?. The short answer is privacy. VCs are based on blockchain technology, which is highly secure. A wallet is linked to a private key rather than an individual person. Therefore, the Governments find it challenging to trace the origin of a transaction. Because VCs use pseudonyms to carry out transactions, it has the potential of being used for illegal activities.

Another concern is that since VCs are not backed by Government or any commodity and therefore can lose their values if the promoter of the VCs stops trading activity. The latest example is Squid Game Crypto Scam, where it is estimated that the promoters scammed an estimated $ 3.38 million, by drawing in buyers and thereafter stop trading, leaving the buyers with tokens which have no financial value.

History of VCs in India:

- **2016- N**SE (India) - Starting early September 2016, NSE has been conducting a blockchain trial involving the country's leading banks — IDFC, Kotak Mahindra, ICICI, IndusInd, and RBL, as well as HDFC Securities. The blockchain trial was related to know-your-customer (KYC) data, enabled by blockchain start-up Elemental.
- In **2017,** India's National Stock Exchange (NSE) conducted a blockchain trial of a KYC (know-your customer) data protocol involving many of the country's leading banks. NSE is also a member of the consortium working on digital identity in India.
- **2018-** Cryptocurrency exchange regulations in India have grown increasingly strict. In 2018 the Reserve Bank of India (RBI) banned banks and any regulated financial institutions from "dealing with or settling virtual currencies." The sweeping regulation prohibited the trade of cryptocurrencies on domestic exchanges and forced existing exchanges to wind down. This contribution deals with the problem of interoperability of blockchain technologies.
- **2018-** RBI Circular DBR.No.BP.BC.104/08.13.102/2017-18 -In India, the Reserve Bank of India ("RBI") over the years has voiced concerns regarding VCs and the lack of safeguards and issued RBI Circular DBR.No.BP.BC.104/08.13.102/2017-18 on April 6, 2018 ("2018 Circular") prohibiting all entities regulated by the RBI from rendering services in connection with VCs including maintaining accounts, registering, trading, settling, clearing, giving loans against virtual tokens, accepting them as collateral, opening accounts of exchanges dealing with them and transfer/receipt of money in accounts relating to purchase/sale of VCs. This circular was later set aside by the Supreme Court in March 2024 in the case of Internet and Mobile Association of India V. Reserve Bank of India.

- **2019**-It is also relevant to note that the SC Garg Committee ("Committee") in 2019, led the charge to ban VCs, the Committee put forth its concerns regarding the ballooning of VCs in its report and stated that nearly all VCs are issued abroad with huge numbers of people in India investing in them. The report stated that, "All these cryptocurrencies have been created by non-sovereigns and are in this sense entirely private enterprises and there is no underlying intrinsic value of these private cryptocurrencies due to which they lack all the attributes of a currency." According to the Committee's report, VCs will not be able to act as a currency since VCs are not consistent with the essential features of currency, it further recommended that the government keep an open mind regarding an official digital currency. The Committee as well as the RBI are of the view that VCs stand the risk of being misused for the purposes of money laundering and have long been regarded as volatile and unsafe investments by the RBI.
- **2021**-Following the judgement of the Supreme Court, the RBI issued a follow up circular dated May 31, 2021, wherein it stated that considering the Supreme Court's decision, the 2018 Circular was no longer valid and directed entities regulated by it not to rely on the 2018 Circular.
  - RBI Circular DBR.No.BP.BC.104/08.13.102/2017-18,
  - WP No.528 of 2018
  - RBI Circular DOR. AML.REC 18 /14.01.001/2021-22
  - Report of the Committee to propose specific actions to be taken in relation to Virtual Currencies February 28, 2019
- **13 August 2021** – SEBI announces 'Security and Covenant Monitoring' using Distributed Ledger Technology: The Securities and Exchange Board of India (SEBI) released its circular on 'Security and Covenant Monitoring' using Distributed Ledger Technology. To strengthen the process of security creation, monitoring of security created, monitoring of asset cover and covenants of the non-convertible securities, a working group comprising of officials from SEBI, Depositories, Stock Exchanges and Trustees Association of India (TAI) was constituted by SEBI. Based on the recommendations of the working group, a platform for 'Security and Covenant Monitoring System' ('system') hosted by Depositories shall be developed. The system shall be used for recording and monitoring of the security created and monitoring of covenants of non-convertible securities. The system shall inter alia capture the process of creation of security (viz. due diligence, charge

creation etc.), continuous monitoring of covenants by Debenture Trustees (as applicable), credit rating of the non-convertible securities by the Credit Rating Agencies (CRAs) etc. Depositories shall create, host, maintain and disseminate the system for security and covenant monitoring using distributed ledger technology. The system shall come into effect from April 01, 2022. However, testing of the system shall start from January 01, 2022, and therefore, Issuers, Debenture Trustees and Credit Rating Agencies etc. are thereby advised to carry out necessary changes, if any, in order to be ready to execute such functions as required for the proposed platform. Source: https://www.sebi.gov.in/legal/circulars/aug-2021/-security-and-covenant-monitoring-using-distributed-ledger-technology_51855.html

The way forward: In India, the Crypto trading platforms are witnessing a substantial jump in volumes. As per a recent report- WazirX, India's biggest Cryptocurrency exchange registered an annual trade of over $43 billion. If properly regulated, the Government can tax the revenue generated, which can be a win-win situation for both the Government as well as investors.

6.Review of effectiveness of Corporate Governance in traditional centralised modal and new block chain model are:

COMPARISON	*Block Chain environment based on de centralised -decentralized trust or trust-by-computation*	*Traditional Corporate Governance model based on centralised-trusting people*
Need of a trusted third party- greater transparency of ownership	The electronic transactions can be automatically verified and recorded by the nodes of the network through cryptographic algorithms, without human intervention, central authority, point of control or third party (e.g. governments, banks, financial institutions or other organizations)	Requires bookkeeping, recording and finalisation and audit of books of account by professional and financial reporting -post transaction process
Realtime technology-based rectification, prevention and human	Even if some nodes are unreliable, dishonest or malicious, the network is able to correctly verify the transactions and protect the ledger from tampering through a mathematical mechanism called proof-of-work2 , which makes	Traditional methods, unreliable, dishonest, or malicious will be found out only after the transactions took place, tracing audit trail, rectification and

intervention or controlling authority	human intervention or controlling authority unnecessary.	recovery of damage is remote.
Audit Trail	It consists of a permanent, distributed, digital ledger, resistant to tampering and carried out collectively by all the nodes of the system. As all entries are written on the ledger, falsification of such record to conceal activity is practically impossible.	Double entry accounting system and Audit trail subject to tampering and falsification of financial record practically possible.
Transaction cost and approval process human intervention or controlling authority	The electronic transactions can be automatically verified and recorded by the nodes of the network through cryptographic algorithms, without human intervention, central authority, point of control or third party (e.g. governments, banks, financial institutions or other organizations)	Required central authority intervention for approval and process
Blockchain-based governance:	They have been mostly developed for the purpose of reaching consensus and coordination between heterogeneous or distant groups of people, facilitating their mutual interactions.	Centralized organizations and the problem of scale-Throughout history, centralized political organizations like State, bureaucracy and representative democracy have been a solution to a scaling problem.
State as a single Point of Authority	Decentralization aims to reduce or prevent such concentration of power and it is a fundamental condition for citizens to achieve political efficacy, equality, transparency, and freedom.	They are based on coercion, and they may lack flexibility and capacity to evolve, providing inadequate responsiveness to challenges and to the growing societal

		demands.
Borderless, globalized government services.	Through the blockchain, governance services can also become global and border-less	Centralized vertical authority has become the main organizational model in society, simply because there has not been a better alternative so far.
Indian competition law and blockchain.	Non enforceability/compliance with respect to -Participation in a blockchain and agreements- any anti-competitive conduct emerging from participation in a blockchain application may be construed as a contravention of the Act.	"agreement" as defined in the Competition Act, 2002 ('Act') and its compliance-traditionally enforceable.
Blockchain as an "enterprise"	Unlike traditional enterprises, blockchain applications are decentralised, i.e., there is no single entity that takes decisions. Rather multiple entities are involved in decision-making. This raises the question if a blockchain application can be viewed as a dominant enterprise.	traditional enterprises centralised concept, compliance and enforceability assured.
enforcement & jurisdiction	blockchain applications can exist across geographies. This could raise the jurisdictional issue for competition authorities around the world when nodes/market participants of a blockchain application are located across different countries.	traditional enterprises centralised concept, compliance and enforceability as well jurisdiction was definite.
blockchains and anti-	within the purview of the existing law its need to be took forward for	traditional enterprises centralised concept,

competitive agreements	necessary enforceability	compliance and enforceability as well jurisdiction were definite.

7.Corporate Governance of Firms Traded on Blockchains - Key advantages & Challenges

Issuing and trading corporate securities on blockchains would create numerous benefits and also certain costs related to greater transparency of ownership and faster, cheaper trade execution and settlement. Better transparency would significantly impact the profit opportunities available to managers, institutional investors, and shareholder activists, among others, because the incentives to acquire ownership and to liquidate it could change markedly if their transactions were observable in real time. Improvements in trading technology would also affect the incentives to acquire and liquidate ownership for these groups. Important side effects might spill over into the real economy, since the changing incentives for informed investors to trade might lead to more reliable signals about the value of individual firms. In the presence of these changes, over time suppliers of capital might design securities differently, reconsidering the need for certain restrictive covenants and taking advantage of blockchains' ability to execute "smart contracts" autonomously. Firms may recruit board members and outside consultants with different skill sets to deal with these changes, and important topics like management incentives would likely evolve to take account of the changing nature of corporate securities.

8. Block Chain adoption- unique advantages in comparison with traditional methods.

Non-Reversibility: Any transaction recorded in blockchain cannot be directly modified in case of any change in contractual parameters, or any exception thrown on validation. The only way to correct the transaction is to pass another entry of the opposing type. This inability to subsequently edit the historical information in the blockchain database is a critical element of its value proposition but might be a hurdle for trade validation.

Trade matching and exception management: The current blockchain technology does not have the ability of matching in place, and how any mismatch and exception processing will be handled is still a question. Furthermore, any modification or correction to existing data cannot be done due to the non-reversibility of blockchain.

Netting of Positions: As of now, Bitcoin transactions using blockchain allow settlement only on payment basis, i.e., on a gross basis and not net. This would lead to higher collateral and capital requirements, unless netting is fully implemented in blockchain. Resolution of this area is still under discussion.

Cash leg of a transaction: Although blockchain allows a security transaction to be settled in almost real time, the biggest hurdle is how to handle the cash leg of it. Digital currency does not have the support of all global central banks, and the high volatility of its value can create a major distrust among parties of a transaction. Cryptocurrency has witnessed a huge growth in the digital market, but the question is whether it would get widespread acceptance like that of fiat money. The second problem is on how to ensure that the value of such cryptocurrencies does not swing wildly and requires the central banks to have some control over the issue of its volatility.

Operational Challenges: Operational risks come into play through the adoption of new technologies. It remains to be seen how, and to what extent, the blockchain can be used to modernize existing models and legacy systems. There is also an apprehension that privacy of parties and sensitive transaction information might get compromised, as multiple copies of transaction are kept across all the nodes in a network.

Scalability: The technology must have enough scalability to deal with high transaction volumes, before it can be implemented on a mass scale. Currently, Bitcoin transactions using blockchain are used with a limited transaction volume, resulting in high processing speed. It still needs to be seen if the blockchain can maintain the high speed of processing, when it deals with high transaction volumes.

Privacy: The privacy aspect is the most important factor when one deals with public (permissionless) blockchain networks, and the open source community is working aggressively on it, to limit access to private information and transactions. This is despite the fact that blockchain networks, by the nature of its architecture, provide better security compared to a traditional centralized model, as it does not allow tampering with data in the distributed ledger once a transaction is recorded.

Regulatory Impact: New regulations are expected where blockchain technologies become an integral part of the market infrastructure. There are significant regulatory considerations, particularly around privacy protections for personal identification information. A considerable number of laws need to be reinterpreted to deal with the new way of processing trades.

Collateral Management: This can be embedded into blockchain in the form of smart contracts, which will contain rules to automate triggering of margin calls, and so on. As both the sender and receiver are on the same blockchain network, the movement of digital recording of assets through tokens substitute sensitive data with a non-sensitive equivalent with the ability to track asset movement, and proper design and rules allow exchange of assets for collateral purposes. This can also be extended to the distributed ledger technology.

Regulatory Reporting: As all the participants will be maintaining one version of the truth, there will be no need for costly reconciliation. Regulators will have visibility of transaction in real time and have monitoring efficiency on the activities of transacting parties. Further, the current use of disparate systems, both externally and internally, provides many bottlenecks when doing Know Your Customer (KYC) and Anti Money Laundering (AML) checks. Verification of information and repetitive information exchange between parties during client onboarding consumes much time. This is likely to be eliminated when there will one version of the truth maintained among all the participants in the blockchain.

Faster Settlement: In theory, the blockchain technology could reduce processes involved in clearing and settlement, because once a transaction is confirmed and committed to the ledger, the associated token (digital representation of an asset or any sensitive data element) is simultaneously settled in the digital wallet of the beneficial owner. The faster settlement is likely to reduce costs, and lower settlement risks

Reconciliation: The main benefit expected from using blockchain technology in the capital market is the reduction of intermediaries involved in processing of trades, thereby reducing costs and effort that goes in reconciling information kept at isolated legacy systems.

Trade Validation: Blockchain supports smart contracts, where rules of the contract are embedded into a code or deployed on the blockchain. The introduction of the smart contract technology could validate contractual data by entering the distributed ledger, which should make processing simpler and reduce exception correction time. The nodes in the network can monitor and detect contracts for changes of ownership and contract rules. This would enhance trade validation in terms of efficiency. The trade validation on blockchain is applicable mainly for contract-based asset trades, basic cash equities and fixed income, repurchase agreements, and swap transactions across all asset classes. As any record written to the distributed ledger is immutable, any modifications, cancellations and corrections can only be done by "reverse" transaction

Reference Data: Reference data consists of asset or security information, calendar days, ticker symbols, client data, and so on, and is essential for processing a trade to its final settlement. Companies across the industry store reference data in their own legacy systems, resulting in highly time-consuming reconciliations with data of other participants involved in the trade. In addition, data reconciliation is necessary between internal systems within an enterprise. The common reference data can be implemented on blockchain, with its standardized validation rules among the participants in the network and auditable change history. This would allow regulators and other participants to view how the data record is being created in the ledger in real time, and which nodes validate the data creation.

Netting and clearing in blockchain: the question is whether it will settle trades either on a gross or net basis. Some advocate that blockchain can allow delay in trades, so these can be netted at the blockchain level, thereby reducing risk and liquidity requirements. Further, clearing to reduce settlement failure (in addition to multilateral netting) using central L&T Infotech Proprietary 15 / 18 counterparty for each trade could also be deployed in blockchain, through appropriate rules. To this end, several solutions are now under development.

9. Decentralizing Government Services Through the Blockchain: Issues and Concerns

- Business Case and Cost of Integration
- Legal & Regulatory Requirements
- Scalability & Capabilities of Technology itself
- Data Privacy & Security
- Undoubtedly, the blockchain has remarkable properties as a distributed ledger, such as efficiency, cost-effectiveness, irreversibility, transparency, auditability and censorship resistance. Yet, the proposal to decentralize government services through an open, unpermissioned blockchain entails a whole set of unknowns, which may overweight the benefits. Although the blockchain is frequently described as a “universal, permanent, continuous ledger” (Swan 2015, p. 46), these claims are somehow overstated, since they do not take enough account of the several performance risks at stake.
- Security problems and technical weakness of current distributed blockchains.
- The first problematic aspect is that current public, un permissioned distributed ledgers as Bitcoin have a highly speculative nature, with an inherent trade-off between dimension of the network and decentralization. Scalability leads to a natural process of centralization of the computing power in the network, due to the decrease of the number of miners able to perform the mathematical verification required by the protocol, which has growing costs.
- data recorded in the blockchain are entirely reliant on connectivity.

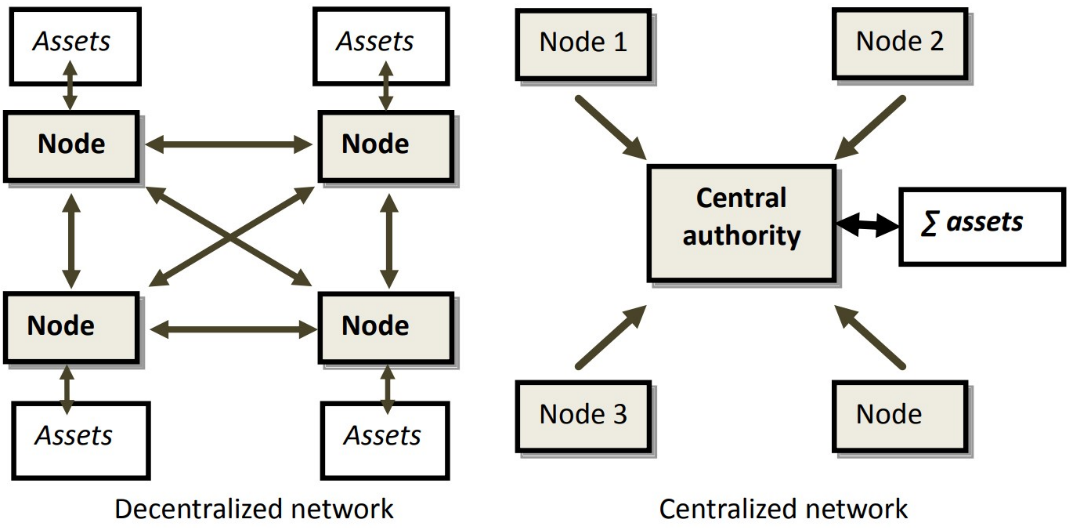
- Bitcoin and its many clones are based on a still immature and highly vulnerable technology.
- With the advent of blockchain and smart contracts, the inefficiencies and costs in derivatives trading due to multiple handoffs and complex processes were supposed to decrease. However, before banks and industry participants can rely on any distributed ledger as the new holy grail or “single source of truth,” better standardization is required. Most participants today use a complex set of processes, data structures, and reporting formats to track trade life cycles in order to satisfy internal and external regulatory and compliance norms. Thus, without a common language or format it may not make sense to adopt a common ledger.
- This Decentralised nature of Block Chain technique coupled with speed , security and transparency make this necessitated to those participating corporate governance.

10. Conclusions: Blockchain technology offers a novel method for trading and tracking the ownership of financial assets. It appears to be a leap forward in financial record-keeping not seen since the introduction of double-entry bookkeeping centuries ago. Stock exchanges around the world have begun to experiment with blockchains as a method for companies to list, trade, and vote their shares, and stockholders may benefit from lower costs of trading, faster transfers of ownership, more accurate records, and greater transparency of the entire process. Corporate governance could change in many ways under a blockchain regime. Institutional investors, raiders, and activists could benefit from being able to purchase shares at lower cost and to sell them into a market with greater liquidity, but they would have a much more difficult time disguising their trades. Managers who obtain incentives from stock-based compensation would likely lose profit opportunities from legal insider trading, due to the greater visibility of their transactions. Blockchains would also deny managers opportunities to backdate compensation awards or covertly pledge shares for derivative transactions. Shareholder voting would become much more reliable and less costly. Companies might also use blockchains for real-time accounting, reducing the role of auditing firms, and for the execution of smart contracts, which would reduce the expected costs of financial distress and reduce the need for litigation. Together these changes could profoundly alter the relative power of managers, shareholders, lenders, regulators, and third-party experts who interact in the corporate governance arena.

Author notes

I thank Conference Team, PG & Research Dept. of Commerce, Loyola College, Chennai, seminar, and conference participants at the Loyola College. The topic Block Chain is technology oriented and emerging concepts and application of technology -Complex Crypto currencies, the information sourced from various published articles and google scholarly reports and newspaper and journals, and the names are given in efference below:

Annexure:1



Annexure:2

References

1. Discussion paper on blockchain technology and competition Ernst & Young LLP
2. Ripple. (2015). Solutions To Send Money Globally, Using Blockchain Technology.[online] Available at: https://www.ripple.com/ripplenet
3. Blockchain Technology and Decentralized Governance: Is the State Still Necessary? Marcella Atzori, Ph. D.December, 2015.
4. Nakamoto S Bitcoin: A peer-to-peer electronic cash system. Available online at https://bitcoin.org/bitcoin.pdf (2008). Last accessed: 2020-10-20
5. BLOCKCHAIN TECHNOLOGY AND CORPORATE GOVERNANCE - Organisation for Economic Co-operation and Development DAF/CA/CG/RD(2018)1/REV1 Unclassified English - Or. English 6 June 2018-Unclassified.
6. RBI Circular DOR. AML.REC 18 /14.01.001/2021-22

Online and Google references:

a) https://bitcoin.org/en/faq#how-are-bitcoins-created

b) https://www.bbc.com/news/business-59129466
c) Report of the Committee to propose specific actions to be taken in relation to Virtual Currencies February 28, 2019
d) Proceeds of Crime (Money Laundering) and Terrorist Financing Act (S.C. 2000, c. 17)
e) Digital Currency, Financial Consumer Agency of Canada, Government of Canada
f) Payment Services Act, Act No. 59 of 2009
g) https://www.coindesk.com/markets/2021/12/16/indian-crypto-exchange-wazirxs-trading-volume-jumps-to-over-43b-in-2021/
h) https://www.ethereum.org 10 http://www.omnilayer.org 11 https://erisindustries.com
i) For a general introduction to Bitcoin, see https://en.bitcoin.it/wiki/Main_Page and http://www.michaelnielsen.org/ddi/how-the-bitcoin-protocol-actually-works/. For more in-depth technical explanations, see Antonopoulos (2015).
j) https://www.sdx.com/news/fqx-and-six-digital-exchange-collaborate-blockchain-based-short-term-debt-instruments
k) https://ethereum.org/en/what-is-ethereum/
l) https://www.tookitaki.ai/compliance_hub/cryptocurrency-regulation-in-canada-2020/; https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/canada
m) https://www.loc.gov/law/help/cryptocurrency/australia.php#_ftn51; https://www.loc.gov/law/help/cryptocurrency/australia.php;
n) https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/australia; https://www.lexology.com/library/detail.aspx?g=b0f981f6-af9c-408b-ad8d-fdf0a8f2d43b.

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A brief review on rGO/Rare Earth Metal Oxide Nanocomposites as electrode materials for Supercapacitor Applications.

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Abstract: Keeping in mind the need of conserving the renewable sources of energy, exploring new techniques and devices for energy harvesting and energy storage has become a need of the hour. In this regard supercapacitors play a very important role in the aspect of energy storage. Unlike conventional capacitors, supercapacitors are different due to its unique properties such as high specific power, fast charge/discharge cycles, wide temperature range and considerable cyclic stability. Its increased cyclic stability is due to the fact that the charge storage mechanism of supercapacitors does not involve any chemical reaction that in turn makes it more reliable to opt over conventional capacitors. In particular, Graphene is attracting the researchers to be used as an electrode material for supercapacitors due to its reliable physical, structural and electrochemical properties. Since Graphene alone cannot meet the requirements of good supercapacitor, it is being used with other materials such as conducting polymers, ferrites, metal oxides, etc., to improve its performance. In this review, an attempt is made to focus on some Reduced Graphene Oxide Rare Earth Metal Oxide Nano composites used as electrode materials for supercapacitor applications.

Introduction

Supercapacitors have become promising energy storage devices with their efficient charge/discharge mechanism. Based on their charge storage mechanism, they are classified into three types: 1. Electric Double Layer Capacitors (EDLC)-where the energy is based on the electrostatic storage of charges at the interface between the electrode and the electrolyte. 2. Pseudocapacitors-where the charge storage occurs not only on the surface of the redox-active material but also throughout the material. 3. Hybrid supercapacitors-are the type of supercapacitors that occur when the electrical double layer capacitor and pseudo capacitor are used together [1].

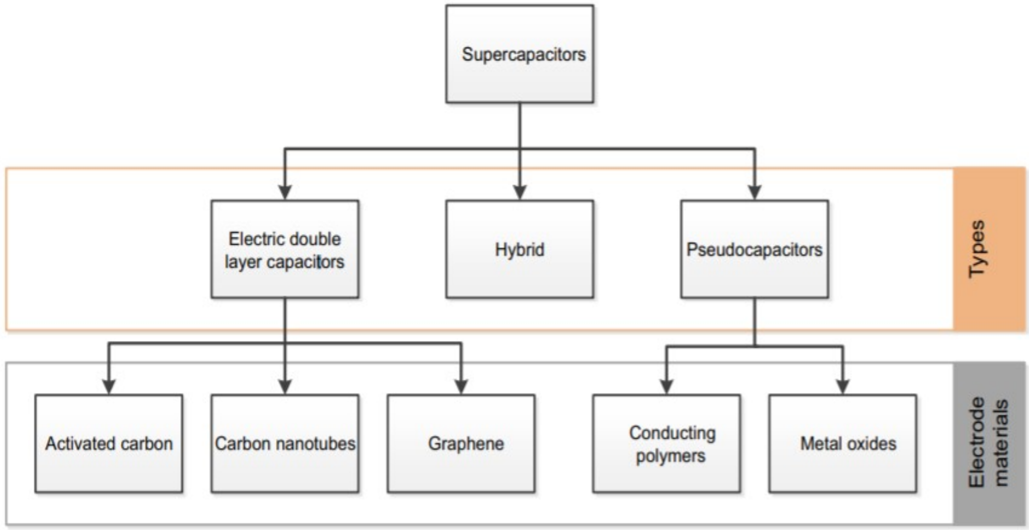

Fig: Classification of different supercapacitors [2]

The important factors that affect the performance of supercapacitors are crystal structure, crystallinity, morphology, pore structure and specific surface area, thickness of the electrode and physio-chemical factors [3]. Graphene is one-atom thick two-dimensional planar sheet of sp^2 hybridised atoms that act as a building block for all the carbon allotropic dimensionalities. [4-6, 7, 8] An essential characteristic of an electrode material, particularly important in energy production and storage, is surface area. The theoretical surface area of graphene is reported to be 2630 m^2 g^{-1}, surpassing that of both SWCNTs and graphite which are reported to be ~1315 m^2 g^{-1} and ~10 m^2 g^{-1} respectively [9]. Since Graphene alone cannot meet the requirements of good supercapacitor, it is being used with other materials such as conducting polymers, ferrites, metal oxides, etc., to improve its performance. To improve the specific capacitance and the energy density, rare earth metal oxides are being investigated as the alternative materials for supercapacitor electrodes.

RGO/Rare Earth Metal Oxide Nanocomposites

Because of their unique optical, catalytic, and electrochemical properties, that arise from the accessibility of the shielded 4f levels, rare earth metal oxides are grabbing the attention of researchers to decorate with reduced Graphene Oxide in the form of nanocomposites that can be used as an effective electrode material for the supercapacitors.

Reduced Graphene Oxide (RGO)/CeO_2 nanocomposites

Zhenyuan Ji et all [10] designed and synthesized reduced graphene oxide (RGO)/CeO_2 nanocomposites with enhanced capacitive performance by a facile two-step approach with a self-assembly method followed by thermal treatment. CeO_2 is considered as a favourable material to be used with rGO due to its property of fast and reliable mutation of the oxidation state of Cerium between Ce (III) and Ce (IV) [11]. In this particular work, Graphene Oxide is obtained from natural graphite flakes by the modified Hummer's method[12] and the required CeO_2 colloidal nanosuspensions were obtained according to the work of Zhenyuan Ji et al [13]. The RGO/CeO_2 nanocomposites were synthesised by a facile two step approach with a self-assembly method followed by thermal treatment. The aggregation and the CeO_2 nanocrystals in the annealing process are controlled by the presence of RGO.

Fig 1: A schematic diagram for the preparation of RGO/CeO_2 Nano composites [10]

The as prepared RGO/CeO_2 nanocomposite electrode delivered a specific capacitance of 265 Fg^{-1} at a scan rate of $5mVs^{-1}$ and showed excellent cycling stability. These results demonstrated excellent potential of RGO/$CeO_2$266 nanocomposites as electrode material [10].

CeO2–SnO2/rGO Nanocomposites

Godlaveeti Sreenivasa Kumar et all synthesised Sno_2-Ceo_2/rGO nanocomposites by hydrothermal method. Among all the rare earth metal oxides, CeO2 is widely the used one because of its ease of availability, comparatively low cost, non-toxic, eco-friendly and posess good electrochemical redox properties. However its poor electrical conductivity made to form CeO_2 based composites to form with other metal oxides like MnO_2, SnO_2, etc. [14]

Table 1: Precursor molar concentration with specific indication and specific capacitance

Precursors molar ratio $Ce(SO_4)_2 \cdot 4H_2O:SnCl_2 \cdot 2H_2O$	Output martial	Specific indication	Specific capacitance (F/g)
0.08 M:0.02 M	CeO_2/SnO_2	CS-1	97
0.05 M:0.05 M	CeO_2/SnO_2	CS-2	75
0.02 M:0.08 M	CeO_2/SnO_2	CS-3	70
0.1 M $(CeSO_4)_2 \cdot 4H_2O$	CeO_2	C	41
0.1 M $(SnCl_2 \cdot 2H_2O)$	SnO_2	S	52
With GO 0.08 M:0.02 M	CeO_2–SnO_2/rGO	RCS-1	156

[14]

Above table clearly indicates that the sample with a combination of transition metal oxide with the rare earth metal oxide made composite with the reduced Graphene Oxide has higher value of specific capacitance relative to all the other molar concentrations used individually. In particular, the CeO2–SnO_2/rGO exhibited an excellent specific capacitance of 156 F g^{-1} at 0.5 A/g in the presence of 3 M KOH solution. [14]

CeO_2-MnO_2/RGO Nanocomposites

Low specific surface area and poor electrical conductivity of MnO2 limits its specific capacitance. It is necessary to improve the specific capacitance that can be achieved by accessing it with one of the prominent rare earth metal oxides i.e., CeO_2 which is known for its oxygen storage capacity[15]. Graphene being with intense properties like structure(2D), surface area (~ 2600 m2 /g), electronic properties, conductivity (10^3 -10^4 S/m^2), it is widely used as an electrode material for supercapacitors. In this work, CeO2 doped MnO2 nanorods anchored on RGO nano-sheets synthesized by hydrothermal process, exhibited combined merits of a multi-component composite as a supercapacitor electrode material. The value of specific capacitance is found to be 648 F/g at the scan rate of 5mV/s. After 1000 cycles, it retained ~ 90.4%, exhibiting a good stability[16].

LaNPs doped rGO Nanosheets

In the present work Lanthanum Nanoparticles were uniformly distributed among the rGO to obtain a Nano composite. By varying the concentration of LaNPs on rGo, considerable change in the electrochemical behaviour of the Nano composite was observed. Reduced Graphene Oxide was obtained from Modified Hummers Method and the LaNP anchored rGO is prepared by simple hydrothermal method.

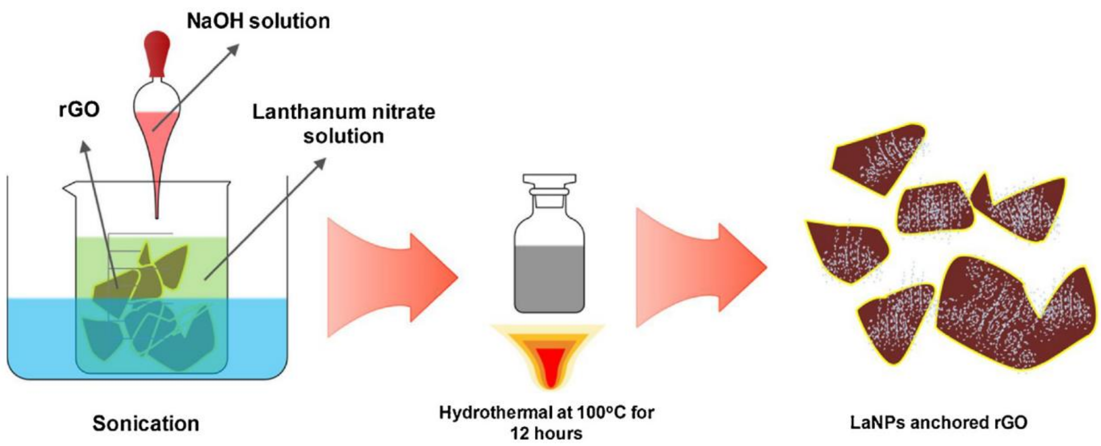

Fig 2: Schematic diagram for the preparation of the LaNP-anchored rGO Nanosheets

Different samples were prepared by changing the molar concentration and it was found that the LaG 12 showed a better areal capacitance of 889.29 F cm^{-2}[17].

RGO/β-Ni(OH)2/CeO2 Nanocomposites

Sreenivasa Kumar Godlaveeti et all synthesized RGO/β-Ni(OH)2/CeO2 ternary nanocomposite by hydrothermal method followed by a solid state method at room temperature. There is a drastic change in the value of the obtained specific capacitance when these ternary nanocomposites were allowed to add a very low quantity of as-prepared bare TiO2 nanorods (NRs), SnO2 nanparticles (NPs) and MnO2 NRs to prepare quaternary nanocomposites. And the superior specific capacitance of this quaternary nanocomposite was found to be about 1250 $F.g^{-1}$ at current density 0.5 A.g−1 in 3 M KOH aqueous electrolyte solution. In the present work, Graphite oxide is obtained by Modified Hummers Method and is reduced using a chemical method with NaBH4 as a reducing agent. And the individual CeO2 nanoparticles, β-Ni(OH)2 nanoparticle, SnO2 nanoparticles, TiO2 nanorods, MnO2 nanorods were obtained by the hydrothermal method. In order to obtain the ternary and quaternary nanocomposites, RGO, β-Ni(OH)2 and CeO2 were taken with weight ratio (10:45:45) and quaternary nanocomposites are prepared. In the same way, replacing CeO2 by other nanoparticles, remaining quaternany nanocomposites are obtained.[18]

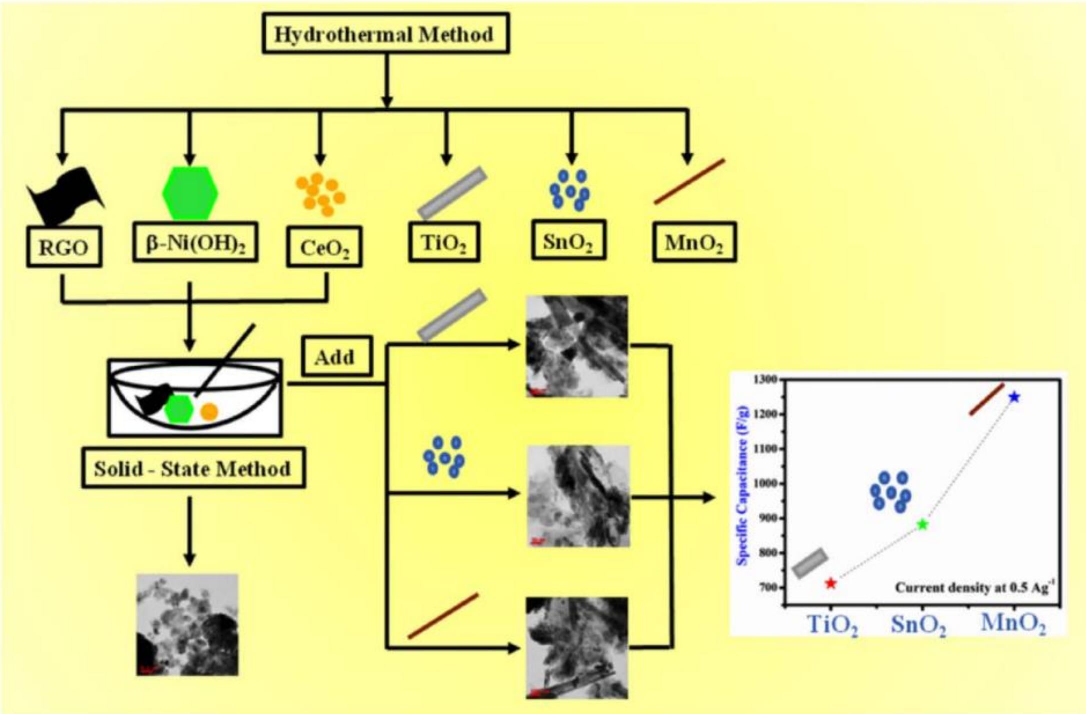

Fig 3: Graphical abstract of the ternary and quaternary nanocomposite materials for supercapacitor application [18]

Y-rGO nanocomposites

Rare earth metal-oxide (yttrium oxide nanoparticles, Y_2O_3NPs) doped reduced graphene oxide nanosheets (rGONSs) nanocomposites (Y-rGO) were prepared by M. Muthuselvi et all and applied as hybrid electrode materials to evaluate the supercapacitor performances. Electrochemical studies reveal that 5 wt% Y-rGO displays improved supercapacitor performance with a high specific capacitance of 190 Fg^{-1}at 10 mVs^{-1} and also exhibits excellent cyclic retention of 88% due to the intercalation of rGO and less contact resistance facilitated by Y_2O_3NPs when compared with 3 wt% Y-rGO and 10 wt% Y-rGO nanocomposites. Further, 5 wt% Y-rGO display a very low charge-transfer resistance of 0.001 Ω, suggesting its commercial viability for energy storage devices.[19]

SmNRGO Nanocomposites

Amin Shiralizadeh Dezfuli et all synthesized Sm_2O_3 nanoparticles (SmNs) and anchored them onto the surface of reduced graphene oxide (RGO) through a self-assembly thereof by utilizing a facile sonochemical procedure. The SmNs decorated RGO (SmNRGO) nanocomposites were found to possess a specific capacitance (SC) of 321 Fg^{-1} when used in a

0.5 M Na2SO4 solution as an electrolyte, in a scan rate of 2 mVs^{-1} . The SC of the SmNRGO based electrodes was also found to be 268 F g^{-1} at a current density of 2 A g^{-1} through galvanostatic charge-discharge tests.[20]

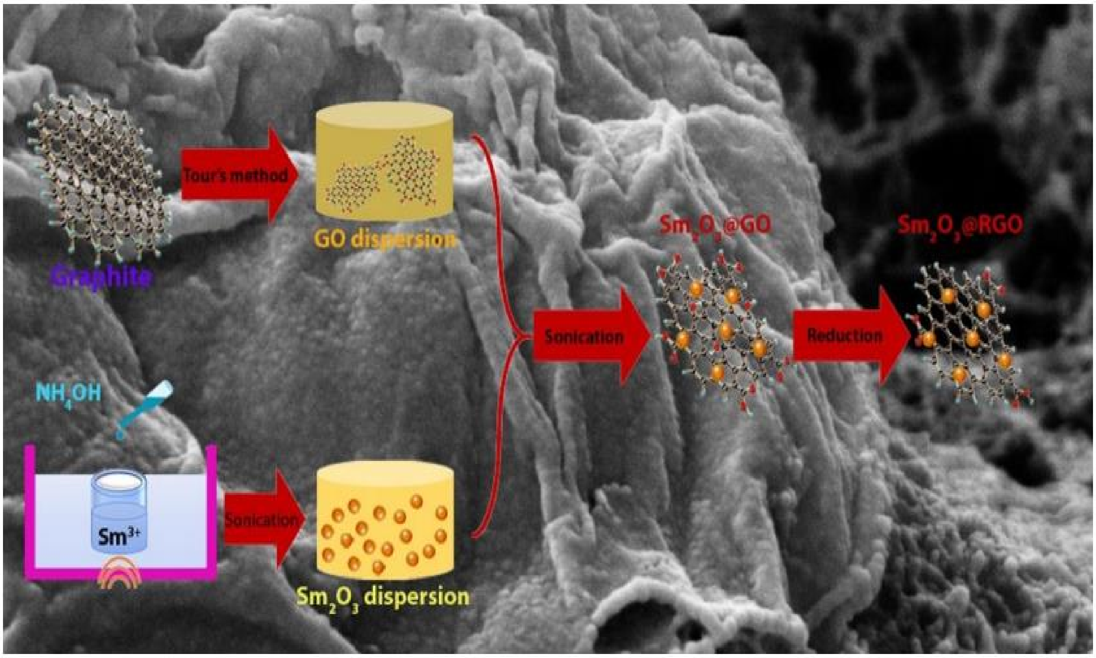

Fig 4: Scheme of synthesis of SmNRGO[20]

CeO_2 –RGO Nanocomposites

Amin Shiralizadeh Dezfuli et all developed a novel nanocomposite material of ceria (CeO_2)-reduced graphene oxide (RGO) by sonochemical route for the application as symmetric supercapacitors. CeO_2 -RGO nanocomposite electrodes exhibited excellent supercapacitive behavior with high specific capacitance of (211 F g^{-1} at 2 mV s^{-1} and 185 F g^{-1} at 2.0 A g-1), high-rate capability and well reversibility.[21]

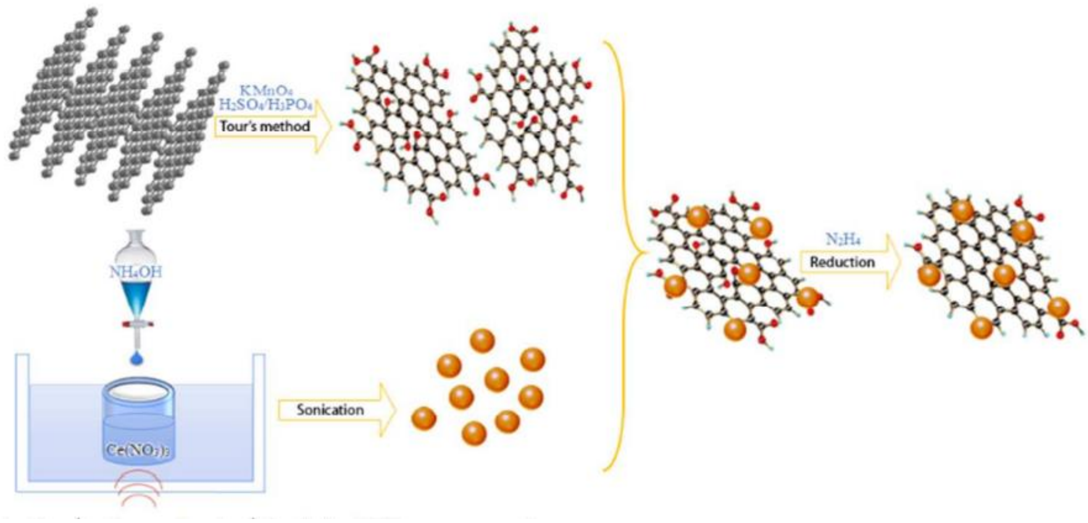

Fig 5: Schematic illustration for the synthesis of CeO2-RGO Nanocomposites[21]

EuN-RGO Nanocomposites

Hamid Reza Naderi et all synthesised Eu2O3 nanoparticles (EuNs) by means of a facile sonochemical procedure and anchoring them onto the surface of reduced graphene oxide (RGO), through self-assembly the results proved that EuNs decorated RGO (EuN–RGO) have a specific capacitance (SC) of 313 F g−1 in a 3.0 M KCl electrolyte, at 2 mV s−1; and also 268 F g−1 under a current density of 2 Ag−1 based on the galvanostatic charge–discharge evaluations.[22]

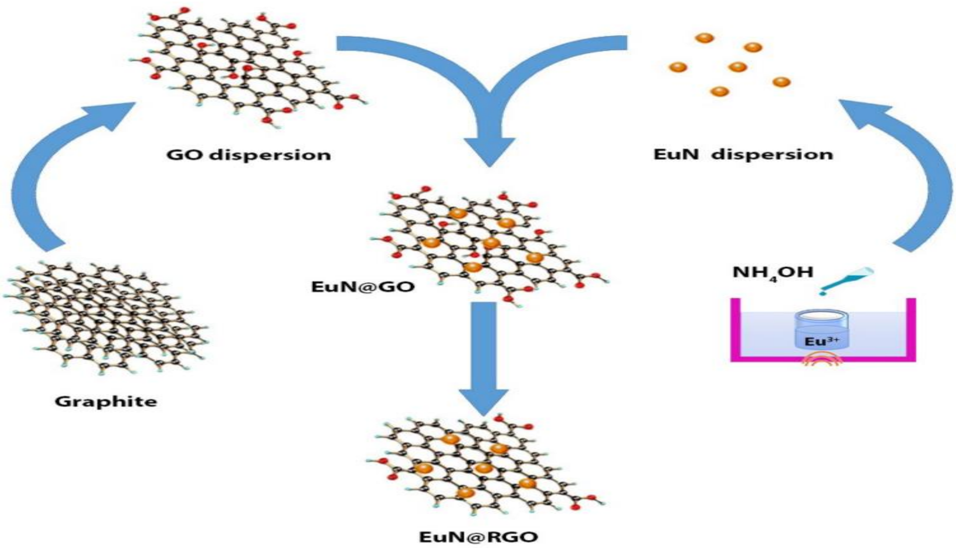

Fig 6: Scheme of synthesis of EuNRGO Smaples [22]

Conclusions

In this review, an elementary overview of the specific capacitance of rare earth metal oxide with rGO nanocomposites is done. Here we have tried to analyse the best among the above discussed nanocomposites.

Sl. No.	Type of Nanocomposite	Specific Capacitance(F/g)
1	(RGO)/CeO_2	265
2	Sno_2-Ceo_2/rGO	156
3	CeO_2-MnO_2/RGO	648
4	LaNP-anchored rGO	889.29 Fcm^{-2}
5	RGO/β-Ni(OH)2 based ternary and quaternary nanocomposites	1250
6	Y-RGO	190
7	SmNRGO	321
8	CeO_2 –RGO	211 and 185
9	EuN-RGO	313

From the above table, we can understand that among the most used rare earth metal oxide reduced grapheme oxide nanocomposites, rather than using binary nanocomposites, superior value of specific capacitance is obtained by using ternary and quaternary nanocomposites. And combination-transition metal oxide-rare earth metal oxide-reduced graphene oxide nanocomposites can be used as a prominent electrode material for supercapacitor applications.

References

[1] Nevin Taslatin, Yilmaz Zirek, Metehan San, Cihat Tasaltin, Selcan Karakus, Ayben Kilislioglu, Physics E 116 (2020) 113766

[2] Saswata Bose, Tapas Kuila, Ananta Kumar Mishra, R. Rajasekar, Nam Hoon Kim and Joong Hee Lee, *J. Mater. Chem*., 2012, 22, 767.

[3] S. Arunachalam, B. Kirubasankar, D. Pan, H. Liu, C. Yan, Z. Guo, S. Angaiah, Research progress in rare earths and their composites based electrode materials for supercapacitors, Green Energy & Environment.

[4]A.K.Geim,K.S.Novoselov,Nat.Mater.6(2007)183. 18

[5] D.Chen,L.Tang,J.Li,Chem.Soc.Rev.39(2010)3157.

[6] M.Pumera,Chem,Rec,9(2009)211.

[7]W.Yang,K.R.Ratinac,S.P.Ringer,P.Thordason,J.J.Gooding,F.Braet,Angrew. Chem.49(2010)2114.

[8] R.L.McCreery.Chem.Rev.108(2008)2646.

[23] M.Pumera,Chem,Rec,9(2009)211.

[10] Zhenyuan Jia, Xiaoping Shena, Hu Zhoub, Kangmin Chenb, Ceramics International 41 (2015) 8710 8716.

[11] https://pubs.acs.org/doi/10.1021/jp312169j

[12] https://sci-hub.hkvisa.net/10.1039/c2jm14680k

[13] https://iopscience.iop.org/article/10.1088/0957-4484/24/11/115603

[14] Godlaveeti Sreenivasa Kumar, Somala Adinarayana Reddy, Hussen Maseed and Nagireddy Ramamanohar Reddy, Functional Materials Letters Vol. 13, No. 2 (2020) 2051005 © World Scientific Publishing Company DOI: 10.1142/S1793604720510054.

[15] D. Deng, N. Chen, Y. Li, X. Xing, X. Liu, X. Xiao, Y. Wang, Cerium oxide nanoparticles/multi-wall carbon nanotubes composites: Facile synthesis and electrochemical performances as supercapacitor electrode materials, Physica E: Low-dimensional Systems and Nanostructures.

[16] Gunendra Prasad Ojha, Bishweshwar Pant, Soo-Jin Park , Mira Park, Hak-Yong Kima, Journal of Colloid and Interface Science, http://dx.doi.org/10.1016/j.jcis.2017.01.100.

[17] Rajesh Rajagopal, Kwang-Sun Ryu, Journal of Industrial and Engineering Chemistry 60 (2018) 441-450.

[18] Sreenivasa Kumar Godlaveeti et al 2020 Adv. Nat. Sci: Nanosci. Nanotechnol. 11 025021.

[19] M. Muthuselvi K. Jeyasubramanian G.S. Hikku M. Muthuselvan Muthusankar Eswaran N. Senthil Kumar Vinoth Kumar Ponnusamy, Int J Energy Res. 2021;45:8255–8266.

[20] Amin Shiralizadeh Dezfuli , Mohammad Reza Ganjali, Hamid Reza Naderi, http://www.elsevier.com/open-access/userlicense/1.0/

[21] Amin Shiralizadeh Dezfuli et all, DOI: 10.1039/C5RA02957K.

[22] Hamid Reza Naderi, Mohammad Reza Ganjali, Amin Shiralizadeh Dezfuli. Journal of Materials Science: Materials in Electronics https://doi.org/10.1007/s10854-017-8234-2

[23] https://iopscience.iop.org/article/10.1088/1742-6596/1410/1/012057/pdf

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Study of Frustration among the Teachers of Higher Secondary Schools

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[1]Research Scholar and [2]Research Supervisor

ABSTRACT

A present study has been done to know the problems of Higher Secondary School teachers. The major aim of this study is to know the effect of Gender & area. In the present study, the researcher used the self-made frustration Inventory based on the achieved scores of the data distributed as per the variable of the study. To check out the significant difference between the null hypotheses; average, standard error and t-value have been calculated.

Keywords: *Frustration, Educational Psychology*

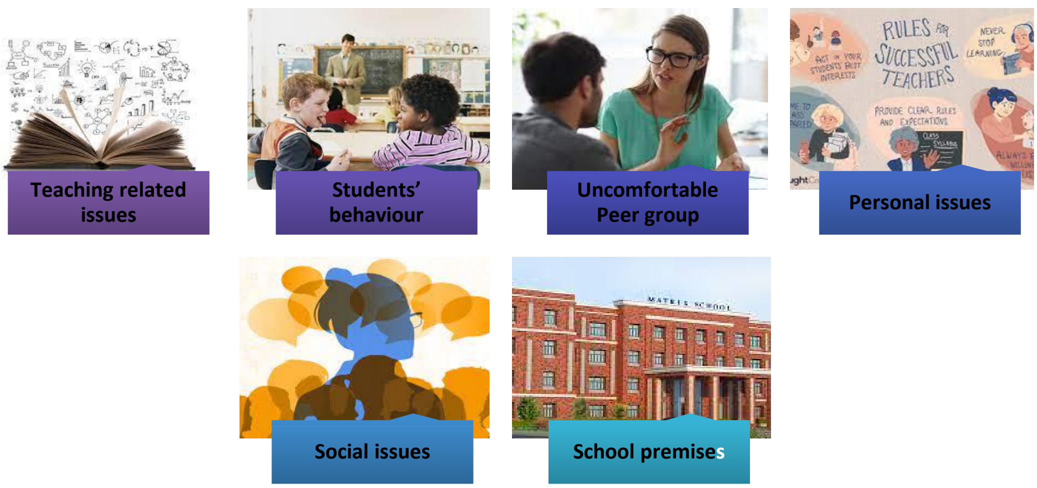
Frustration is a natural phenomenon in human life. People who are constantly involved in society and human life often feel frustrated because of social restrictions, disabilities, and attachments. Most often, big or small frustrations occur. Small frustrations are easier to handle than large frustrations. However, there are individual differences in the ability to withstand rather than frustration. In a frustrating situation where a person is frustrated, it depends on the frustrated person and the situation. Some people are dissatisfied with the small difficulties they face with patience and wisdom. Frustration situations are more likely to be seen in high school teachers. Because of this researcher's belief, she does this research to get information about the frustration of high school teachers which may be helpful to future research.

A Study of Frustration among the Teachers of Higher Secondary Schools

Impact of the Frustration on Teachers and their Studies

The classroom is recognized as a source of considerable emotion for teachers. Frustration is often associated with disturbed goals, such as student misconduct and rule violations. (e.g., Hargreaves, 1998; King, 2016b; Nias, 1996; Zembylas, 2002) In school -class factors that make it difficult to teach well, uncooperative peers, and parents who do not follow appropriate guidelines, they also become reasons for frustration. It will also arise from the cause for personal and physical reasons. Teachers get disappointed when they believe that a student's poor academic performance is due to controllable factors such as laziness and carelessness. Many teachers report that most experiences of frustration are not small, but emotions that pass through, are intense it is last for more than an hour, and are associated with prominent physical sensations. Intrusive thought makes it difficult to focus on study. These are the reasons that show why the researcher selected this topic for research. And why it is necessary to study the frustration of the teachers, which shows studies rationale.

- ❖ Teaching-related issues
- ❖ Students' behaviour
- ❖ Uncomfortable Peer group
- ❖ Personal issues
- ❖ Social issues
- ❖ School premises



Objectives of the study

- ❖ To study the Frustration of higher secondary school teachers in the context of Gender.
- ❖ To study the Frustration of higher secondary school teachers in the context of the Area.

The hypothesis of the study

- ❖ **Ho1** There will be no significant difference in the mean scores of frustration inventory between the male and female school teachers of higher secondary.
- ❖ **Ho2** There will be no significant difference in the mean scores of frustration inventory between the teachers of urban and rural areas.

Delimitation of the study

- ❖ The study was delimited to the sample of teachers of Ahmedabad city.
- ❖ The study was based on only Gujarati medium schools.
- ❖ The study was conducted with a self-made frustration Inventory

Research Method

In this study, the researcher adopted the survey method because it was necessary to collect information from a huge sample in a very short time.

Population

All teachers of Gujarati medium higher secondary schools of Ahmadabad city are the population of this study.

Sample of the study

In the present study, a stratified random sampling method was used. In this way, a total of 382 teachers (211 female and 171 male) were selected.

Tool of the study

In the present study, the researcher used the self-made frustration Inventory.

Method of Data Analysis

In the present research, the data was distributed concerning the gender and area of school of the teachers as the variables of the study. And the investigator based on the achieved scores of the data distributed as per the variable of the study, calculated the average, standard deviation, standard error and t-value for the assessment of the null hypotheses.

Reliability of Inventory

In the present research, the Test-Retest Method reliability was found 0.82 and the Slip-half Method reliability was found 0.91.

Finding of the study

- ❖ **The Effect of Gender on the frustration**

Statistics Effect of Gender

Gender	N	Mean	SD	SED	C.R.	Level of Significant
Male	211	130.01	16.00	1.54	1.36	NS
Female	171	132.11	14.13			

No gender effect was seen on the frustration of high school teachers. This means that gender does not affect frustration. Therefore, it was found that the level of frustration was the same for males and females.

- **The Effect of School Area on the frustration**

Statistics Effect of area

Area	N	Mean	SD	SED	t-value	Level of Significant
Urban	216	133.12	1.54	4.99	3.24	0.01
Rural	166	128.13				

The influence of the area on the frustration of high school teachers was noted, and the proportion of frustration of teachers in the urban area was higher than the teachers of rural areas. Thus, the range is frustrating.

References

1. Best, John W. (1963). Research In Education, New Delhi: Prentice-Hall of India Ltd.
2. Desai H.G & Desai K.G Psychological testing, University Granth Nirman Board, Ahmedabad.
3. Sansodhan Paddhatio, (1989). University Granth Nirman Board, Ahmedabad.
4. Parekh, B.U. and Manubhai D Trivedi (1994). Statistics in Education (Fourth Edition), University Granth Nirman Board, Ahmedabad.
5. Shah, Gunvant and Kulin Pandya, Shaikshanik Manovignan, Ahmedabad.
Links
https://www.google.com/search?q=Social+issues+issues++of+teachers
https://www.google.com/search?q=School+premises (e.g., Hargreaves, 1998; King, 2016b; Nias, 1996; Zembylas, 2002)

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A STUDY ON AWARNESS AND PERCEPTION ABOUT LITE COINS CRYPTO CURRENCY- WITH SPECIAL REFERENCE TO YOUTH IN JAMNAGAR CITY OF GUJARAT

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ABSTRACT:

Crypto currency founder by first time in 2009 by Japan. It is very useful and digital assets of any kind of digital transaction way sources. It is exchangeable and very useful to users. Trusted level day by day increased to them people also crypto currency used as a investment tool and got the highest return. India also finally accepted for tool of an investment level, and mostly people invest the money many kind of crypto currency . but knowledge also very useful to more and more profit earn but some risk also found to them in this side like, i.e. theft, loss, fraud, properly investment knowledge, cyber crime, etc many other some matter affect to them in this side but India still RBI as per norms and rules regulation very strong build in this side . finally users easily investment done on directly crypto currency side 2018 norms RBI mostly said that crypto currency very helpful to developed the nation. so many crypto currency available to them but LITE-COIN mostly very important helpful to transaction and done easily. LITE COINs also given to highest First Rank in Crypto Currency. It is a virtual digital assets.

(KEY WORDS : “Crypto Currency - Digital Assets”, “LITE COIN- Powerful Currency”, “RBI - 2018 Circular , Youth Generation, Awareness/Perception Level about crypto currency)

1. INTRODUCTION :

The any kind of Economic activity very powerful important part of the any organization / institution / corporate business. monetary system crypto currency also droops out this limitation because it is digital currency and operate online. people also trusted to this currency, LITE COINs its strong network around the world because mostly people also used this currency any time any KIND where (24x7) it is emerged which is being used in transactions for various purposes, known as CRYPTOCURRENCY. Crypto currency is a digital currency which is created for the purpose of transactions as a normal currency its exchanges and this network also very strong all about the world. **2020 RBI circular** some limit also decreased and fully finally it is trustable used for as a digital transaction said about the RBI.

2 LITERATURE REVIEW:

1. **Deep Vyas (2017) :** This paper about the crypto currency awareness in india . this paper mainly focus on how to reaction and how many times use of crypto currency so this side survey included with digital payment system and opinion about the crypto currency. Researcher taken the primary data survey with bit coin investor. 68 respondents covered to them in this study male respondents highest majority given to use as a crypto currency as a tool of investment 56% respondents crypto currency use as a store, 36.5% respondents say that bit coin as a perfect investment tool compared to other crypto currency. Chi square and ANOVA test result arrived in this side NULL hypothesis rejected and Alternative hypothesis accepted.
2. **Joseph & ytvini (2018)-***"A Study On Security Issues In Investments And Transactions In LITE COINs And Crypto currencies"* this research paper focus on security about the lITE COINs and investments, it is also effect to the technology, and this paper worked out prepare on risk management system but some regulation are also very effect to the security and some other factors also very helpful to done the digital transaction .
3. **Frenzel et al. (2019) :** In this paper main find out the data arrived on the majority also 66% of the respondents have at least a rough idea of what crypto currencies are. And highest majority given to 90% of the respondents have heard of Lite - coin. Deutsche Post - bank.
4. **Ante et al. (2020) :** This paper revised on the collected a sample size 3846 respondents statement it is a positive instrument of as a investment of crypto currency. It is more successful impact on the peroxide the self knowledge ratio it is a perfect role play to the level of knowledge about the crypto currency
5. **Saad ALAKLABI1, and Kyeong KANG1(2021***)"Perceptions towards Crypto currency Adoption: A case of Saudi Arabian Citizens* "The global financial market is influenced by relatively new technologies such as crypto currencies; namely LITE COIN, Ethereal, Lit coin, and others. Crypto currencies are a challenging area in finance that requires additional attention from the academic community as they can have a potentially large impact on society and the economy
6. **Rickard & Grassman & Vanessa & Bracamonte & Matthew Davis & Maki Sato (2021) :** In this research paper related to attitude of crypto currency with comparative

between Sweden vs Japan. Totally about the implication a new era also mostly used a crypto currency culturally situated for significance.

7. **Gaurav Sahu & Harsh Jain (2022) :** This research paper theorical background clearly show that technological/internet activities online plat form . in this developed technology change the scenario networked based crypto currency also valuable for the online transaction. It is virtual currency mostly popularity increased to them in 21^{st} century .mainly focus to how to work and what about the crypto currency pattern it is mostly affect to technical environment/network. Indian government recently concern to regarding the crypto currency and developed to growth with respective crypto currency like. Bit coin, block chain, ripple, lite coin etc.

3 RESEARCH METHODOLOGY:

3.1 STATEMENT OF THE PROBLEM:

"A STUDY ON AWARNESS AND PERCEPTION ABOUT LITE COINSCRYPTO CURRENCY -WITH SPECIAL REFERENCE TO YOUTH IN JAMNAGAR CITY OF GUJARAT "

3.2OBJECTIVES OF THE STUDY:

1. To study of the Awareness level and perception level of LITE COINs among youth people in Jamnagar city.
2. To understand the awareness and perception about LITE COINs among the youth people of Jamnagar city.

3.3 NEED/ IMPORTANCE OF THE STUDY:

Crypto currency totally new currency in new market. It is based on technology with government rules and regulations, so youth people also highest used and mostly awareness and perception about the crypto currency.

3.4 SCOPE OF THE STUDY:

The study is going to be conducted for Awareness And Perception about LITE COINs with special Reference to Youth People in Jamnagar City Of Gujarat.

3.5 SAMPLE UNITS OF THE STUDY :50 Respondents Statement.

3.6 TYPE OF THE STUDY: Survey Research

3.7 SOURCES OF THE DATA COLLECTION: Primary Data i.e. Questionnaire

3.8 SAMPLING TECHNIQUE: Convenience sampling

3.9 UNIVERSE OF THE STUDY: Youth People in Jamnagar City.

3.10 TOOLS AND TECHNIQUE OF THE STUDY: Percentage Analysis

4. FIGURES AND TABLES:

TABLE- 1 (PERSONAL DEMOGRAPHIC PROFILE OF THE RESPONDENTS)

Respondents (Age)	**No. of (Respondents)**	**Percentage (%)**
20-30	19	38 %
31-40	19	38 %
41-50	10	20%
Above 50	02	04 %
Total	**50**	**100%**
Respondents (Marital status)	**No. of (Respondents)**	**Percentage (%)**
Married	25	50%
Unmarried	25	50%
Total	**50**	**100%**
Respondents (Occupation)	**No. of (Respondents)**	**Percentage (%)**
Professional	15	30%
Business	21	42%
Employee	09	18%
Others	05	10%
Total	**50**	**100%**
Respondents (Annual Income)	**No. of (Respondents)**	**Percentage (%)**
Below 10,000Rs	14	28%
10,001 Rs -25,000 Rs	15	30%
25,001 Rs -50,000 Rs	12	24%
Above 50,000 Rs	09	18%
Total	**50**	**100%**
(Gender) of Respondents	**No. of (Respondents)**	**Percentage (%)**
Male	25	50%
Female	25	50%
Total	**50**	**100%**
Respondents (Education Qualification)	**No. of (Respondents)**	**Percentage (%)**
Ssc	10	20%
Hsc	12	24%
Graduate	15	30%
Post Graduate	08	16%
Other	05	10%
Total	**50**	**100%**

(Source: Primary Data Survey)

Interpretation:

Above table-1 show as the personally demographic profile of respondents, so it is Described on the clearly show that 50% were respondents male and 50% were female , next one Age classification clearly show that highest majority given to age between 20-30, and 31-40 years age group with 38% and 38% respectively then next classification about marital status - 25% respondents were married and only 25% respondents were unmarried., next one classification show about that business man of respondents highest majority given to 42% it is other professional level person given to low score in percentage . next classification clearly show that 30% respondents were income were 10,001 – 20,000 . and only 18% respondents income above 50,000. One more classification also show that education qualification of respondents highest majority also given to 30% graduate and low majority given to P.G. With 16%.

TABLE- 2 (Awareness / Perception About Crypto Currency – LITE COINs)

Particular	No. of (Respondents)	Percentage (%)
Yes	38	76%
No	12	24%
Total	**50**	**100%**

(Source: Primary Data Survey)

►Interpretation:

►Above Table NO.-2 clearly show that 76% respondents were awareness/perception status say yes and only 24% respondents were awareness/perception status say No.

TABLE- 3 (Choose crypto currency LITE COIN as)

Particular	No. of (Respondents)	Percentage (%)
Currency	27	54%
Investment Tool	23	46%
Total	**50**	**100%**

(Source: Primary Data Survey)

►Interpretation:

►Above Table NO. - 3 clearly show that 54% respondents were use as currency and LOW majority given to 46% investment tool.

TABLE- 4 (LITE COIN Risky Or Not)

Particular	No. of (Respondents)	Percentage (%)
Yes	37	74%
No	13	26%
Total	**50**	**100%**

(Source: Primary Data Survey)

►Interpretation:

►Above Table NO. – 4 clearly show that 74% respondents say yes and ONLY 26% respondents say No

TABLE- 5 (ROI IN LITE COIN)

Particular	No. of (Respondents)	Percentage
Highest	42	84%
Middle	05	10%
Lowest	03	06%
Total	**50**	**100%**

(Source: Primary Data Survey)

►Interpretation:

►Above table NO. – 5 Described shown that level of LITE COIN as a tool of investment highest majority given to 84% high return , 10% middle , only 06% lowest return on in ROI of LITE COIN.

TABLE - 6 (DOMINANT AS THE FUTURE CURRENCY IN LITE COIN)

Particular	No. of (Respondents)	Percentage
Yes	42	84%
No	08	16%
Total	**50**	**100%**

(Source: Primary Data Survey)

►Interpretation:

►Above table NO. – 6 Described shown that Dominant As the Future Currency level of LITE COIN, 84% respondents chosen as dominant future currency and only 16% respondents were not chosen as the dominant as the future currency .

5. SUGGESTIONS :

5.1 Strong Rules and Regulation very low its need to firstly made perfect.

5.2 Some others factors also need to improvement development

5.3 Legalization factors

5.4 Some others factors needs .

6. MAIN FINDINGS:

6.1) the personally demographic profile of respondents, so it is Described on the clearly show that 50% were respondents male and 50% were female , next one Age classification clearly show that highest majority given to age between 20-30, and 31-40 years age group with 38% and 38% respectively then next classification about marital status - 25% respondents were married and only 25% respondents were unmarried., next one classification show about that business man of respondents highest majority given to 42% it is other professional level person given to low score in percentage . next classification clearly show that 30% respondents were income were 10,001 – 20,000 . and only 18% respondents income above 50,000. One more classification also show that education qualification of respondents highest majority also given to 30% graduate and low majority given to P.G. With 16%.

6.2)76% respondents were awareness/perception status say yes and only 24% respondents were awareness/perception status say No.

6.3) 54% respondents were use as currency and LOW majority given to 46% investment tool.

6.4) As a LITE COIN Risk: 74% respondents say yes and ONLY 26% respondents say No.

6.5)ROI In LITE COIN : that level of LITE COIN as a tool of investment highest majority given to 84% high return , 10% middle , only 06% lowest return on in ROI of LITE COIN

6.6)that Dominant As the Future Currency level of **LITE COIN**, 84% respondents chosen as dominant future currency and only 16% respondents were not chosen as the dominant as the future currency .

7. LIMITATIONS:

7.1) This study conducts only of **JAMNAGAR** city of Gujarat (LITE-COINS)

7.2) Primary Data covered

7.3) Time Consuming

7.4) Very costly

7.5) Limited Sample Size

7.6) limited Demographic factor

7.7) Youth people

8. FUTURE SCOPE:

8.1) Other District/City wise

8.2) National/International Level

8.4) Other Demographic Factors wise

►REFERENCES:

► Books/Magazines/Journals:

► Saad ALAKLABI & Kyeong KANG (2021)" IBIMA *Publishing",*vol.-2021,No.-1,ISSN NO.-2165-9982, 2021, PP(01-17).

►Deep Vyas (2017**), "***IJRAR"*, Vol.No.-6, Issue No. – 1, ISSN NO.-2348-1269, March-2017, pp(774-779)

►Frenzel At Al. (2019**), "***IJRCM"*, Vol.No.-2, Issue No. – 2, ISSN NO.-2368-1456, January-2019, pp(1-18)

►Gaurav Sahu & Jain (2022**), "***IJRAR"*, Vol.No.-6, Issue No. – 1, ISSN NO.-1258-4569, July-2022, pp(1-20)

Joseph & ytvini (2018) - "*A Study On Security Issues In Investments And Transactions In Lite coins And Crypto currencies"*, The IASMS Bi-annual Journal of Business Spectrum, 2018, Volume: XI, Number: 2, pp.14-27. (DOI: https://cryptocurrencyLitecoin2015797821%34.pdf)

Kothari C.R. (2004*), "Research Methodology"* National publishingHouse. 2004 pp (22-48,112-146) (DOI: https://kotharic.r.786%ahodgc2015793.pdf)

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IMPACTS OF PSYCHOLOGICAL STRESS AMONG COLLEGE STUDENTS

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ABSTRACT

OBJECTIVES: The present study is to know the level of psychological stress among college students. From this perspective, the current research was aimed to examine the Causes and consequences of psychological stress among the students in colleges.

SETTING: The study was conducted among the college students.

DESIGN: In order to obtain the reliable primary data from 460 samples of respondents were using self-developed structural Questionnaire. Questionnaire link was sent to students via Whatsapp and email using the "Google Form", because of COVID pandemic lockdown situation and to assessing their psychological stress.

MAIN OUTCOMES: In conversion from school to college is makes stressful to students. Stress is crucial part of everyone's lives. College is more stressful time because of many students has to become accustomed from old to a new academic style and social environment. Psychological stress is a popular term that refers to processes that are believed to contribute to various mental and physical conditions.

RESULTS: The test shows that there is no significant difference between causes of psychological stress and the consequences of psychological stress.

CONCLUSION: The researcher suggested that college students' stress where can be overcome by following the method of analyzing individual behavior and students are advised to be aware of their stress and be prepared to take the necessary steps to reduce stress.

KEYWORDS

Causes, College, Consequences, Students, Psychological Stress, Stressors

INTRODUCTION

Stress is a usual response to the body has when changes will happen. It can take action to these changes in emotionally or mentally, physically and psychological. Stress can be distinct in various forms like physical, psychological, and emotional also. In India education is compulsory and no cost to all of their people which is basic right surefire by the constitution. Stress has turn out to be a significant subject matter in academic field. It makes an impact on lives both positive as well as negative. It can also causes by psychological conditions such as temperament, anger, unnecessary worries, scare of employability and perfectionism. Students suffer stressed even chronic anxiety, no new ideas, erratic thinking, low productivity and impulsive actions. Not only the mentioned stress causes, but they also stressed when disturbing thought, feeling of inferiority and pessimistic attitude. This study brings to bear on the causes of psychological stress and the consequences of psychological stress among college students.

METHODOLOGY

Descriptive research was undertaken to assess the students' level of psychological stress. The researcher collect the primary data from 460 samples of respondents were using self-developed structural Questionnaire. Questionnaire link was sent to students via Whatsapp and email using the "Google Form", because of COVID pandemic lockdown situation and to assessing their psychological stress. The researcher collected the data and analyzed it with the help of percentage analysis, reliability test, Garrett Rank, Fisher's Exact Test, and paired sample test to analyze the data using SPSS software.

PSYCHOLOGICAL STRESS

Everyone has different stress triggers. In psychology stress is the feeling of emotional strain and stress. Depression is a form of psychological pain. Small amounts of stress may be desirable, beneficial, and healthy. Several psychological, cognitive, and personal variables were affect health and college academic achievement among students.

Table 1 ANOVA for Reliability Statistics for Psychological Stress

Items		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig**
Between People		4947.355	459	10.779	**19.111**	**.000**
Within People	Between Items	313.890	19	16.521		
	Residual	7538.710	8721	.864		
	Total	7852.600	8740	.898		
Total		**12799.955**	**9199**	**1.391**		
Grand Mean = 2.03		Cronbach's Alpha = 0 .920			N = 20	

Source: Derived

The reliability analysis for the Psychological stress is tested through Cronbach's Alpha test, the value is 0.920 which is the good measure of reliability. It is known from the ANOVA test that the mean square Between People is 10.779 and Between Items is 16.521. The F value is 19.111 and is statistically significant as the p value is 0.000 which is less than

0.05. The grand Mean is 2.03 and so it is stated that 20 statements taken for analysis are statistically significant and can be used for further analysis.

Table 2 Garrett Rank for Psychological Stress

Psychological Stress	**Total Garrett Value**	**Garrett Rank / Mean Score**	**Rank**
Temperament / anger	19235	41.82	**I**
Unnecessary worries	19120	41.57	**II**
Scare of employability	19080	41.48	**III**
Perfectionism	18670	40.59	**IV**
Procrastination (Postponement)	18125	39.40	**V**
Low self esteem/Lack of Self Confidence	18055	39.25	**VI**
Lack of motivation	18000	39.13	**VII**
Lack of assertiveness	17970	39.07	**VIII**
Lack of co-students' understanding himself	17945	39.01	**IX**
False Fantasies	17790	38.67	**X**
Disturbing Thought	17575	38.21	**XI**
Feeling of inferiority	17535	38.12	**XII**
Pessimistic Attitude	17230	37.46	**XIII**
Disappointment	17160	37.30	**XIV**
Thinking like an orphan	16775	36.47	**XV**
Unsecure	16760	36.43	**XVI**
Recent break up	16650	36.20	**XVII**
Love & affair	16590	36.07	**XVIII**
Loneliness	15720	34.17	**XIX**
Unknown Irritation	15350	33.37	**XX**

Source: Derived

The students are under stress based on their psychological stress and the reasons are ranked as per the Garrett Ranking Test. Temperament / anger ranked as first with the Garrett rank value of 41.82 and followed by the statements of Unnecessary worries ranked as second with 41.57, Scare of employability ranked as third with 41.48, Perfectionism ranked as fourth with 40.59, Procrastination (Postponement)ranked as fifth with 39.40, Low self esteem/Lack of Self Confidence ranked as sixth with 39.25, Lack of motivation ranked as seventh with 39.13, Lack of assertiveness ranked as eighth with 39.07, Lack of co-students' understanding himself ranked as ninth with 39.01, False Fantasies ranked as tenth with 38.67, Disturbing Thought ranked as eleventh with 38.21, Feeling of inferiority ranked as twelfth with 38.12, Pessimistic Attitude ranked as thirteenth with 37.46, Disappointment ranked as fourteenth with 37.30, Thinking like an orphan ranked as fifteenth with 36.47, Unsecure ranked as sixteenth with 36.43, Recent break up ranked as seventeenth with 36.20, Love & affair ranked as eighteenth with 36.07, Loneliness ranked as nineteenth with 34.17 and Unknown Irritation has last rank as twentieth with 33.37. Hence, it is understood that the major reasons for the psychological stress are Temperament/anger, Unnecessary worries, Scare of employability, Perfectionism, Procrastination (Postponement), Low self esteem/Lack of Self Confidence, Lack of motivation, Lack of assertiveness and Lack of co-students' understanding himself are make more stress to sample students and Thinking like an orphan, Unsecure, Recent break up, Love & affair, Loneliness and Unknown Irritation are not make more stress to sample respondents.

PSYCHOLOGICAL CONSEQUENCES

Some stressors may affects psychologically. They can also change performance, mood and their attitude. For find out the relationship between students' psychological consequence and the respondent's gender which is *Female and Male*.

Table 3 ANOVA for Reliability Statistics

Items		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig**
Between People		5730.719	459	12.485		
Within People	Between Items	140.956	14	10.068		
	Residual	4293.311	6426	.668	**15.070**	**.000**
	Total	4434.267	6440	.689		
Total		**10164.986**	**6899**	**1.473**		
Grand Mean = 2.03		Cronbach's Alpha= 0.946			N = 15	

Source: Derived

It is known from the ANOVA test that the mean square Between People is 12.485 and Between Items is 10.068. The F value is 15.070 and is statistically significant as the p value is 0.000 which is less than 0.05. The grand Mean is 2.03, Cronbach's Alpha is 0.947 which is the good measure of reliability and it can be considered that all the statements taken for study are reliable and further tests can be conducted.

H_0: There will be no association between Gender and Psychological Consequences of Stress

Table 4 Fisher's Exact Test for Psychological Consequences

Psychological Consequences	**Chi-Square**		**Fisher's Exact**		**Linear-by-linear association**	**Standardized Statistic**
	Value	**Asym. Sign.**	**Value**	**Exact Sign.**		
Feel that future is in dark	21.969	.000	22.149	**.000**	9.180	3.030
Negative attitude	18.192	.001	18.070	**.001**	11.520	3.394
Exaggerated sense of self-worth	10.943	.027	10.888	**.027**	6.564	2.562
Changes in mood	10.111	.039	10.055	**.039**	3.391	1.842
Poor concentration	9.708	.046	9.585	**.047**	6.471	2.544
Forgetfulness	9.552	.049	9.483	**.049**	1.302	1.141

Hopeless about the future	8.725	.068	8.619	.070	5.426	2.329
Hate themselves rather than other when annoyed	7.737	.102	7.651	.104	3.339	1.827
Low productivity	7.568	.109	7.493	.110	4.176	2.044
Impulsive actions	7.125	.129	7.072	.131	5.780	2.404
never take decision	7.072	.132	6.998	.135	2.476	1.573
Erratic thinking	6.676	.154	6.631	.155	5.356	2.314
Hate myself when seeing a fair complexioned person	6.464	.167	6.421	.168	5.546	2.355
Chronic anxiety	5.450	.244	5.361	.251	1.872	1.368
No new ideas	5.052	.282	5.039	.283	4.050	2.012

Source: Derived

As per this fisher's exact test, the consequences are ranked with the value of fisher's exact value, feel that future is in dark has 22.149 (p: 0.000), Negative attitude has 18.070 (p: 0.001), Exaggerated sense of self-worth has 10.888 (p: 0.027), Changes in mood have 10.055 (p: 0.039), Poor concentration has 9.585 (p: 0.047), Forgetfulness has 9.483 (p: 0.049), Hopeless about the future has 8.619 (p: 0.070), hate themselves rather than other when annoyed has 7.651 (p: 0.104), Low productivity has 7.493 (p: 0.110), Impulsive actions have 7.072 (p: 0.131), never take decision has 6.998 (p: 0.135), Erratic thinking has 6.631 (p: 0.155), hate themselves when seeing a fair complexioned person has 6.421 (p: 0.168), Chronic anxiety has 5.361 (p: 0.251) and No new ideas has 5.039 (p: 0.283). From this analysis that the majority of the psychological consequences are statistically not significant with the p values are more than 0.05 and accept the null hypothesis that states **there is no association between Gender and their Psychological Consequences of Stress** except feelings about their future is in dark, Negative attitude, Exaggerated sense of self-worth, Changes in mood, Poor concentration and Forgetfulness.

Table 5 Paired Samples Statistics for the Consequences of Psychological Stress

Items		**Mean**	**N**	**Std. Deviation**	**Std. Error Mean**
Pair 1	Causes of Psychological Stress	2.033	460	1.164318	0.054287
	Consequences of Psychological Stress	2.037	460	1.209816	0.056408

Source: Derived

The Consequences of Psychological Stress were measured with the help of the causes of Psychological Stress and it is found that there is considerable improvement in this case except one student has impacted their Psychological activities. The mean value of Causes of Psychological Stress is 2.033 and Consequences of Psychological Stress is 2.037. The average causes of psychological stress are 1.164318 and consequences of psychological stress are 1.209816.

Table 6 Paired Samples Correlations for the Consequences of Psychological Stress

Items		N	Correlation	Sig.
Pair 1	Causes of Psychological Stress & Consequences of Psychological Stress	460	0.517	.062

Source: Derived

The paired sample correlation reveals the fact that there is positive and little association prevails causes and consequences of psychological stress for students. The association is lesser in case of Causes of Psychological Stress and Consequences of Stress (0.517). This aspect is statistically not significant as the p values are more than 0.05 and the association between causes and consequences of stress are low.

Table 7 Paired Samples Test for the Consequences of Psychological Stress

Items		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval				
					Lower	Upper			
Pair 1	Causes of Psychological Stress & Consequences of Psychological Stress	0.020	1.142	0.053	-0.125	0.085	0.438	459	0.222

Source: Derived

As per this Paired Sample Test, mean difference between Causes and Consequences of Psychological Stress is 0.02, t value is 0.438, standard deviation is 1.142 and the standard error of mean is 0.053 which is not statistically significant as the p value is 0.222 which is more than 0.05. From this analysis the causes of psychological stress are affected and psychological consequences are from the psychological stress variables.

RESULTS

In this study most of the students are under stressed and the major reasons for the psychological stress are temperament/anger, unnecessary worries, scare of employability, perfectionism, and procrastination. There is no association relationship between gender of the college students and their psychological consequences of stress. From this analysis the causes of psychological stress are affected and psychological consequences are from the psychological stress factors. However the test shows that there is significant difference between causes of psychological stress and psychological consequences of stress.

CONCLUSION

This study has found the majority of the college students are experienced psychological stress. It showed that psychological components of stress were bring into being to be privileged among the college students. The causes temperament, anger, unnecessary worries, scare of employability, perfectionism, procrastination, postponement, low self esteem/confidence, lack of motivation, lack of assertiveness and lack of co-students' understanding himself are considered to be major academic causes. Comparing male and female students psychological stress, which found from the test, was the gender of the college students. That is do not to predict their psychological consequences of stress as the results are statistically not significant and states that there is no association between Gender and their Psychological Consequences of Stress. Psychological stress and consequences of stress were not statistically significant as the p value is more than value limit. From this analysis the causes of psychological stress are affected and psychological consequences are from the psychological stress factors. However the test shows that there is significant difference between causes of psychological stress and psychological consequences of stress. The researcher suggested that college students' they will overcome from their stress by following the method of analyzing individual behavior, college environment, family, relatives and society. Students were advised to be aware of their stress and be prepared to take the necessary steps to reduce stress such as give counseling to students, following stress management strategies and use relaxation techniques to overcome from their stress.

References

1. Ashok Kumar Sahoo, Srinibash Dash, Sudhanshu Sekhar Rath. The Application of Garrett Scoring Techniques for Assessment of the Farmer Problems in Obtaining and Repayment of Agricultural Credit. International Journal of Scientific & Technology Research. 2020; 9(3): 5192-5199.
2. Bilun Naz Boke, Mills Devin J, Jessica Mettler, Heath Nancy L. Stress and Coping Patterns of University Students, Journal of College Student Development. 2019; 60(1): 85-103. Avaiable: https://doi.org/10.1353/csd.2019.0005
3. Brindle Ryan C, Ginty Annie T, Phillips Anna C, Douglas Carroll. A tale of two mechanisms: A meta-analytic approach toward understanding the autonomic basis of

cardiovascular reactivity to acute psychological stress. Psychophysiology. 2014; 51: 964-976. Avaiable: https://doi.org/10.1111/psyp.12248

4. Bulo Juvilyn G, Marita G Sanchez. Sources of Stress among College Students. CVCITC Research Journal. 2014; 1(1): 16-25.
5. Darling Selvi V, Rajaprabha P. Causes and Consequences of Academic Stress among College Students. South African Journal of Economic and Management Sciences. AOSIS (Pty) Ltd. South Africa. 2020; 23(91): 1-7. Available: https://doi.org/10.4102/sajemsin.v23i1.6395
6. Dawit Yikealo, Werede Tarek, Ikali Karvinen. The Level of Stress among College Students: A Case in the College of Education. Eritrea Institute of Technology. Open Science Journal. 2018; 3(4): 1-18. Available: https://doi.org/10.23954/osj.v3i4.1691
7. Deepti Bhargava, Hemant Trivedi. A Study of Causes of Stress and Stress Management among Youth. 2018; 11(3): 108-117. Available: https://doi.org/10.21013/jmss.v11.n3.p1
8. Gianaros Peter J, Kristen Salomon, Fan Zhou, Owens Jane F, Daniel Edmundowicz, Kuller Lewins H, Matthews Karen A. A greater reduction in high-frequency heart rate variability to a psychological stressor is associated with subclinical coronary and aortic calcification in postmenopausal women. Psychosomatic Medicine. 2005; 67: 553-560. Available: https://doi.org/10.1097/01.psy.0000170335.92770.7a
9. Gianaros Peter J, Wager Tor D. Brain-Body Pathways Linking Psychological Stress and Physical Health, Current Direction in Psychological Science. 2015; 24(4): 313-321. https://doi.org/10.1177/0963721415581476
10. Gregory Miller, Edith Chen, Cole Steve. Health psychology: developing biologically plausible models linking the social world and physical health. Annual Review of Psychology. 2009; 60: 501-524. Available: https://doi.org/ 10.1146/annurev.psych.60.110707.163551.
11. John Christy R. Garrett's Ranking Analysis of Various Clinical Bovine Mastitis Control Constraints in Villupuram District of Tamil Nadu. IOSR Journal of Agriculture and Veterinary Science. 2014; 7(4): 62-64.
12. Kavita Batra, Manoj Sharma, Ravi Batra, Tejinder Pal Singh, Nena Schvaneveldt. Assessing the Psychological Impact of COVID-19 among College Students: An Evidence of 15 Countries. Healthcare. 2021; 9(2): 1-18. Available: https://doi.org/10.3390/healthcare9020222
13. Leo Samson S, Hema Nalini M. A Study on Depression among College Students. Studies in Indian Place Names. 2020; 40(12): 247-259.

14. Naizhu Huang, Shaoping Qiu, Amin Alizadeh and Hongchao Wu. How Incivility and Academic Stress Influence Psychological Health among College Students: The Moderating Role of Gratitude. International Journal of Environmental Research and Public Health, 2020; 17(9): 1-10.
15. Neil Schneiderman, Gail Ironson, Siegel Scott D. Stress and Health: Psychological, Behavioral, and Biological Determinants. Annual Review of Clinical Psychology. 2005; 1(1): 607-628. Available: https://doi.org/10.1146/annurev.clinpsy.1.102803.144141
16. Philippsen C, Hahn M, Schwabe L, Richter S, Drewe J, Schachinger H. Cardiovascular reactivity to mental stress is not affected by alpha2-adrenoreceptor activation or inhibition. Psychopharmacology (Berl). 2007; 190(2): 181-188. Available: https://doi.org/10.1007/s00213-006-0597-7
17. Psychological stress – Wikipedia
18. Rajaprabha P, Darling Selvi V. Regression Analysis on the Academic Stress among College Students. International Journal of humanities, Law and Social Sciences, Published biannually by New Archaeological & Genological Society, Kanpur Philosophers. 2021; 8(5): 91-100.
19. Selvi V Darling, Rajaprabha P. Academic Impact of Student' Employee. RAC Journal of Research, 2(17), 2018, pp. 47-52.
20. Sheela Sundarasen, Karuthan Chinna, Kamilah Kamaludin, Mohammad Nurunnabi, Gul Mohammad Baloch, Heba Bakr Khoshaim, Syed Far Abid Hossain, Areej Sukayt. Psychological Impact of COVID-19 and Lockdown among University Students in Malaysia: Implications and Policy Recommendations. International Journal of Environmental Research and Public Health. 2020; 17: 1-13. Available: https://doi.org/10.3390/ijerph17176206
21. Sheldon Cohen, Denise Janicki-Deverts, Miller Gregory E. Psychological stress and disease. Journal of the American Medical Association. 2007; 298: 1685–1687. Available: https://doi.org/10.1001/jama.298.14.1685.
22. Sripathi Kalvakolanu, Sama Hanumantha Raoand Venkateswara Kumar. Application of Henry Garrett Ranking Method to Determine Dominant Factors Influencing Smartphone Purchase Decisions of Customers. Journal of Advanced Research in Dynamical and Control Systems. 2019; 11(6): 213-218.
23. Zamirullah Khan, Abul Barkat Lanin, Naseem Ahmad. The Level of Stress in Male and Female School Students. Journal of Education and Practice. 2015; 6(13): 166-169.

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Increasing Prominence Of Women In Merchant Navy

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Abstract:

Women are many a time neglected from the global industry for being family-committed and being considered as a weaker gender. Since women are a crucial part in sustainable development, they should be unified in ocean-based policy, governance and decision-making. However, gender disparity, lower wages, favoritism on board and harassment becomes hindrance and can wrench women to keep themselves away from the ocean. It is vital to increase prominence of women in marine professions and to promote the involvement of women in ocean related diligences.

Keywords:

Seafarer, Merchant Navy, Shipping, Male domination, Gender disparity

Introduction:

Globally there around 1.9 million seafarers working to facilitate the way we live. The BIMCO/ICS Seafarer Workforce Report 2021 estimated the global supply of seafarers at 1,892,720, up from 1,647,494 in 2015. Of these, 857,540 were officers, and 1,035,180 were ratings – the skilled seafarers who carry out support work. But even today, women represent only 1.2% percent of the global seafarer workforce [1].

Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world [2]. There is ample evidence that investing in women is the most effective way to lift communities, companies, and even countries. Countries with more gender equality have better economic growth. This represents a positive trend in gender balance, with the report estimating 24,059 women serving as seafarers, which is a 45.8% increase compared with the 2015 report [3].

Women make up half of the human population, yet do not have the same economic opportunities as men. This disparity is very pronounced in the male-dominated transportation and maritime sectors and the maritime industry. Women are now entering into technical and leadership roles and are serving in various capacities at different levels in both sea-based and shore-based work.

Increasing women's representation, participation and leadership roles in politics, the public and private sectors, and the development sector, including maritime, is key to achieving gender equality goals. The greater participation of women would result into economic benefits from maritime resources as well as open up opportunities in ship ownership, fishing, manufacturing, shipbuilding, and natural resource extraction [4]. Increasing female participation in decision making is positive for business outcomes as it brings diversity in conversation and discussions.

Need for research:

Shipping is a global industry and policy makers, researchers, educational institutions, and regional and global partners need to take special care to ensure career development and employability for maritime transport professionals. Between 2005 and 2010, there was a 2% increase in the number of women employed on board ships, predominately on cruise ships, and women are becoming an increasingly large proportion of shore-side employees in the global maritime sector [4]. It is imperative to maintain this trend to ensure overall sustainable development in the maritime community.

Merchant navy - male dominated industry:

The word 'seafarers' is gender-neutral and has been replaced by the masculine forms, such as 'seaman'. A number of documents on the basic assumption that seafarers are men were described, and the expression of 'he', 'his' and 'him' can be observed in the literature. In the 294th session of the International Labour Organization (ILO) in 2005, an official proposed the use of the word 'seafarer' instead of 'seaman', drawing attention to the fact that gender-neutral language cannot yet be taken for granted within the industry and the maritime community [5]. Representing only a fraction of the maritime industry's largely male-dominated workforce, women are pushing for change and equality. The maritime sector is becoming increasingly more welcoming to women, but unfortunately it does not have the historical reputation of doing so [6]. "Women are undermined, misjudged, ill-treated and at times overprotected when they foray into a male-bastion. Mental readiness to tackle the adversities help women who make unusual careers" says Radhika Menon, one of few women in a leadership role in Merchant Navy and is the first woman to receive the IMO award for Exceptional Bravery at Sea in 2016 [7].

Roadblocks for women:

Many women are dissuaded from participating in the male dominated industries because of the lack of role models, stereotypes about women's nature of work, discouraging workplace culture and traditions within the organization [8].

- **Lack of awareness and information:** It is necessary to improve career awareness and preparedness. The schools can provide career guidance and address young women on careers in the maritime world, making them aware of the bright career prospects. Educators can also help students to translate awareness into pursuit of seafaring as a career. The difficulty of getting access to jobs and professional development in the maritime industry is also a reason for less women seafarers in the maritime sector.
- **Social, cultural and practical barriers:** Most of the women are not allowed to choose merchant navy as a career due to long stay at sea. Finding a balance between demands of work and family has been a common issue. Staying away from family and friends for so long is not easy job. Being on-board for several months might not satisfy the social role of a woman. Thus social pressure and traditional social responsibility stops women from pursuing such a career and forces them to choose land based jobs. The problem is that we can influence the way people think but culture has a huge impact on the recruitment of women in the industry, particularly in Asia. Changing a culture is far more challenging. It's a global industry and wherever our seafarers sail the potential conflicts and challenges relating to gender stereotyping will always be a reality [6].
- **Lower acceptance by companies:** Lack of workplace support keeps women out of this career. Aspiring female seafarers perceive little chance of advancing in their field. Many women feel that they will be subjected to difficulties such as performance pressures or face a hard time moving up in the company. Due to lack of career opportunities women back out and start looking for other jobs and develop a negative mind-set about job opportunities and career prospects in the maritime industry [9].
- **Job security:** Majority of the women prefer jobs with a stable source of income and a planned retired life. This is also a reason as to why women hesitate to join this industry since the job is contractual in nature and many companies do not support women for maternity benefits and other such facilities.

- **Harassment:** As per Momoko Kitada's research many women seafarers on cargo ships experienced gender-related problems including sexual harassment by their male colleagues [5]. Female seafarers are likely to be at even greater risk than their male counterparts because of their higher likelihood of encountering sexual harassment on board. Expectation of sexual harassment as normalised behaviour on board and, in this regard, the findings make it clear that there is a long way to go to before the industry is anywhere near gender equality. As the recent Women and Equalities Select Committee report (2018) states that “Sexual harassment can have a devastating impact on those who are subjected to it. Mental and physical health often suffers, leading to anxiety, poor sleep, depression, loss of appetite, headaches, exhaustion or nausea. Victims feel humiliation, mistrust, anger, fear and sadness.” [10]

- **Isolation:** Isolation will always have a symbiotic relationship with seafaring. Since isolation stops seafarers from seeking solace in company of friends and families after a period abroad, seafarer often is bored, irritated and exhausted. It is considered as disadvantage of seafaring, especially for women.[11]

Making maritime more appealing and other initiatives:

Traditionally, the maritime sector has been known as a male dominated industry, but the narrative is slowly changing as results of robust platforms that promote diversity and inclusivity in the work places, are tools for more comprehensive outlook for equal participation of men and women in maritime. It is envisaged that implementing the strategy that will mobilise more and more young girls and women will embrace maritime careers and contribute to the sustainable economic development of global economy.

According to regional Strategy for pacific Women in maritime 2020-2024 there are 3 pillars which will promote women participation in merchant marine sector :

Pillar 1: Recognition of leadership and contribution of women in the maritime sector

Pillar 2: Visibility of women in the maritime sector

Pillar 3: Capacity building of women in the maritime [4].

- **Awareness and support:** Parents must be made aware of this field so as to motivate and encourage their daughters who are willing to make a difference. Lack of support is one of the reasons why women become upset, disappointed, and eventually step back from taking seafaring as a career. This is also the reason they are not seen as decision makers. These changes can definitely make merchant navy more acceptable by women [9].

- **Role models:** Men further need to be promoters of women in Maritime, as in many instances, women do not go to sea for cultural reasons. Cultural differences are the most difficult to manage, but, getting the message out there through female seafarer ambassadors, is the strongest method of promoting the industry to other women [6].Women in leadership roles are rare in the maritime industry because it has traditionally been a male dominated industry, but the tide is changing and now there are women who are leaders in their own capacity serving at different levels. The gap is slowly closing but the challenges and obstacles, both physiological and psychological, remain prevalent [13].
- **Changing life at sea to make it easy and adaptable:** Director of the Merchant Navy Training Board at the UK Chamber of Shipping, Kathryn Neilson states that, there also needs to be more 1-1 support for women onboard ships – mentoring support has been shown to increase retention rates and lead to women being given more opportunities to progress. To increase the number of women, we specifically need to ensure that basic things like women's specific health requirements are catered for onboard [6].

  Head of strategy at Nautilus International Debbie Cavaldoro says, there are things which can be improved in the maritime sector, particularly life at sea, which would make it better for all seafarers and therefore also increase the number of women entering the sector. Things like better access to the internet, personal protective equipment which fits different shapes and sizes of people and rotas which do not increase the risk of fatigue may make the career a more attractive proposition [6]. Company hiring women seafarers have strict policies to protect and safeguard their rights and identity. They have many complaint procedures. With more number of aspiring women seafarers this obstacle can be easily eliminated. We must find a way to make women feel that their gender does not govern how they perform in a working environment and thus make it easier for women to pursue and achieve their dreams [9].
- **Training and mentoring:** One of the main methods of capacity building is mentoring and coaching. It is evident in shipboard operations, where senior officers mentor and coach lower ranking officers. While these opportunities are mostly found among men, as they predominate in leadership roles, mentoring and coaching can also be a catalyst for women who are already in a leadership role and for younger women. Since 2016, there has been a notable increase in training opportunities for women in a cohesive approach,

as well as further strengthening measures to promote the role of women in the maritime sector [4].

- **Scholarships:** A study by Caroline Walker suggested that widening of the scholarship into Maritime Education and Training, and in particular, the Merchant Navy could increase number of women in this sector. Institutions are trying to provide a fair recognition of women in the ocean-related jobs but still efforts are required [14].
- **Job advertisement:** Job advertising needs to appeal to all and to build an image of the modern, innovative workplace that shipping strives to be, so we can attract the best talent of the next generation [14]. Career related magazines can be a source of information and newsletters from the maritime industry can be used as a medium to promote and highlight seafaring as a potential career for female (as well as male).
- **Exciting and rewarding career opportunities:** We need to promote the maritime professions, aboard and ashore, to young women, and show how a career in maritime can be both rewarding and exciting. There exist a pipeline between the core roles and C-level positions, and that there is willingness among some companies to consider women for both, and that one is often correlated with the other. Many organizations are actively working to redress gender imbalances, either through improving pay equality, or, for a small number of more radical companies, introducing quotas [14].
- **Initiatives by various organizations: International Maritime Organization (IMO)** has undertaken a range of initiatives and events, such as panel discussions and a social media campaign; IMO supports gender equality and the empowerment of women through gender specific fellowships; by facilitating access to high-level technical training for women in the maritime sector in developing countries; by creating the environment in which women are identified and selected for career development opportunities in maritime administrations, ports and maritime training institutes; and by facilitating the establishment of professional women in maritime associations, particularly in developing countries.**"Empowering Women in the Maritime Community"** was selected as The World Maritime Day theme for 2019. This provided an opportunity to raise awareness of the importance of gender equality, in line with the SDGs, and to highlight the important contribution of women all over the world to the maritime sector [3].

In 1988, the International Maritime Organization (IMO) launched the **Women in Development (WID)** program to address the issue and went on to forge a global program known as the **Integration of Women in the Maritime Sector (IWMS).** This program has continued to make a great impact on the maritime industry through various activities, programs and associations. Through the 1988 WID program, IMO also spearheaded the establishment of regional support networks for capacity building for women in the maritime sector. Many programs and resolutions are now in place, and much has been done, facilitated by organizations such as IMO, the International Transport Federation, the International Labour Organization and the International Seafarers Welfare and Assistance Network [4].

The Women in Maritime program pushed forward with numerous activities, including premiering the film, Turning the Tide, launching the online profiles of women in the maritime sector and providing support to the Women in Maritime Associations (WIMAs) launched through the program [3].

A lot of organizations like **WISTA** gaining greater impact and presence, counting [more than] 3000 members worldwide. WISTA is doing an amazing job and it also seems that there are a lot of initiatives being run at the moment trying to promote even further and bring women into the industry, which is very encouraging [6].

Gender, Empowerment and Multi-cultural Crew (GEM) Project, an international study aiming to examine seafarers' welfare, focusing on gender issues arising from a multi-cultural crew environment in three countries: China, Nigeria and the UK. The main research findings, which relate to China, are reported under the headings of motivation, training, employment opportunities and barriers, and career prospects for women.

Since 2005, IMO and Pacific community (SPC) have collaborated to develop Pacific Women in maritime network and support activities to facilitates equal education and training opportunities. This led to establishment of **Pacific Women In Maritime Association (PacWIMA)** which has demonstrated its capacity to support Pacific women in maritime at national level and identify women's development opportunity through this network [4].

Conclusion:

In the maritime arena, there is a major disparity between the number of women working at sea and on shore. There is a growing shortage of seafarers, and it is shipping that cannot afford to exclude half of humanity from the labor pool, and must therefore find a way to make a career in maritime an attractive option for women and girls.[13] The customer-facing maritime industries, cruise, and passenger, present the biggest opportunities for women seafarers, and they are home to a small number of women captains and a disproportionate number of the women crew, compared with other seafaring professions. It certainly seems that more women are entering the shipping industry today than they did before – but that there are some countries where this is still very unlikely. Women are underrepresented in both capacities, but are clearly capable of matching men in these positions, where they are given the opportunity to do so. The maritime industry needs to be made attractive to women throughout their career stages – with clear opportunities to develop from junior positions to leading figures within the industry.

References:

[1] BIMCO/ICS 2021 Seafarer Workforce Report 2021
[2] https://www.un.org/sustainabledevelopment/gender-equality/
[3] https://www.imo.org/en/OurWork/TechnicalCooperation/Pages/WomenInMaritime.aspx
[4] Regional Strategy for pacific Women in maritime 2020-2024, Pacific community, Suva, Fuji, 2019 https://prdrse4all.spc.int/sites/default/files/t8_-_annex_a_regional_strategy_for_pwm_2020-2024_0.pdf
[5] **Momoko Kitada** Code of behaviour at sea: women seafarers' shipboard identity management ***WMU Journal of Maritime Affairs*** volume 12, pages 213–227 (2013) https://link.springer.com/article/10.1007/s13437-013-0044-7
[6] **https://www.ship-technology.com/analysis/women-in-maritime/** October 15, 2019updated 09 Mar 2022 12:53pmRoundtable: the women fighting for equality in maritime
[7] Times of India,11 March 2020 (TNN, Jagriti Kumari)
[8] Ahalya Arulnayagam Scientific Research Journal (SCIRJ), Volume VIII, Issue IV, April 2020 52 ISSN 2201-2796 www.scirj.org © 2020, Scientific Research Journal http://dx.doi.org/10.31364/SCIRJ/v8.i4.2020.P0420763 Addressing the Voice of Women in Marine and Maritime Industry
[9] https://www.marineinsight.com/life-at-sea/7-fewer-women-seafarers-in-the-maritime-industry/
[10]https://publications.parliament.uk/pa/cm201719/cmselect/cmwomeq/725/725.pdf
[11] Lin LI, June 2011, Values and beliefs: Chinese seafarers in the age of transition, School of social sciences, Cardiff university.
[12] https://www.cambridge.org/core/journals/journal-of-navigation/article/gender-in-the-maritime-space-how-can-the-experiences-of-women-seafarers-working-in-the-uk-shipping-industry-be-improved/050E9D751A1FDDBBC1DB89A01672B3DC
[13] Women in Maritime Survey 2021 A study of maritime companies and IMO Member States' maritime authorities https://wwwcdn.imo.org/localresources/en/OurWork/TechnicalCooperation/Documents/women%20in%20maritime/Women%20in%20maritime_survey%20report_high%20res.pdf
[14] Caroline Walker, David Peart & Alan Gleaves (2003) Problems in the construction of gender and professional identities for women in a United Kingdom merchant navy training school, Research in Post-Compulsory Education, 8:3, 285-304, DOI:10.1080/13596740300200156

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A STUDY THE EFFECT OF NEW APPOINTED PRIMARY SCHOOL PRINCIPAL'S ON PRIMARY SCHOOL QUALITY AMELIORATION OF JAMNAGAR DISTRICT

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Abstract

Ancient Time in India emphasis more quality than other nation of word self-development and get Best is the concept of life. To improve education level and future of the students so many programs prepared like Gunatshav, Pravesh Utsav and Pragna Programme. In present scenario, the principals of schools of primary schools should pay more attention to motivate children and awareness of education. In primary Schools, the administration and planning work should pay more attention to motivate children and awareness of education. Objectives: To study the effect of primary school Quality amelioration on new appointed principals' primary school of Jamnagar district. To study the effect of new appointed primary school principals towards the amelioration of Quality criterion of Jamnagar district. Earlier students were not able to get good facilities, even if many of them could be engineers, doctors, I.C.S., and industrialist. Now days result is Quality disappointing after getting many facilities. Now days all types of facilities like education technology, training etc are given in primary teaching. Besides new principal administration.

1. Introduction:

Ancient Time in India emphasis more quality than other nation of word self-development and get Best is the concept of life. To improve education level and future of the students so many programs prepared like Gunatshav, Pravesh Utsav and Pragna Programme. In present scenario, the principals of schools of primary schools should pay more attention to motivate children and awareness of education. In primary Schools, the administration and planning work should pay more attention to motivate children and awareness of education. In primary schools, chief teacher should do the administration and planning work. However, chief teacher cannot play their duty because of abetments of planning awareness. Thus, the more work of chief teacher effect the education in primary schools. Therefore, demand of educational scholars and right to education at 2009 has plane to create series of Principals. HTAT held by minister of primary education Gandhinagar. Principal's role is so important in school's progress and education system. To improve quality in primary education Principals have good qualities. If we want to update primary education in our state. We should know opinion of Primary schools is Principals for quality betterment.

2. Review of Related literature:

To give Proper direction to research process: Researcher. Has studies research abstract, books, journals, magazine thesis eat. Joshi (1995) studied the Attitude of primary education of population education. Kaskokre (1985) studied the Teacher's attitude of education of primary schools of Ahmedabad. Rady (1985) studied education attitude of parents and teachers. Joshi (1999) Studied learning attitude of primary teacher.

3. Statement of the Problem:

Considering the above facts, the present study is titled as following,

"A STUDY THE EFFECT OF NEW APPOINTED PRIMARY SCHOOL PRINCIPAL'S ON PRIMARY SCHOOL QUALITY AMELIORATION OF JAMNAGAR DISTRICT"

4. Definition of terms: Definition of the Research title as given below.

Jamnagar district: It is a border district on the west of Gujarat and on the Arabian Sea side and the Gulf of Kutch. In present study include all primary schools of Jamnagar District. **Primary Education:** Present Study primary education means pre. Primary and upper primary including age group of 5 to 14 years students learn primary education.**Principals:** Five years experience of primary education and HTAT then as per regulation of Primary responsible person known as Principals. **Effect of Amelioration of Quality criterion:** Unit which include to total readiness of education can a total quality. Continuous awareness gave motivation to quality criterion.

5. Objectives of study: Researchers decided following objectives for the present study:

1. To study the effect of primary school Quality amelioration on new appointed principals primary school of Jamnagar district.

2. To study the effect of new appointed primary school principals towards the amelioration of Quality criterion of Jamnagar district.

3. To study the attitudes of new appointed primary school principals wards the amelioration of Quality criterion of Jamnagar district.

4.To get the opinions of new appointed principals on primary school amelioration of Quality of Jamnagar district.

5. To study the effect of new appointed principals of Sex, Faculty, Educational Experience, social group and merit on amelioration of Quality of primary school of Jamnagar district.

6. Hypothesis:

Ho1. There will be no significant difference between the average of amelioration of Quality criterion in Male and Female principals towards amelioration of Quality in primary school of Jamnagar district.

Ho2. There will be no significant difference between the average of amelioration of Quality criterion in Graduate, Arts-Commerce-Science B. Ed. and Graduate, P.T.C. principals towards amelioration of Quality in primary school of Jamnagar district.

Ho3. There will be no significant difference between the average of amelioration of Quality criterion in More than 7 years and less than 7 years principals towards amelioration of Quality in primary school of Jamnagar district.

Ho4. There will be no significant difference between the average of amelioration of Quality criterion in Security group (S.C., S.T., O.B.C.) and Non Security group principals towards amelioration of Quality in primary school of Jamnagar district.

7. Variables of the study: Dependent Variable: Newly appointed principals of primary school of Jamnagar districts apparent amelioration of Quality criterion. **Independent Variable:** For principles variables are as under: sex: Male-Female, Faculty: Graduate, Arts-Commerce-Science B. Ed. -Graduate, P.T.C., Educational experience: More than 7 years - Less than 7 years. Social group: Security group (S.C., S.T., O.B.C.) -Non Security group. Merit of Recruitment: More than 65 years-Less than 65 years. **Controlled Variable:** Principles of primary schools

8. Importance of the study: We know the effect of Amelioration of quality criterion. This study helps to update primary educational program. We know quality effect of new appointed of principals of Jamnagar district primary school's principal's on sex, age, faculty education experience area, and social group and school administration. The effect of Amelioration or quality criteria helps to formal future plan and help in fiscal policy. Provide guidance and mental capability to new appointment principals for Training.

9. Limitation of the Study: Present study include 48 principals run by Jamnagar district education committee appointed by requirement then 23 principals become as Response lender ... present study are limited only for Amelioration of quality criterion. For data, Collection quality Criterion are prepared das a tools.

10 Population and sample: In present, study populations are newly appointed Principals of Jamnagar District's schools run by Jamnagar Jilla Panchayat. First Training has been given to principals and then give them opiniory of Amelioration of quality criterion from then 23 Principals has returned opiniory so 23 Principals become samples.

11 Research Method: Present Study used serve method.

12 Tools: For Data collection aptitude test used for quality criterion.

13 Method of Data Collection: Kept in mind the objectives of studies researchers visited the newly appointed principals at the training centre at Jamnagar. Aptitude test of Amelioration of Quality criterion has been given to new appointed Principals. This way tools has been given 48 Principals. Among then 23 tools come co-operation this way collection of data has been done.

14 Classification of Data collection: With the help of F.test, T.Test, K Square value, percentage, average statically method and SPSS page classification of data has been done.

15 Conclusion:

(A) Conclusion according to response of newly appointed principals as per amelioration of Quality criterion: (A) Conclusion according to newly appointment Principals as per amelioration of quality creation. (B) Male and Female Principals of the primary schools of Jamnagar District shows positive attitude for Amelioration of quality creation. (C) Principals of B.Ed. and P.T.C. Principals of primary schools of Jamnagar shows positive attitude for Amelioration of quality creation. (D) Principals of primary schools of Jamnagar District whose experience is 7 years or more than seven years shows positive attitude of Amelioration at quality creation.

(B) Conclusion according to response of a newly appointed principals as per unit wise: (A) Calculus in according to educational arrangement and planning. Different training and governmental work effect for poor education for teachers have to work more. (B) Conclusion according to related Schools: Teacher has to prepare educational equipment by project work. (C) Conclusion According to related Examination: Other oriented should be included for examination and evolution. (D) Conclusion according to Classroom Environment: To give importance to manners and Time for better development or institutions. Students feel uncomfortable. If we thought more than one subject them content mastery has been continued. (E) Conclusion according to Content Mastery and curriculum. With the Content of Present Changes, we should get mastery in present curriculum. We should teach hard things by model. We should develop national integration. (F) Conclusion According to Co-Curricular Activities and Patenship. Child development depend on teacher's capacity. Programme of schools has been successes if we gave more attention. We should develop Co-relation between caliges. (G) Conclusion According to leadership : It's a necessary that students and teacher should be impressed by the done by principals. (H) Conclusion according to school environment and human related develop relation. (I)Conclusion according to life related.

(C) Conclusion according to newly appointed principal's opinion of open-ended answer. A good and effective principal should have developed the qualities of good management. A principal should have qualities like punctually, cooperativeness, emotions, team-work, administrative power, habit of observation, knowledge of new affairs, child loving, self dependent, natural, simple and truth loving, curious, morality in work , dedication to profession, management power and inspiring to staff.

16. Educational Implication

Earlier students were not able to get good facilities, even if many of them could be engineers, doctors, I.C.S., and industrialist. Now days result is Quality disappointing after getting many facilities. Students lacks in Quality Education that is why government has started 'Gunostav' to emphasise reading, writing and understanding among students in the state. Now days all types of facilities like education technology, training etc are given in primary teaching. Besides new principal administration. These principal should be elucidated to the Qualitative development of education. Development of school at last depends on the principal's commitment to Qualitative development.

Reference:

- Pandiya, S. R. (2010) ***Learning and Teaching Stule***. New Delhi: APH Publication Corporation.
- Ram, S. (1998). ***Teching Method.*** Surat: Gavendra Prakashan. New Delhi: Sarup and sons Publication.

- Siddiavi, M. H. (2009). ***Techniques of Teaching.*** New Delhi: A.P.H. Publication Corporation.

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A Study of Effect of Advertisements on TV and mobile on the Buying Behaviour of Youth with respect to Branded Clothing in Nagpur city

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Abstract:

Clothing is not only basic necessity but also an important element of personality. Every youth want to look attractive and different from other, for this they always want to try branded clothing. India is the country where the number of young people are more in number. Also during last few decades, the economic conditions of people are improving, in this light the demand for branded clothing are ever increasing. To get benefit out of this, every branded clothing company try to advertise branded clothing. This study aims to study the effect of advertisement on TV and mobile on buying behavior of youth with respect to branded clothing. The present study is a survey-based research based on 300 respondents between the age group of 15 yrs to 24 yrs. The study found out that there are various factors affecting buying behavior and advertisement on TV and mobile have strong positive effect on buying behavior of youth. Majority of the respondent reveals that advertisement have positive effect on buying behavior and males are more attracted towards branded clothing compared to females.

Introduction:

Every youth wants to look attractive and distinct from others for this young people Buying behavior is one of the most discussed topics of marketing management.

(britanica)India's population is young. Its birth and death rates are both near the global average. More than half the population is under age 30 and less than one-fourth is age 45 or older.

(Sherlekar, 2011) The buying behaviour of the consumers is one of the most complex process. Buying behaviour is a comparatively new field of study. Buyer behaviour means all the psychological, social and physical behaviour of potential customers as they become aware of, evaluate, purchase, consume and tell other about products and services. The buyer behaviour involves both individual (psychological) process and group (social) processes. Buyer behaviour is reflected from awareness right through post purchase evaluation indicating satisfaction or non-satisfaction from purchases. Buyer behaviour includes communication, purchasing and consumption behaviour. Buyer behaviour includes both consumer and business buyer behaviour. Buyer behaviour is one of the most important keys to successful marketing. The buyer behaviour not only includes why, how, and what people buy but other factors such as where, how often and under what conditions the purchase is made. An understanding of buyer behaviour is essential in marketing planning and programmes

Keywords: - Buying behavior, Branded clothing, youth,

Objectives of study:

1) To study the advertisement strategies adopted by branded clothing companies on TV and mobile
2) To study the awareness level of advertisement among young about branded clothing
3) To evaluate various factors influencing buying behavior of youth regarding branded clothing.
4) To analyze the opinion of youth regarding advertisement on TV and mobile about branded clothing.

Scope of the study:

The study is limited to Nagpur city only. The responses of 300 samples are considered. The study is restricted to only the advertisement on TV and mobile about branded clothing.

Hypothesis

H1 There is significant positive relationship between advertisement on TV and mobile on the buying behavior of youth.

Research Methodology:

The current study is a descriptive study. The research is based on survey of 300 respondents of Nagpur city. The respondents of only 15 yr to 24 yr are considered.

About Nagpur City:

Nagpur is named after the Great River Nag which flows through the city. The old Nagpur city (today called 'Mahal') is situated on north banks of the river Nag. The suffix pur means "city" in many Indian languages.[Nagpur city is the second capital of Maharashtra state. Nagpur is popularly known as “Orange city”. The city was founded in 1702 by the Gond King Bakht Buland Shah of Deogarh and later became a part of the Maratha Empire under the royal Bhonsale dynasty. The British East India Company took over Nagpur in the 19th century and made it the capital of the Central Provinces and Berar. After the first re-organisation of states, the city lost its status as the capital. Following the informal Nagpur Pact between political leaders, it was made the second capital of Maharashtra. It is also called the Tiger Capital of India or the Tiger Gateway of India as many tiger reserves are located in and around the city and also hosts the regional office of National Tiger Conservation Authority. Nagpur is the safest and greenest city of India. (Nationa Next Nagpur, 2020).

Review of Literature

(Isabel J. Grant, 2005)**, The article titled** Buying behaviour of “tweenage” girls and key societal communicating factors influencing their purchasing of fashion clothing" reveals that the respondents were prepared to pay a premium for branded clothing, placing a high emphasis on the product being deemed *cool*.

(MUTHUKRISHNAN, 2017)**,** The study “Consumer Buying Behaviour And Effect of Advertisement Medias on Textile Products - A Study” is a research work based on primary data, it reveals that the Textile Dealers in Rajapalayam have to consider various Socio – Economic factors that are influencing the buying behaviour. The effective Advertising media should be selected to reach the consumers during the festivals. Textile products must reach the consumers in all aspect to satisfy their needs and wants.

(Cass A. , 2000), This study presents an alternate approach to the conceptualisation and measurement of four important types of involvement that will aid in better understanding consumer behaviour and developing improved marketing mix strategies.

(Cass A. o., 2004), The research Fashion clothing consumption: antecedents and consequences of fashion clothing involvement reveals that fashion clothing involvement is significantly affected by a consumer's degree of materialism, gender and age. Further, it was found that fashion clothing involvement influences fashion clothing knowledge. Finally, the results indicate that fashion clothing knowledge influences consumer confidence in making purchase decisions about fashion.

(Phaik Nie Chin, 2020), the study “The impact of endorser and brand credibility on consumers’ purchase intention: the mediating effect of attitude towards brand and brand credibility" This study examines the relationship between endorser credibility (EC) and brand credibility (BC) on consumers' PI of products sold by local apparel brands in Malaysia. The study also examines the mediating effect of attitude towards BC (ABC) and attitude towards brand (AB). Data analysis was based on data collected from a sample of 245 consumers in a structured survey. Structural equation modelling was used to examine the hypothesised linkages between the mentioned variables. The findings of this study demonstrate that EC and BC have significant effects on ABC, AB and PI. The bootstrapping procedure shows that ABC and AB possess a significant influence as mediators between the EC and BC in swaying consumers' PI.

Advertisement on TV & mobile about branded clothing:

Allen Solly, Peter England, Levi's, Provogue, Van Heusen, Park Avenue, Park Avenue, Pepe Jeans, Wrangler, Mufti, Lois Philips, Biba, Fabindia, Flying machine, Killer, Raymonds, polo, Lyra, Adidas, Nike, Zara, Global desi, Allen Solly, W for women, pantaloons, Westsides, only, Aurilia etc are some of the brands available for youths. There are some local brands available at malls. Some of the tagline of various popular clothing brands are as follows-

Raymonds - 'Complete Man' 'Light up Your Diwali with Elegance'
Peter England – 'Honest Shirt', 'Honestly Impressive', 'Beginning of good Things'
Arrow – 'Authentic American', 'When you know'
Van Heusen – 'Evolve Yourself'
J. Hampstead – 'The World's Finest Fabric', 'Nothing but the best'
Turtle- 'The little Deeper'
Oxemberg – 'Body music' , 'Cloths that moves to my Rhythem'
Allen Solly – 'Always in fashion', 'I hate ugly', 'My world my way'
Parx – 'Easy way'
Blackberrys – 'Go Sharp'
Color
John Player – 'Play it cool'
The advertisements of these brands on TV and mobile appeals the young mind with different kind of taglines. The branded clothes generally associated with in fashion clothes.

Findings and Conclusion

Age

Age group	Respondents	%
15 to 18	80	26.67%
19 to 21	100	33.33%
22 to 24	120	40%
Total	300	100%

Gender

Gender	Respondents	%
Male	151	50.33%
Female	149	49.67%
Total	300	100%

Occupation

Occupations	Number of respondents	%
Student	150	50%
Service	120	40%
Business	30	10%
Total	300	100%

Income

Income level	Number of respondents	%
Less than Rs 10,000	70	23.33%
Rs 10,001 to Rs 30,000	150	50%
Rs 30,001 to 50,000	50	16.67%
Above Rs 50,001	30	10%
Total	300	100%

Awareness about E- Media

Kindly mark your extent of agreement or disagreement to the following statements.

Statement	Not at all aware	Slightly Aware	Moderately Aware	Very Aware	Extremely Aware
	Total respondents 300				
There are various types of e-media	15%	10%	05%	45%	25%
TV, radio, internet are the types of e-media	5%	28%	02%	30%	35%
The ads shown on e-media are dynamic	15%	17%	05%	38%	25%

Perception about e-Media

Kindly mark your extent of agreement or disagreement to the following statements.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
I spend more time watching e-media than traditional media	12%	18%	10%	25%	35%
I think e-media is important source of collecting information about branded clothing.	10%	20%	5%	40%	25%
Branded clothing ads on e-media influences my purchase decision	5%	15%	5%	40%	35%
Customer reviews on e-media influence me to try new brands	10%	25%	20%	15%	30%
I think the prices of branded clothing promoted on e-media are high	30%	15%	10%	20%	25%
I think the quality of branded clothing advertised on TV and mobile is very good	10%	20%	5%	35%	30%
Offers and discounts announced through advertisement influences me to purchase branded clothing	27	15	8%	30	20
Latest information about branded clothing is available on advertisement	15%	20%	-	40%	25%

Consumer preferences

Kindly mark your extent of preference to the following statements.

Statement	Not at all	To low extent	To moderate extent	To a great extent	To a very great extent
I prefer branded clothes because I have seen its ads on TV and mobile	20%	20%	5%	25%	30%
I prefer to purchase branded clothing recommended by my acquaintance through social media	20%	20%	25%	20%	15%
I prefer to purchase branded clothing because it adds to my personality	10%	20%	5%	35%	30%
I prefer to purchase branded clothing because I think it improves my lifestyle	15%	10%	10%	35%	30%
I prefer to purchase branded clothing because it is a status symbol	15%	15%	5%	35%	30%
I prefer to purchase branded clothing because it gives me	5%	20%	10%	30%	35%

value for money benefit					
I prefer to purchase branded clothing because I wish to impress others	15%	10%	5%	40%	30%

Kindly rate the following sources of getting information about branded clothing from 1 to 5, where 1 is the low rating and 5 is the highest rating.

Source	Rating				
	1 (Low)	2	3	4	5 (High)
Social media (WhatsApp, FB, YouTube, etc.)	10	25	15	28	22
Friends and relatives	20	15	10	20	35
Advertisement on TV and mobile	10	20	10	35	25
Advertisement in print media	30	35	10	10	15
Company website	10	20	10	40	20

Kindly rate the following attributes of branded clothing from 1 to 5, where 1 is the low rating and 5 is the highest rating.

Attribute	Rating (In Percentage)				
	1 (Low)	2	3	4	5 (High)
• Fitting	2%	3%	10%	35%	50%
• Fabric Quality	1%	4%	15%	50%	30%
• Design/Style	13%	10%	2%	40%	35%
• Long life i.e. Durability	10%	15%	5%	25%	45%
• Comfort	5%	10%	-	30%	55%
• Colour attractiveness	3%	20%	2%	35%	40%

Nearly 70% of the respondent reveal that fitting is the most important criteria behind purchase of branded clothing.

About 80% say that fabric quality is the important point behind purchase decision.

Nearly 75% are happy with design and style of the branded fabric

Frequency of purchase of branded clothing

Q: What is your frequency of purchase of branded clothing?

Frequency of purchase of branded clothing	**Response total 300 (In %)**
• Never	2%
• Seldom (Once in a year)	20%
• Occasional (Once in Six Months)	50%
• Often (Once in Three Months)	20%
• Regular (Once in a month)	8%
	100%

About 50% reveal that they purchase branded clothing at least once in six month.

Impact of advertisement on TV and mobile on purchase of branded clothing

Statement	Not at all	To low extent	To moderate extent	To a great extent	To a very great extent
My purchase decisions of branded clothing is favourably affected by the ads I watched on TV & mobile	20	10	-	30	40
My frequency of purchasing branded clothing has increased after watching its ads on TV & mobile	10	15	10	35	30
My awareness about branded clothing has increased after watching its ads on e-media	10	20	10	20	40
I started spending more on branded clothing after watching its ads on e-media	20	15	05	25	35
I will repetitively purchase branded clothing	5	5	10	30	50

About 70% reveal that the purchase of branded clothing affected positively due to advertisement on TV and mobile

Social factors influencing customer's buying behaviour

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I purchase decisions of branded clothing get influenced by the opinion of my friends/colleges	20%	10%	15%	35%	20%
My family members think that I should buy branded clothing	10%	25%	10%	25%	30%
Most people who are important to me think that I should buy branded clothing	25%	15%	20%	15%	25%
I feel under social pressure while buying branded clothing	20%	20%	30%	20%	10%
Shopping branded clothing is very common in my circle of friends	20%	25%	10%	20%	25%

Above 50% respondents reveal that purchase of branded clothing influenced by opinion of friends and relatives.

As per data collection and analysis the hypothesis H1 There is significant positive relationship between advertisement on TV and mobile on the buying behavior of youth is accepted. (Since 55% respondent's purchase decision get positively affected due to advertisement of branded clothing on TV and Mobile

Suggestions

- The branded clothing market is dominated by males. There is huge opportunity for female branded clothing market.
- The general perception of the people is that prices are little higher, but people also have believe that it is value for money.
- The youth should read the conditions in the advertisement properly.

References

britanica . (n.d.). Retrieved from https://www.britannica.com/place/India/Demographic-trends

Cass, A. (2000). An assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. *Elsevier, 21*(5), 545-576. doi:https://doi.org/10.1016/S0167-4870(00)00018-0

Cass, A. o. (2004). Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. *Eurpean Journal of Marketing Emrald, 38*(7), 869-882. doi:https://doi.org/10.1108/03090560410539294

Isabel J. Grant, G. S. (2005). Buying behaviour of "tweenage" girls and key societal communicating factors influencing their purchasing of fashion clothing. *Emrald, 9*(4), 450-467. Retrieved from https://doi.org/10.1108/13612020510620812

MUTHUKRISHNAN, S. (2017). CONSUMER BUYING BEHAVIOUR AND EFFECT OF ADVERTISEMENT MEDIAS ON TEXTILE PRODUCTS - A STUDY. *International Journal of Business Management & Research (IJBMR), 7*(5), 1-10. doi:https://d1wqtxts1xzle7.cloudfront.net/55405995/1.IJBMROCT20171-with-cover-page-v2.pdf?Expires=1656915661&Signature=aepE5A-Gtt9nycRMAEUbrdLH~1x3HJI2vM27RaR3OrTu~ktHYGr6WCQ9BkcsVVUScU64rqfuETTzaFgFYi55x9KYGq9Ig2XI-O8-r7MGGga1sAUBXJ3e7wP9dl0V9C-sXzVhJENv~dNY

Nationa Next Nagpur. (2020, March). Retrieved from https://www.nationnext.com/: https://www.nationnext.com/nagpur-ranks-1st-in-maharashtra-2nd-in-india-as-smart-city-becomes-greenest-safest-in-state/

Phaik Nie Chin, S. M. (2020). The impact of endorser and brand credibility on consumers' purchase intention: the mediating effect of attitude towards brand and brand credibility. *Journal of Marketing Communications,, 26*(8), 896-912.

Sherlekar, S. &. (2011). *Marketing Maangement.* Himalaya Publishing House.

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Effects of the Covid19 Pandemic on Mental Health of adolescents belonging to 10th class students of Government and Private schools of District Kathua

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Abstract

Just as it is necessary for everyone to maintain good physical health, every human being is required to maintain a condition of good mental health and everybody whether healthy or unhealthy, stands in the need of mental health. As a result of rapid rate of social changes taking place, the life of man is becoming more complex day by day. Mental health is an echo of the ego to the supposed danger. It is an emotional attitude or sentiment to further mingle with fear and hope. It is considered that mental health has a great impact on the mental preparation of the individual. Mental health, on the other hand is a state of mind where a student has either a sense of insecurity, loss of confidence or incompetence or when the individual is overstressed worried or tense in the moment when he/she is to be evaluated.

Since during Covid-19 pandemic the education provided to the students by both Govt. and private schools though online mode. Similarly, the evaluation done by the schools also through online mode. In this situation I found that the private schools were much better in providing online education through ZOOM App, Google Meet, WhatsApp and other platforms and for evaluation they were using Google form, WhatsApp, email or other online platforms for evaluating students. Whereas Govt. schools were also using the same platforms but they were far behind as compare to private schools in terms of internet infrastructure, computers, android mobiles and training to teachers and students to conduct online classes and evaluation.

In the view of this, the present investigation was undertaken to study the mental health among students of Government and Private Schools during COVID-19 pandemic. The goal of this study was to compare the significance of means scores on Mental Health between the students of the Government and Private schools during COVID-19. For this research the sample of 200 students (Govt. School- 50boys + 50 girls= 100, Pvt. School- 50boys + 50 girls= 100) was taken from the class 10th students of Government and Private schools of Kathua. Significant difference is found between students of Government and Private Schools

on Mental Health. The students of Private schools depict good Mental Health than Government school counterparts.

In the light of these findings the following steps shall be taken: - Government should provide mobile phone, tabs and internet facility to poor students of Govt. Schools in Covid-19 pandemic like situation. Government and social groups should organize community classes during pandemic situation. The schools should establish psychological guidance and counseling cells to guide the students at every stage of education. The schools should organize different co-curricular and curricular activities to reduce the test anxiety level of students. The schools should pay special attention to the learning needs, problems and issues of students belonging to the different family patterns.

Keywords: Mental Health, Adolescence, Government School, Private School, Covid-19

Definitions of the term used

Mental Health: Mental health is that ability by means of which we establish our adjustment with difficult situations of life. It is the mental condition and mental set of the organism. Just as physical health is condition of the body, mental health is the condition of mind and like physical health, mental health is also an essential ingredient of a well-developed and well-balanced adjusted personality**.**

Adolescence refers to the period of human growth that occurs between childhood and adulthood. Adolescence begins at around age 10 and ends around age 21.

Covid-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Need And Justification of the Study

Adolescence is the period in human growth and development that occurs after childhood and adulthood, from ages 10-19. In this stage the children may experience anxiety to a great extent. Which exercises positive or negative influences on their personality. A child cannot avoid anxiety in his/her life. Which affects to his/ her Mental Health. If Mental Health is not properly addressed, it can have many serious and long lasting consequences and as the result, the students perform poorly on school work, fail classes and withdraw from socializing with peers.

Since during Covid-19 pandemic the education provided to the students by both Govt. and private schools though online mode. Similarly the evaluation done by the schools also through online mode.

In the view of this, the present investigation was undertaken to study the Mental Health of adolescents during COVID-19 pandemic.

In the view of this, the present investigation was undertaken to study the Mental Health of adolescents during COVID-19 pandemic. The students of government and private schools were compared on the Mental Health.

Statement of the Problem

Keeping in view, the importance of the theme mentioned above and the literature reviewed, the problem under study could be stated as:

"Effects of the Covid19 Pandemic on Mental Health of adolescents belonging to 10th class students of Government and Private schools of District Kathua"

Objectives of the Study

The present study is focused on the following objectives:

1. To study and compare the significance of difference of mean scores on **Mental Health** between the adolescent students of Government and Private schools.
2. To study and compare the significance of difference of the mean scores on **Mental Health** between the adolescent students of Government and Private schools in the boys and girls groups respectively.
3. To study the significant sex differences in the mean scores in **Mental Health** among the adolescent students of Government and Private schools.

Methodology

In this research paper the data for the present study is collected from students of Government and Private schools of Kathua city with a view to identify and analysis the impact of Test anxiety during covid 19.

The population of the present study comprised of the X class students studying in Government and Private schools of Kathua.

The Sample of the present study comprised of 200 X Class students (Government:100 Private: 100) having equal number of boys and girls. These students were selected randomly from different schools.

Tool used: In the present study, **Mental Health Inventory, constructed by Dr. H.P. Mangotra** was used. There are 140 items in the scale and each item is being responded by students either in Yes or No. A score of 1 is awarded to each 'Yes' response, which is indicative of test anxiety and 0 to 'No'. The higher score in the test indicates the greater level of **Mental Health** and low score reveals the low **Mental Health**.

Statistical Techniques Employed Mean, S.D. CR Values

Hypotheses of the Study

1. There will be no significance of difference of mean scores on **Mental Health** between the adolescent students of nuclear and joint families.
2. There will be no significance of difference of the mean scores on **Mental Health** between the adolescent students of nuclear and joint families in the boys and girls groups respectively.
3. There will be no significant sex differences in the mean scores in **Mental Health** among the adolescent students of nuclear and joint families.

Delimitations of the Study

- The present study was limited to a sample of 200 students only.
- The present study was limited to the students of Govt. as well as Private schools.
- The present study was limited to the X class students only.
- The present study was confined to Kathua district only.

Interpretation

- **Inferences based on general view**

  Significant difference is found between students of Govt. and Private schools on **Mental Health**. The students of Private schools depict Good Mental Health than Govt. schools counterparts.
- **Inferences based on boys group**

Significant difference is found between boys of govt. and private schools on **Mental Health**. The boys of Private schools depict Good Mental Health than Govt. schools counterparts.

- **Inferences based on girls group**

Significant difference is found between girls of govt and private school on Mental Health. The girls of Private schools depict Good Mental Health than Govt. schools counterparts.

- **Inferences based on sex differences**

No significant sex differences are found among the students of government and private schools in Mental Health. The boys and girls respectively of govt. and private school depict alike Mental Health.

CONCLUSION

In conclusion I should say that good **Mental Health** is necessary in giving the full performance of the student. The schools should establish psychological guidance and counseling cells to guide the students at every stage of education. The schools should organize different co-curricular and curricular activities to boost good **Mental Health** level of students. The schools should pay special attention to the learning needs, problems and issues of students belonging to the different family patterns.

As we know Covid-19 disease may come again so Govt. and Private institutions must plan to continue education through online as well as offline mode and Govt. should plan for the same also.

Educational Implications and suggestions

In the present study, the students of Private schools in general view, in boys and in girls group depicted Good Mental Health than Govt. schools' counterparts.

Moreover, no significant sex differences were found among students of govt. and private school on Mental Health. In the light of these findings the following steps shall be taken:

- The schools should start classwork of internet for students so, that during any crisis they can use it well for education.

- Government should provide mobile phones and tablets to poor students on subsidy.
- Internet facility must be provided in all Govt. and private schools.
- Teaching staff must be trained to adopt new technology.
- The schools should establish psychological guidance and counseling cells to guide the students at every stage of education particularly the students of govt. schools.
- The schools should organize different co-curricular and curricular activities to reduce the anxiety level of students.
- The government schools should pay special attention to the learning needs, problems and issues of students.
- Special activities viz. Seminar, Symposium, Workshops, Painting, Drawing Quiz competitions should be organized and all the students should be encouraged to participate in them. This will reduce their anxiety to some extent.
- Remedial / Tutorial classes should be organized for the students to increase their level of academic achievement.
- Regular test series should be conducted for the students.
- Special incentive should be given to the students of different families.
- Parents should be educated as how to tackle the test anxiety level of children.
- Parent teacher meets shall be organized frequently. This will enable them to share and understand the problems related to Mental Health and initiate joint efforts in this regard.
- The family atmosphere should be made congenial, democratic and conducive for the overall development of children.
- WHO has recently pointed out that the Covid-19 may never be eradicated and people will have to live with it. "It is important to put this on the table: this virus may become just another endemic virus in our communities, and this virus may never go away. HIV has not gone away, but we have come to terms with the virus. I think there are no promises in this and there are no dates. This disease may settle into a long problem, or it may not be" WHO emergencies expert Mike Ryan said in an online briefing (Sandhya, 2020). With reference to this statement, many countries are now planning to continue education through distance or virtual mode and Govt. should plan for the same also.

References

- **Batt (2000)** found that there are significant differences between boys and girls in test anxiety where as there are no significant differences between high and low intelligent students in test anxiety. In another study **Kour (2002)** found that there are no significant gender differences in test anxiety among first generation learners of high school students.
- **Malbi RS, Reasoner RW**. Self-Esteem, Enhancing. Kuala Lumpur: Self-Esteem Seminars Sdn. Bhd, 2000.
- **Finkenauer C, Engels RCME, Meeus WS, Oosterwegel A**. Self and identity in early adolescence. The pains and gains of knowing who and what you are. In T.M. Brinthaupt & R.P. Lipka (Eds). Understanding early adolescent self and identity. Applications and interventions. Albany, NY: State University of New York Press, 2002, 25-56.
- **Kour (2003)** found that there are significant differences in self confidence among high and low test anxious secondary school students. The variables of test anxiety and sex are independent of each other with self confidence as the dependent variables.
- **Meadmore D, Meadmore P**. The boundlessness of performativity in elite Australian schools. Discourse. 2004; 25(3):375-387.
- **Dennis R.** Buying an education: Where are the returns highest?, 2004.
- **Martin G, Richardson AS, Bergen HA, Roeger L, Allison S**. Perceived academic performance, self-esteem and locus of control as indicators of need for assessment of adolescent suicide risk: implications for teachers. Journal of Adolescence. 2005; 28(1):75-87.
- **Dhal Anubha,** Bhatia Sangeeta, Sharma Vidhi, Gupta Priyanka. Adolescent Self-Esteem, Attachment and Loneliness. Journal of Indian Association for Child and Adolescent Mental Health, 2007, 61-63.
- **Phillips TM, Pittman JF**. Adolescent psychological wellbeing by identity style. Journal of Adolescence. 2007; 30:1021-1034.
- **Freudenthaler HH**, Spinath B, Neubauer AC. Predicting school achievements in boys and girls. European Journal of Personality. 2008; 22:241-245.
- **Erol, Orth.** Self-Esteem Development from Age 14 to 30 Years: A Longitudinal Study. Journal of Personality and Social Psychology, 2011, 607-619.
- **Rana & Mahmood (2010)** The major aim of this research study was to explore the relationship between test anxiety and academic achievement of students at the post graduate level A sample of 414 students was randomly selected from seven different

science departments in a public sector university in Lahore, Pakistan Data were collected by using the Test Anxiety Inventory (TAT) developed by Spielberger. Pearson correlation, multivariate statistics and regression analyses were run for data analysis. It was found that a significant negative relationship exists between test anxiety scores and students' achievement scores Results showed that a cognitive factor (worry) contributes more in test anxiety than affective factors (emotional). Therefore, it is concluded that test anxiety is one of the factors which are responsible for students' underachievement and low performance but it can be managed by appropriate training of students in dealing with factors causing test anxiety.

- **Gupta & Dutta (2012)** in his research took a sample consisted of 143 school students of class 11 and 12 both males and females from different higher secondary schools in Kolkata. Students from all streams (science, humanities and commerce) were considered for the study. Results showed that reactive aggression, neuroticism and psychoticism were significantly positively correlated with test anxiety whereas emotional intelligence was significantly negatively correlated with it. Regression analysis revealed reactive aggression, emotional intelligence and neuroticism as possible predictors of test anxiety.
- **Khadyal, Romi (2012)** conducted a study on the topic test anxiety of student of higher secondary schools in relation to gender and academic streams. She found that the female students depicted more anxiety than male counters parts. Moreover, the student of rural locality depicted more test anxiety than urban counter parts.
- **Jaipal & Sharma, (2013)** concluded that there is significant difference regarding Test Anxiety between sportsmen and non- sportsmen of Ch. Devi Lal University. It shows that Test Anxiety level is higher in non-sportsmen than sportsmen of Ch. Devi Lal University. And sportsmen have more courage than sedentary students. They can bear both load sports as well as education.
- **Meenu (2013)** conducted a study on the topic: Academic anxiety of adolescent students studying in govt. and private schools and she found that the students of Govt. schools, in general, in the boys group and in the girls group showed higher academic anxiety than their private schools counterparts. **Kour (2014)** conducted a study on test anxiety of adolescents of different academic streams. She found that the students of arts stream depicted more test anxiety than the student of science and commerce streams.

- **Neena (2016)** found that the students of rural locality experienced more anxiety than urban locality counterparts. **Priyanaka (2017)** found that the students of rural locality experienced more anxiety than urban locality students.
- Wikipedia. Covid-19 Pandemic in India. Retrieved on May 20, 2020 fromhttps://en.wikipedia.org/wiki/COVID-19_pandemic_in_India.
- T. Abel, D. McQueen the COVID-19 pandemic calls for spatial distancing and social closeness: not for social distancing! Int J Public Health (2020), 10.1007/s00038-020-01366-7Google Scholar.
- D.K. Ahorsu, C.-Y. Lin, V. Imani, M. Saffari, M.D. Griffiths, A.H. PakpourThe fear of COVID-19 scale: development and initial validation Int. J. Mental Health Addiction (2020), 10.1007/s11469-020-00270-8 Google Scholar.
- MHRD online. Online Learning Resources of MHRD. Retrieved on June 6, 2020 from https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/Write_up_online_learning_resources.pdf.
- Pravat Ku Jena. Online learning during lockdown period for Covid-19 in India. International Journal of Multidisciplinary Educational Research. 2020c; 9, 5(8):82-92.
- WHO coronavirus disease Covid-19 dashboard. Retrieved on June 3, 2020. fromhttps://covid19.who.int/

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Factors Involved in Investment Evaluation and Decision in Online Trading System

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Abstract

In the past decade much research has focused on online trading system because, now a day's many people are move forward to trading system so, that is why this topic is important. The research paper tries to analyse the Factors Involved in Investment Evaluation and Decision. The data used for this study were collected by 100 structure questionnaire from the investors. After that research has used WAM, Weighted Average Mean, Mann Whitney U test, and Kruskal Wallis test. At the end of the study researcher can say, Researchers have found that the major that "media effect" is the most important factor for investing in capital market as 52 investors out of 100 (52%) consider "Very High" and 26 investors out of 100 (26%) consider "High" to this statement. The W.A.M is also the highest in this case (W.A.M = 28.33). In similar manner the second important factor is observed to be "Risk Factors." The least important factor is identified from the above table "Lead Managers". The Kruskal Wallis-test shows that there is a significant difference in Factors Involved in Investment Evaluation and Decision with respect to demographic factors.

Key words: - Cross Tabulation, Computing Mean, Weighted Average Mean, Mann Whitney U test, and Kruskal Wallis test

1. INTRODUCTION

As we know Information technology (IT) is playing a crucial role in contemporary society. It has transformed the whole world into a global village with a global economy, which is increasingly dependent on the creative management or distribution of information. Globalization of the world economies has greatly enhanced the values of information to business organizations and has offered new business opportunities. It creates many advantages for the peoples for their decision making process. From the information they can take proper decision for the online trading system.

IT plays a vital role in the management of Stock Exchange World over because at world level many stock exchanges are working. IT has transformed the working of Stock Exchange in the global scenario. The rapid advances in information technology have determined important changes and innovation in the operation of Stock Exchange.1

2. REVIEW OF LITERATURE

Gupta (1991) argues that designing a portfolio for a client is much more than merely picking up securities for investment. The portfolio manager needs to understand the psyche of his client while designing his portfolio. According to Gupta, investors in India regard equity debentures and company deposits as being in more or less the same risk category, and consider mutual funds, including all equity funds, almost as safe as bank deposits. He argued on the basis of a study of 25 large companies over a ten year period that bonus policy of companies is characterized by low bonus, irregular intervals and inconsistent policy. This is an area which needs further study as his sample is too small to arrive at any definitive conclusions. In fact, he knew too little about how companies decide on bonus issues; certainly, he knew less about bonus policy than about dividend policy.2

Mayya (1991) made an overview of the Indian capital market. He examined various aspects of Indian Capital Market. The study emphasized the need for modernization and computerization for providing liquid and efficient market. His study reveals that though Indian stock market has attained a remarkable degree of growth in last one decade, but has still to go a long way.3

Mohammad Ali et al (2009)

In this study, the effect of the Internet on the stock market trade volume and volatility has been enquired in the case of Dhaka Stock Exchange in Bangladesh. The results show that the "Net"

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1 V. A. Avadhani, "Investment Analysis and Portfolio Management", Himalaya Publishing House, 1st Edition, 2011, Mumbai

2 L. C. Gupta, Indian Shareholders: A Survey. Society for Capital Market Research and Development, Delhi, 1991, p. 174.

3 M. R. Mayya, Investor Protection. Lecture delivered at Sydenham College of Commerce and Economics, Bombay, 14th March, 1991.

has a significant impact on these two parameters of volume and volatility of Dhaka stock market.4

Aruna Polisetty et al (2016)

Stock price downward movement continuously in the market forewarns the crisis period in advance. This study analyses the dynamic relationship between stock market and exchange rate and explores the long-run and short-run causal relationship between the stock market and the exchange rate in India for the major decade 2005-2014 of indices BSE Sensex and Nifty NSE. As US Dollar is a prominent currency for foreign trade, the exchange rate of rupee and US Dollar has been taken for the study. BSE Sensex NSE NIFTY index is a bench marking index that is used to measure the economic development of a country like India. The present study conducted from 2005-2014 for a period of 10 years. Correlation between NSE NIFTY, BSE SENSEX with reference to Exchange Rates can be calculated. This explains about the relationship between the variables.5

3. SIGNIFICANCE OF THE STUDY

Through this study reseracher has identify is there risk in online trading or not and for the investors it is safe or not. When investors go for investment so, online trading system is safe or not and what are the factors we have to consoder while decision making process in online trading system.

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4 Mohammad Ali Ashraf and Hasanur Raihan Joarder, the Effect of Information Technology on Stock Market Trade Volume and Volatility: Case for Dhaka Stock Exchange in Bangladesh. AU J.T. 12(4): 265-270 (Apr. 2009)

5 Aruna Polisetty and etc., Influence of Exchange Rate on BSE Sensex & NSE Nifty. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 18, Issue 9.Ver. II (Sep. 2016), PP 10-15.

4. OBJECTIVES, HYPOTHESIS AND TOOLS AND TECHNIQUE

Table: 1.1 Objectives, Hypothesis and tools and technique

Objective-1	**To Know Factors Involved in Investment Evaluation and Decision**	Frequency, Percentage, Weighted Average Mean Frequency, Percentage,
Hypothesis-1	**H_0:** There is no significant difference between the means of the Factors Involved in Investment Evaluation and Decision with respect to gender (male and female) at 95% confidence level.	**Mann Whitney-U test**
Hypothesis-2	**H_0:** There is no significant difference between the means of the Factors Involved in Investment Evaluation and Decision with respect to various Age Groups, EQ, Income Level, Earning family Members at 95% confidence level.	**Kruskal Wallis-test**

(Sources: self-constructed)

5. METHODOLOGY

Research-based on analytical information that means the researcher has to use fact or information already available with him, analyse them to make a critical evaluation of the data. The Researchers have collect data from the 100 investors who used online trading system and convenient sampling technique; the researcher has used **Frequency Distribution/Simple tabulation, Arithmetic Mean, Weighted Average, Mann Whitney-U test, Kruskal Wallis test.**

6. DATA ANALYSIS

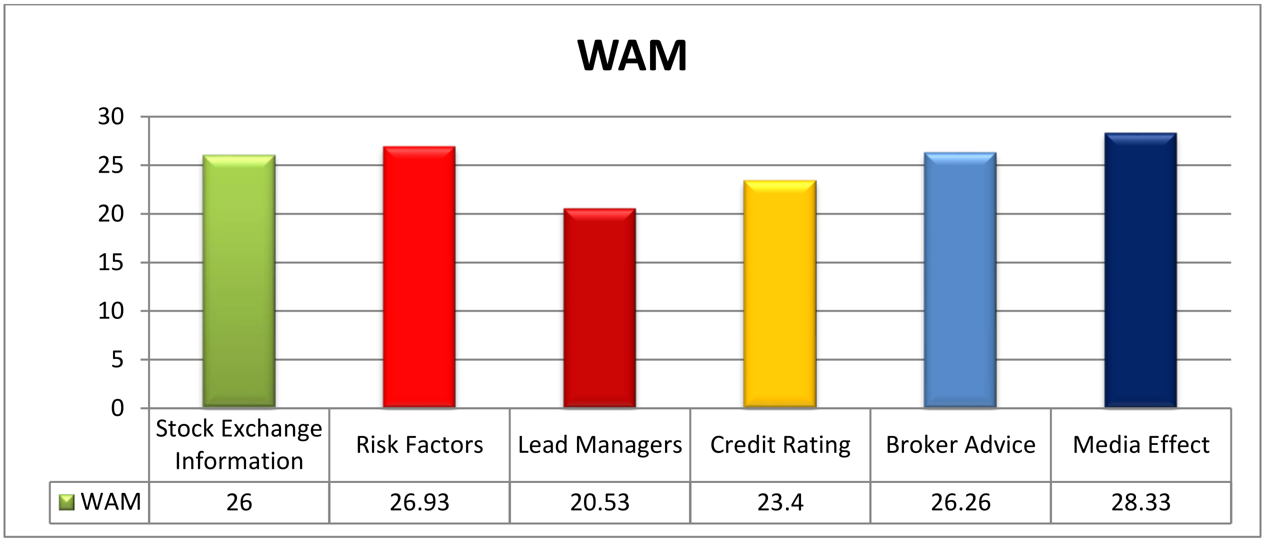
Factors Involved In Investment Evaluation and Decision

Table 1.2: Factors Involved In Investment Evaluation and Decision

Factors Involved In Investment Evaluation and Decision	VH	H	NH,NL	L	VL	WAM
Stock Exchange Information	29	37	29	5	0	26
Risk Factors	27	52	19	2	0	26.93
Lead Managers	8	20	49	18	5	20.53
Credit Rating	16	38	31	11	4	23.4
Broker Advice	29	45	18	7	1	26.26
Media Effect	52	26	17	5	0	28.33

(Sources: self-constructed)

Figure 1.1: Factors Involved In Investment Evaluation and Decision



Analysis:

It is clearly seen from the Table 1.2 and Figure 1.1 that "media effect" is the most important factor for investing in capital market as 52 investors out of 100 (52%) consider "Very High" and 26 investors out of 100 (26%) consider "High" to this statement. The W.A.M is also the highest in this case (W.A.M = 28.33). In similar manner the second important factor is observed to be "Risk Factors." The least important factor is identified from the above table "Lead Managers". It is interesting to observe that in this case around 49 investors were considering it as "neither high nor low" which means that investors are indecisive on this aspect of factors involved in investment evaluation and decision. It is also observed that majority of the investors agree that "broker advice".

Table: 1.3 Factors Involved in Investment Evaluation and Decision (Hypothesis Testing Based on Mann Whitney and Kruskal Wallis Test

S.R	Detail	Gender	Age	EQ	Earning Family Member	Monthly Income
1	F1 Stock Exchange Information	0.596	0.035	0.007	0.128	0.958
2	Risk Factors	0.901	0.297	0.238	0.272	0.307
3	Lead Manager	0.851	0.114	0.009	0.147	0.055
4	Credit Rating	0.465	0.283	0.015	0.306	0.145
5	Broker Advise	0.040	0.590	0.845	0.445	0.414
6	Media Effect	0.238	0.568	0.010	0.310	0.168

(Sources: self-constructed)

From the above table it can be said that stock exchange information is create difference in age and Education qualification that means according to age groups and education qualification investment decision process is differ. Lead manager is also differing in education qualification. So, from the above analysis it can be say that education qualification is important factors in evaluation decision making process. Maximum null hypothesis are fail to accept it means Factors Involved in Investment Evaluation and Decision depends on education qualification. It is also said that most important factor is media effect and risk factor.

7. CONCLUSION

From this study researcher have found that "media effect" is the most important factor for investing in capital market as 52 investors out of 100 (52%) consider "Very High" and 26 investors out of 100 (26%) consider "High" to this statement. The W.A.M is also the highest in this case (W.A.M = 28.33). In similar manner the second important factor is observed to be "Risk Factors." The least important factor is identified from the above table "Lead Managers". It is interesting to observe that in this case around 49 investors were considering it as "neither high nor low" which means that investors are indecisive on this aspect of factors involved in investment evaluation and decision. It is also observed that majority of the investors agree that "broker advice". Maximum null hypothesis are fail to accept it means Factors Involved in Investment Evaluation and Decision depends on education qualification. It is also said that most important factor is media effect and risk factor.

Refrences:

Aruna Polisetty and etc., Influence of Exchange Rate on BSE Sensex & NSE Nifty. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 18, Issue 9.Ver. II (Sep. 2016), PP 10-15.

Chiaku Chukwuogor, Stock Markets Returns and Volatilities: A Global Comparison, Global Journal of Finance and Banking. Issues, Vol. 1. No. 1. 2007

Dr .A. Abdhul Rahim, Problems and Prospects of Online Share Trading Practices in India. International Journal of Marketing, Financial Services & Management Research,ISSN 2277- 3622 Vol.2, No. 4, April (2013)

Dr. S. Gurusamy, "Essentials of Financial Services", Tata Mc Graw-Hill Publishing Company Limited, 2nd Edition, New Delhi

Francis X. Diebold and Kamil Yilmaz, Macroeconomic Volatility and Stock Market Volatility, World-Wide. University of Pennsylvania and NBER,Pennsylvania, 2007.

International Journal of Academic Research in Accounting, Finance and Management Sciences Vol. 3 (1), pp. 382–390, ISSN: 2225-8329, January 2013.

L. C. Gupta, Indian Shareholders: A Survey. Society for Capital Market Research and Development, Delhi, 1991, p. 174.

Laveena M, Jindal S and Dhiman M, Online Trading: The Future of Stock Market. Int J Econ Manag Sci Volume 4 • Issue 7 • 1000271 ISSN: 2162-6359 IJEMS

M. R. Mayya, Investor Protection. Lecture delivered at Sydenham College of Commerce and Economics, Bombay, 14th March, 1991.

Mohammad Ali Ashraf and Hasanur Raihan Joarder, the Effect of Information Technology on Stock Market Trade Volume and Volatility: Case for Dhaka Stock Exchange in Bangladesh. AU J.T. 12(4): 265-270 (Apr. 2009)

V. A. Avadhani, “Investment Analysis and Portfolio Management”, Himalaya Publishing House, 1st Edition, 2011, Mumbai

Yinxia Guo, the Efficiency of the Chinese Stock Market with Respect to Monetary Policy. Doctoral thesis, School of Economics and Management, Lund University, spring, 2008

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Marketing of the Banking Products and Services

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ABSTRACT:

The present research work focuses on the marketing of the banking products and services. Bank is a financial organisation which primarily deals with accepting deposits and lending loans. As the banking system has technologically advanced and customer wants or demands have become more intricate, marketing of services and products has become a need. Marketing of bank product is the aggregate functions, focused at offering services for the purpose to satisfy customers financial needs, more efficiently than the competitors keeping in view the organizational aims. Bank marketing can be understood as a system of banking strategies influencing on the entire procedure of offering banking services in the best way which will satisfy requirements of the target customers. Its aim is not only to get more and more customers but also to retain them by efficient customer facility. For the purpose to survive in stiff competition banks have adopt various marketing strategies and techniques to satisfy the customers by providing best possible banking services. Banking services and products offered through bank comprises credit card, debit card, ATM card, mobile banking, online banking, home banking, Demat account, deposits, loan and advances etc. Present research is based on secondary sources of the data and it is descriptive in nature. This study also recommends some strategies for the development of bank marketing and analysed that nowadays only those banks will sustain which have an ability to face the growing competition with the effective ways of marketing.

Keywords: Marketing, Bank, Bank Marketing, strategies, banking services, products

INTRODUCTION:

At the present time customer is becoming more sophisticated regarding their preference and quality of service being served to them. Throughout the life, customers endeavour their best to satisfy their requirements. The word ‘Market’ refers to the place where potential buyers and sellers gather to exchange products or services, as well as 'Marketing' is a function that identifies human and social needs and satisfies them. In addition to after the banking sector reforms, Marketing has developed as a more integrated function with in financial service institutions such as banks largely as a result of quick modifications in the operating environment. On the other hand, a 'Bank' is a financial institution that accepts deposits and channels those deposits into lending activities either directly through loaning or indirectly by capital markets. Banks are among the chief participants of the Indian financial system. As the banking system has developed and customer requirements or demands have become more complicated, marketing of services and products has become a necessity. 'Bank marketing' is the aggregate of functions, directed at offering or providing services to satisfy customers financial wants, more effectually than the competitors keeping in view the institutional objectives of the bank. Bank marketing assigned due weightage to satisfaction of the customers as well as it can be understood as a system of banking strategies affecting on the whole process of providing banking services in the best way which will satisfy wants and needs of target customers or clients. Bank marketing is maintained in an important interaction among services, products with customers demands and competitor's activities on the basis of balance benefits between customers, society and banks. Bank marketing purpose to win more and more customers and to retain them by effectual customer services. Thus, marketing constitutes the important tactic for banks to retain good customers as well as anticipate their future.

REVIEW OF LITERATURE:

Duraichamy, J. and Ram Prasad, T. P. (2016) have analysed A Study on the Marketing Mix in Banking Sector – With Special Reference to State Bank of India. They have the aims to study the concept of marketing mix of banking industries and its services and also concise the 7 P's or marketing mixes of State Bank of India. For the purpose of research work they have used secondary sources of the data. Present study is descriptive in feature. Researchers have examined that the at present banking sector all components of the marketing idea customer loyalty, benefit incorporated system as well as social duty are on the whole similarly significant. People from State Bank of India visit various grounds and partake in street shows. The bank additionally gives motivators to its staff with the purpose that better workplace is built up.

Navamani, C. and Saravanakumar, N. (2015) have examined Marketing of Bank Products and Services: Emerging Trends. In the present research work researchers have study about various products and services of banks, marketing approach and strategies for enhancement of bank marketing as well as they have suggested some strategies for improvement of bank marketing. From the study researchers have told that only those banks will survive in the future which will adopt effectual and realistic strategy to win the trust of the customers.

Tidke S. (2017) has studied about Marketing of the Banking Services. The objectives of the present study are to identifying the different marketing principles which are applied as well as discuss regarding the problems faced in marketing banking services and measures to overcome the difficulties in implementing the marketing strategies. Researcher has used both the sources of the data i.e., primary data and secondary data. On the basis of the present research work researcher has concluded that applying different marketing concepts enhanced customers satisfaction as well as assisted the banks to give a strong competition in the industry.

OBJECTIVES OF THE STUDY:

- To study the marketing developments concerning products and services in banking institution.
- To recommend some strategies of bank marketing.
- To study the importance of marketing in banking industry.

METHODOLOGY:

Present study is based on secondary sources of data, collected from various reference books, journals, articles, magazines, periodicals, and websites etc. and it is descriptive in nature.

BANKING PRODUCTS AND SERVICES:

Different banking products and services offered by banks are explained as under:

A. Credit Card:

A credit card is a card that permits its holders to make purchases of goods and services in exchange for the credit cards provider instantly paying for the services or goods. The cardholder promises to pay back the amount of purchase to the card provider over some time and with interest.

B. Debit Card:

Debit card is utilized for the withdraw of funds directly from the cardholder's accounts electronically. Most debit cards need a personal identification number to be used to verify the transaction.

C. ATM Card:

ATM card is a device that permits customer who has an ATM card to perform routine transaction of banking at any time without interacting with human teller. ATM card issued in association with checking or saving accounts that permits cash withdrawals as well as cash deposits at Automated Teller Machines but not point of sales purchases.

D. Mobile Banking:

Mobile banking is also known as M-Banking. Mobile banking is a word utilized for performing balance checks, payments, credit applications, account transactions and other transactions of banking by a mobile device for instance a mobile phone or personal digital assistant.

E. Online Banking:

Bank offer online banking that permits account holders to access their account data through the internet. Online banking is also known by other name such as web banking or internet banking. Online banking by traditional banks allows customers to perform routine transactions like balance inquiries, stop payment request, bill payments and account transfers etc. Some even provide online credit card applications and loans. Account information of account holder can be accessed anytime as well as can be done from anywhere.

F. Home Banking:

Home banking is the process of completing the financial transaction from one's own home rather than using a bank branch. Home banking services need an internet connection or access to online banking. It comprises direct deposits, making account inquiries, paying bills, transferring money and applying for loans etc.

G. Demat Account:

The full form of 'DEMAT ACCOUNT' is a 'DEMATERIALISED ACCOUNT'. An account that is utilized to hold securities and shares in electronic format is known as Demat Account. Demat Account make available facility of holding shares and securities in electronic format. During online trading, shares are purchase and held in a dematerialised account, therefore facilitating easy trade for the customers or clients. A dematerialised account holds all the investments an individual makes in government securities, shares, bonds, mutual funds and exchange traded funds in one place.

H. Accepting Deposits:

Accepting deposits from account holders or savers is the main function of a bank. Banks accept the deposit from those who can save money. People choose to deposit their savings in a bank for the purpose to earn interest.

➢ **Fixed Deposit Account:**

The fixed deposit is a type of investment provided by banks. A fixed deposit account is one where you deposit sum of money for a definite tenure with the bank and earn interest on the fixed amount for the period of the deposit. The interest rate provided in a fixed deposit account is higher than a saving bank account. With fixed deposit account, the money deposited cannot be withdrawn before the maturity term. If a depositor withdraws this money before the maturity tenure, depositor has to pay an interest penalty, a definite amount set through the banking institution.

➢ **Saving Bank Account:**

A saving account is a basic bank account that most of the people have. A saving account held at a bank or other financial organization that safeguards funds. This is an account where persons can deposit their money and earn interest on the deposits. In this account, the depositors have maintained a minimum balance as specified through bank. Great for building emergency savings or saving for short tenure goal.

- **Current Account:**

A current account is a deposit account used for business owners, entrepreneurs and traders, who want to make and receive payments more often than others. Current accounts hold more liquid deposits with no limit on the number of transactions per day. In these accounts overdraft facility i.e., withdrawing more amount than what is currently available in the account. Also, unlike saving bank accounts, where depositor earn some rate of interest, current account is zero interest bearing accounts. In current account persons required to maintain minimum balance to be able to operate current accounts.

- **Recurring Deposit Account:**

This account has a fixed tenure. Recurring deposit account is one where you need to invest a fixed amount of money in it regularly i.e., every month, or once a quarter to earn interest. The total deposit amount along with the interest therein is payable on maturity. The interest rate allowed on the deposits is higher than that on a saving bank deposit but lower than the interest rate allowed on a fixed deposit for the same tenure.

I. Loans and Advances:

Banks are profit oriented business institutions. Therefore, they have to advance a loan to the people and generate interest from them as profit. After keeping definite cash reserves, banking institution make available long tenure, medium tenure and short tenure loans to needy borrowers. The banking institution can recall such amount of loans at its option. The borrower has to pay interest on the whole amount of loan that is to say from the date of sanctioning of loan to the date of repayment. If the borrower fails to repay the amount of loan, its collateral security can be sold through the banking institution in the market and recover his amount of loan.

PURPOSE OF BANK MARKETING:

- Identifying the most profitable markets present day and in future.
- Assessing the present and future needs and wants of the customers.

- Setting business development goals and making plans to meet them
- Managing the various services and promoting them to achieve the plans
- Adapting to changing environment in the market place.

MARKETING APPROACH TO BANKING SERVICES:

Marketing of banking services is a means to maintain commercial viability and an approach to market the services profitability. It is a one kind of technique to energise orientation. The marketing approach in bank services includes the below given points.

- To identify the financial needs and wants of the customers' or clients.
- To develop proper products and services of banks to meet the customers' wants.
- To decide the reasonable and competitive prices for the products and services developed.
- Promote and advertise the product to probable as well as current customers of financial services.
- To set up proper channels of distribution and bank branches.
- Continuous focus on the forecasting and research of future market necessities.

The marketing of banking services relates to giving right way to banks with regard to multidimensional advantages to the numerous segments using the banks services. The services quality has undergone a foremost change because of the use of modern technologies by the banking institutions. The holistic idea of management has made marketing of banking services a tool to establish a balance between the commercial and social consideration frequently considered to be a balance amongst two opposite wings.

BANK MARKETING STRATEGIES:

In the intense competitive market, needs and wants of the customers keep changing. So, our strategies of marketing must be flexible as well as dynamic to meet changing scenario. Following are the bank marketing strategies explained as under:

- Informing Customers regarding Banking products and services
- Advertisement of banking products and services.
- Return value to customers with special financial services
- Formulate a saleable product scheme

- Get on the right social media platform
- Emphasis on deposits of banks
- Give importance to Convenience of the Customers
- Sale of products and services by E-delivery channels
- Sale of products and services through web sites
- Offer more products for women
- Motivate and reorient bank staff

IMPORTANCE OF BANK MARKETING:

Importance of bank marketing are exaplained as under:

A. Awareness among Customers:

Modern technology has made customers or clients aware of developments in the economic environment, which consist the financial system. With a broad area of network of branches, even in a different banking scenario, customers or clients expect the banks to provide more better service to match their requirements and this has compelled banks to take up marketing in right earnest.

B. Quality Key Factor:

Quality is the watch word in the present competitive word, which is market driven and banks have had to face up this emerging scenario. In actual fact, it may not be out of place to repeat that quality will in future be the only determining factor of successful banking ventures and marketing has to concentrate on this most vital need of the hour.

C. Growing Competition:

Increased competition is being confronted through the Indian banking industry from within the system with other agencies both, foreign as well as local, offering value added services. Competition is no more limited to resource mobilization but also to lending and other areas of banking activity. The foreign commercial bank with their services has also offered the required impetus to the Indian banks to innovate in the market place.

D. Technological Advances:

Technological innovation has resulted in financial product development or growth specially in the international and investment banking areas. The western experience has demonstrated that technology has not solitary made execution of work faster but has also resulted in greater availability of manpower for customer contact.

PROBLEMS FACED IN BANK MARKETING:

A. Lack of Customers Trust:

Since the financial sector like banking institution depends heavily on relationship, building trust is main consideration. Marketing can be enhanced only through increasing the customers. Customers can be attracted only through winning the trust of the customers.

B. Inadequate Promotional Activities:

Promotional Activities such as advertisement are still lacking. Public have not been enlightened adequate on packages available from these financial institutions. Most of the time, information to promote their activities thereof making it tough for the influence of their promotional activities to be felt through the people.

C. Inadequate Channel of Service:

The location where these services are available have not been enough and they tend to make the banks inefficient Branch offices providing these services are not equitably distributed and as such needy persons cannot receive bank service promptly. These are those who are interested in patronizing these financial institutions but cannot do so owing to lack of available branch network.

D. Low Quality of Service:

The service quality provided through the financial organizations are of very low quality at the present time. Some patronise these financial institutions just for the reason that there are no readily accessible alternatives around. Once the service quality is below standard or taste of the customers, he tends to withdraw from such organization.

E. Unappealing Prices:

Customers of the banks generally consider the prices charged through these organizations for their services not appealing. Also, depositors consider the interest paid on deposits very low when compared to the earning yield in other sectors of the economy. The insufficient pricing tends to demoralize persons from patronizing the bank and in turn it leads to decreased sales volume on the part of the banks.

CONCLUSION:

Reforms of banking sector have changed the traditional way of doing banking business. Nowadays, Marketing of banking products and services are of great emphasis on both bank and customers. With the introduction of novel products and services competition has grown up amongst the banks. With the increased competition and awareness regarding banking sectors, clients or customers are now becoming more demanding about products and services offered. At present time only those banks will survive who face the growing competition with the effectual ways of marketing.

References:

Choudhry, M. (2018). *An Introduction to Banking.* United Kingdom: Wiley.

Disha, E. (2017). *Marketing Aptitude.* New Delhi: Disha Publication.

Duraichamy, J. &. (2016). A Study on the Marketing Mix in Banking Sector - With Special Reference to State Bank of India. *Shanlax International Journal of Economics, 4*(2), 78 - 87.

Hoyle, J. &. (1987). *Elements of Banking.* London: An Imprint of Heinemnann Professional Publishing Ltd.

Navamani, C. &. (2015). Marketting of Bank Products and Services: Emerging Trends. *Shanlax International Journal of Economics, 3*(3), 1 - 4.

Tidke, S. (2017). Marketing of the Banking Services. *IJARIIE, 2*(3), 128 - 132.

https://www.iedunote.com/bank-services

https://www.studocu.com/row/document/hajee-mohammad-danesh-science-and-technology-university/integrated-marketing-communication/importance-benifit-of-bank-marketing/11181555

https://wikifinancepedia.com/finance/personal-banking-products-services-solutions-financial-management

https://www.unitedway.org/financial-products-and-services-the-basics

https://www.studocu.com/row/document/hajee-mohammad-danesh-science-and-technology-university/integrated-marketing-communication/importance-benifit-of-bank-marketing/11181555

42 The Scenario of Education During Covid-19 Pandemic: An Analytical Study

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Abstract

The outbreak of Covid-19 affected the lives of people severely all over the world and made everyone to isolate themselves in order to prevent the spread of Covid-19. Lockdown had a serious impact on everyone's life providing damage in both physical and mental terms. Pandemic had forced the government to impose strict lockdown in all the sectors like schools, colleges and enterprises. Educational institutions had nearly universal shift to online classes which had become the most challenging tasks to teachers. It also deprived many students from getting basic education (especially those from poor family background). Many students lacked communication devices like cell phones, laptops which curbed students from getting educated.

The main objective of this paper is to focus on the scenario of education during Covid-19. The paper brings limelight to both positive and negative impact of Covid-19 on education. Covid-19 created merely a complete new system of education. This paper further focuses on strategies that were used in that phase to overcome the spread of Covid-19.

Key Words: Lockdown, Education, Covid-19 Pandemic.

Introduction

Corona virus which is commonly called as Covid-19 is an infectious disease which affects human respiratory system. This pandemic was an abrupt hit to the whole globe. It has been more than 2 years since the covid-19 pandemic perforated the deep principals of human civilization and made us aware about the essence of our world.

It affected all the developing fields and also escalated into the educational province which made the whole world to shut their doors. When the question of learning aroused it could not be ignored. Thus, to see that the learning action proceeds the governments, universities and institutions found different paths to furnish pedagogy to the students.

Impact of Covid 19 on Education

The influence of Covid 19 pandemic was seen in all the zones of the world out of which educational sector was affected to the worse. The pandemic had affected educational systems worldwide and it led to the widespread closures of schools and universities. According to the UNESCO report more than 32 crores of students were affected by the transmission of the educational system.

Positive Impact of Covid-19 on Education

Covid-19 crisis made educational institutions to utilize digital technologies to convey education and were evoked with the significance of online learning. This resulted in the increase of digital literacy among the individuals who were associated with the academy. Numerous institutions leveraged online teaching opportunity to present lessons in an interesting and interactive way using PPTs, graphics and animation etc. Online education also took the cognizance of different learning pace of students and developed solutions for them. The teachers and students were exposed to a completely new challenge which made them get experience of digital education system. Though, it was very hard nut to crack, they had to adjust themselves for the sake of education.

Negative Impact of Covid-19 on Education

We had never expected a disaster like covid-19 would walk in our life. It was the worst nightmare to everybody during pandemic era. It had changed everyone’s lifestyle and due to this pandemic, the world had turned upside down. The covid-19 impact was found everywhere that forced the government to impose lockdown resulting in closure of all sectors including educational institutions. Though the schools were closed, educational initiatives like online classes, radio programs were enabled in order to cope up situation as the students started facing a huge loss in education. Though the innovative ideas of providing education created a positive impact but on the other hand, the students who weren’t having any kind of resource to attend online classes started suffering. Teachers who were experts in classroom teaching with black boards, chalks and books were exposed to great challenge in the pandemic phase. The parents who were educated handled the situation and supported their children. But what about those illiterate parents? Yes, the parents who were not educated were exposed to many challenges.

Board exams were cancelled in many states; students of all the grades were promoted without writing exams. Because of this student couldn't test their capabilities. On the other hand, most of the students from poor background were involved in labor work in order to support their families. This pandemic curbed the education of most of the female children and many schools and colleges were completely shut down due to low budget issues (financial issues). It shows us that covid-19 disaster not only had impact on students and teachers but also on parents and educational institutions.

Measures to Overcome Learning Loss during Pandemic in Education

The educational institutions all over India should take steps to recover the learning loss that happened during pandemic phase.

- They should develop new innovative ideas in order to create core competences that were lost in children during covid-19.
- There is necessity to establish bridge courses which can help the students to conquer the loss in academics.
- All the educational institutions must strive to fill the gap between previous year's education and the upcoming years.
- In order to organize several programs or bridge courses the government should allot the funds.
- To enable students to learn faster, activity based learning should be motivated.
- Vacations have to be reduced to maximum level so that students can make efficient use of time to overcome the loss in education during Covid phase.

Conclusion

The scenario, positive, negative impacts and remedies have been discussed in this paper considering all the sectors but mainly on the education sector. Keeping the remedies in an account one can overcome the learning loss during pandemic.

References

- https://timesofindia.indiatimes.com/readersblog/theenchantedpen/impact-of-covid-19-on-school-education-in-india.
- https://adamasuniversity.ac.in/positivecorona-positive-impact-of-covid-19-on-indian-educationsystem/#:~:text=The%20ongoing%20COVID%2D19%20crisis,shortcomings%20in%20the%20conventional%20model

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NRI Women in Indian Diaspora

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Abstract:

The term 'Diaspora' is used to refer to any people or ethnic population forced or induced to leave their traditional ethnic homelands; being dispersed throughout other parts of the world; and the ensuing developments in their dispersal and culture. Indian Diaspora possess a vivid and vital portion in Indian English Literature. And in this perspective we have to cite the role of Indian women writers who bears a brilliant and dazzling part of the Indian Diaspora. Various ism like post-colonialism, feminism, post modernism are mingled proportionately in the writing of these Indian diasporic women writers. Their creation emits a salient flavor of exotic land as well as they bear the exquisite and receded beauty of their homeland. Multiple dimensions of life within a multicultural milieu has been elevated by their writing. And in this relevance we have to mention the matter of Americanization. America, the dreamy abode of prosperity and material comforts confers their writing a different charm. The cadence of language floats from the penury to opulence; from superstition to pragmatic knowledge and from gloominess to conflagration. The dual nature of the life impeccant pictured by these women writers. Gradually they have become the facet of Indian Diaspora.

Keyword: Indian NRI Women, Diaspora, Immigration, Empowerment.

Introduction:-

Indian women usually migrate within the patriarchal framework and cultural considerations, and are supposed to preserve it as the 'bearers of Indian tradition' yet the process of migration and economic self-dependency give them an opportunity to assert independence, and redefine roles and perceptions of the self. While many of the problems, women in the Indian Diaspora face, arise out of patriarchal structures besides foreign settings, one can and innumerable instances of their struggles and triumphs over adversities and hostile situation Standing 'in-between' the two worlds, with complex realities of unequal power dynamics of the homeland and stereotypical spaces of the host land, women tend to experience on fisting subjectivities of freedom and subjugation. The space of the 'hyphen' often gives them a freedom for self-exploration and deliberation to conceive new identities and move beyond the fixed de nations of femininity. This volume is an attempt to capture the process of migration and settlement of women in the Indian Diaspora during the colonial as well as contemporary period. The essays map the struggles, challenges and agency of the immigrant women in their ongoing process of the reproduction of identity and culture in a foreign setting.

Indian Women in Diaspora:-

Fiction by Indian women writers constitutes a major segment of contemporary Indian Diaspora literature. The women novelists of Indian Diaspora in USA are Bharati Mukherjee, Chitra Banerjee Divakaruni, Kiran Desai, Sujata Massey, Indira Ganeshan and Jhumpa Lahiri. These writers have made their homeland memorable and popular by writing about it. Through the movements of migration on immigration writers are turned Diaspora. It depends upon individual's response to the adopted country and acceptance by the host. This acceptance also depends upon the value/importance of diasporic individual to the host society. It the initial stage they are 'outsiders' and face the question – who am I ? The initial works of diaspora writers are autobiographic and focus on the issues like nostalgia, restlessness, homelessness, dislocation and displacement. There are two moves of the diasporic writers – 1) Temporal Move – a look backward to the past and a look forward at the future. It produces nostalgia, themes of survival and cultural assimilation. 2) The Spatial Move – involves a deterritarialization and reterritorialization connected by journey. It is observed distinctly in the writings of Bharati Mukherjee (Jasmine, Desirable Daughters, The Tree Bride), anjana Appachana (Listening now), Jhumpa Lahiri (Interpreter of Maladies, Namesake), Kiran Desai (The Inheritence of Loss, Hullaballo in the Guava Orchard) and others.

Women have been part of almost all the groups of people moving out of Indian borders which today constitute the Indian Diaspora. However as discussed before, their experiences have largely been subsumed under male-centric homogenized perceptions and meta narratives. As a result their voices, experiences and their critical role in the success story of the Indian Diasp ora remain unnoticed and unmapped. Women in India are deeply embedded in the socio-cultural moorings and belief systems that are ingrained in historical antecedents and mythical/religious narratives. Patriarchy, power hierarchies and gendered perceptions are the fundamentals of these narratives. Although Indian culture in reality is immensely diverse and heterogeneous with no uniform template, the patriarchal social order tends to dominate the overarching frame.

Women migrate to work abroad in response to gender-specific labour demand in countries of destination that reflects existing values, norms, stereotypes and hierarchies based on gender. Thus, although laws regarding the admission of migrant workers are generally gender neutral, the demand for domestic workers, nurses, and entertainers focuses on the recruitment of migrant women. Moreover, in countries of origin as well, female labour supply is the result of gender norms and stereotypes that gear women to certain traditionally female occupations. Recruitment intermediaries, whether private or official, also contribute to reinforce gender segregation in the labour market. In addition, expectations about reciprocity within the family in countries of origin may favour the migration of women if daughters are seen as more likely to remit consistently and to undertake the responsibility of helping the family left behind. Migration is related to the level of empowerment of women, with migration levels among women being higher when female earning potential is more highly valued in the country of origin and women have access to local employment and income-generating opportunities. However, access to such opportunities may dampen the need or desire for migration.

Migrant women display considerable agency. They contribute to the economic development of their countries of destination through their competencies and skills, and to that of their countries of origin through their remittances and their increased experience when they return to those countries. Often, migrant women help other family members to migrate by paying for the costs of the move. As migrants, women are sources of remittances that may be used to improve the well being of other family members and foster economic growth. In countries of destination, migrant women work to improve their own and their family's standards of living, and they often press for changed gender relations within their families. In many countries, they also form and participate in non-governmental organizations that lobby for gender equality. Upon return to the countries of origin, migrant women may disseminate the importance of rights and opportunities for women.

Feminist inquiries suggest that migration and Diasporic conditions also affect women's authority and power relations within the family and alter patriarchal tructures according to the changing socio-economic contexts of home and host countries. But such changes do not show a linear pattern and are unevenlyexpressed. On the one hand, migration can be liberating and bring about moreegalitarianism in the family, and can open avenues for women to strengthen their agency, to negotiate many critical matters, to create new opportunities for them-selves and even recreate alternative cultural practices (see Hondagneu-Sotelo 2000; Buijs 1993; Levitt et al. 2007). However, on the other hand, it is also sometimesevident that gender hierarchy gets reinforced and becomes more rigid and traditional than in the homeland. The idea of losing control over women, in a perceived insecure, hostile or immoral (as liberal societies are often seen) receiving society, results in situations like physical abuse, honor killings and other cruelties (seeKang 2003; Kurien 1999; Judge 1992, 1994).

The twentieth-century scholarship on Diaspora Studies was slow and partial to take note of these perspectives, explore women's agency and the way they create their space in the diaspora's conditions. The dominant thread in the discourses on Indian women Diaspora was about women's role as agents and custodians of Indian culture, thus restricting them to subservient positions in society. The essays included in the volume discuss women in the Indian Diaspora from a multidisciplinary perspective involving social, economic, cultural and political aspects. Overall this volume resists the portrayal of women in Indian Diaspora only as victims by emphasizing their agency. Such an effort will privilege women's experiences and perspectives by raising consciousness and developing a deeper understanding about their issues in academia and among policy makers. (Women And International Migration, Division for the Advancement of Women Department of Economic and Social Affairs United Nations, https://www.un.org/en/development/desa/population/migration/events/coordination/3/docs/P01_DAW.pdf)

Population of India 1800-2020:

In 1800, the population of the region of present-day India was approximately 169 million. The population would grow gradually throughout the 19^{th} century, rising to over 240 million by 1900. Population growth would begin to increase in the 1920s, as a result of falling mortality rates, due to improvements in health, sanitation and infrastructure. However, the population of India would see its largest rate of growth in the years following the country's independence from the British Empire in 1948, where the population would rise from 358 million to over one billion by the turn of the century, making India the second country to pass the billion person milestone. While the rate of growth has slowed somewhat as India begins a demographic shift, the country's population has continued to grow dramatically throughout the 21st century, and in 2020, India is estimated to have a population of just under 1.4 billion, well over a billion more people than one century previously. Today, approximately 18% of the Earth's population lives in India, and it is estimated that India will overtake China to become the most populous country in the world within the next five years. (Aaron O'Neill, Jun 21, 2022). The most populated federal state in Germany is North Rhine-Westphalia in the west, with a population of almost 18 million. The state capital is Düsseldorf. Bavaria and Baden-Württemberg in the south rounded up the top three. (Evgenia Koptyug, Jun 24, 2022).

Number of reported dowry death cases in India 2005-2020:

In 2020, reported dowry death cases in India amounted to nearly seven thousand. This was a gradual decrease from the 2014, in which this number was approximately 8.5 thousand. The dowry system in India incorporates payments in the form of capital, durable goods, real estate among others, made to the bridegroom from the family of the bride as a condition for marriage.

The Hindu Succession Act :

Until its amendment in 2005, the Hindu Succession Act of 1956 was biased towards the male next of kin when it came to property inheritance. The amendment stated that women had right to their parents' property irrespective of being married. However, in practice, the inheritance of the women is socially imparted to her as dowry in marriage leading to financial dependence on the husband or the in-laws. This economic handicap has hindered progress towards equality among men and women the most. To prevent the economic abuse of women, The Dowry Prohibition Act of 1961 was passed by the government which prohibits the giving or taking of dowry in India.

How well are policies for women implemented? :-

Domestic violence against women, assault, religious and cultural traditions are the predominant perpetrators of endangering women's safety around the world. In 2018, India was the world's most dangerous country for women. The general consensus regarding women's safety suggested that the citizens of the country perceived the efforts to increase women's safety as ineffective. Although public opinion about the central government's policy is changing, the capital territory of the country was one of the most unsafe regions for women in India, thus questioning the effectiveness of the government regulations for women's safety.

NRIs and the connection to empowerment:-

Ever since the IT boom, emigration to western countries has been seen as the expected outcome of a 'successful' life. A large number of parents raise kids and educate them with this narrow definition, which often dictates their life choices. There are many angles to why the term NRI is so alluring, but it also hides a secret outline for women's empowerment.

Living abroad, many women feel empowered as they are allowed to manage their house, commute and most importantly, cultivate self-expression without the judging eyes of the extended family. With the reasoning of "fitting in" in a more open society, even husbands shed their patriarchal attitudes with time and the progressive attitude often seeps into the minds of the children as well.

When visiting family in India, women in such cases do get the short end of the stick, as the norm dictates that married woman spends most of her time at her in-laws' house, not her parents' home. This rule has been navigated mostly with 'time-share' arrangements by reasonable adults but there are patriarchal exceptions to this rule (wherein, women stay the whole vacation in their in-laws' house, and visit their parents for the day).

Usually a family settled abroad is considered a special visitor in the household and "the limited direct contact time", makes feuds an unnecessary disruption. Not those feuds don't happen, but they are usually marked down as "misunderstandings" and reasoned as "we see them once a year."

In India, the perception of joint families with a patriarch is the norm in most households. Even in nuclear breakaways, the control and authority often continue, enabled by technological advancements like WhatsApp and whatnot. This mutation of Indian households is familiar to all and many online feuds have happened because a toddler refused to chat with a grandparent, or a weak wifi signal sabotaged a weekend family call. Navigating these situations is easier for women when living abroad. A sense of autonomy prevails, and the distance helps smoothen these human frailties and ego.

The global pandemic has led to many families being stranded in their hometowns for an unavoidable extended period of time (which mostly in the case of women translates as the husband's house). Vacationing for a month and returning to familiar home turf outside India, is a whole different ball game when compared to the present situation for many families.

Social and Awareness Drives:-

1. At civil society and social level, take up community mobilization and capacity building, especially by taking rigorous steps towards three crucial aspects:

(a) Precautions

(b) Rights of wives in NRI marriages, under Indian Laws

(c) Rights of wives in NRI marriages, under Laws of the country where the husband is located.

Conclusion:

Thus, Indian as well as NRI Women in Indian Diaspora and Gujarati Diaspora is widely spread in the global area. Today, no country in the world will find Jovian where Indian people do not exist. The Indian Diaspora has made a special mark on the entire globe. International Diasporic studies at the international level provide evidence of this. Diaspora is a short-lived immigrant, or a person who leaves his country and settles in another country. Such a Diaspora no longer breaks its ties with the people of its native land. But the person returns to his hometown some years to visit his family or relatives. Visits his hometown. If such a person wants to have an impact on his / her villagers, families, youth etc. In the course of examining these effects, it is very important to get information about global Diaspora groups, Indian Diaspora in the world and Gujarati Diaspora in the world. Number of reported dowry death cases in India 2005-2020, The Hindu Succession Act, How well are policies for women implemented? NRIs and the connection to empowerment Social and awareness drives etc. As well as the NRI And it is equally important to know about migration as these two terms are very closely related to 'Diaspora'. But they have different meanings which can be seen from the above information.

Reference:-

1. Altamirano, Aha Tollefsen. 1997. Feminist Theories and Migration Research-Making Sense in the Data Feast. Refuge 16 (4).

2. Sanyukta Kanwal, Number of reported dowry death cases in India 2005-2020: Sep 20, 2021.
3. Women And International Migration, Division for the Advancement of Women Department of Economic and Social Affairs United Nations, https://www.un.org/en/development/desa/population/migration/events/coordination/3/docs/P01_DAW.pdf.
4. Report on Problems Relating to NRI Marriages, National Commission For Women, New Delhi.
5. http://www.ncw.nic.in/ncw-cells/nri-cell
6. https://www.womensweb.in/2015/09/11-misconceptions-nri-women/
7. https://link.springer.com/chapter/10.1007/978-981-10-5951-3_1

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Change In the Perception of Society Towards Menstruation: A Sociological Study

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Abstract

Menstruation is a social and cultural occurrence with a lot of implications. This paper aims to understand the perception of people toward menstruation and to try to find a possible solution to break the misconception about menstruation. It is a biological process in women's lives. The monstrous cycle of women's life starts from the onset of menarche coverage, 13 years through to menopause (an average of around 50 years). A woman menstruates for around 3 to 7 days a month during her menstruation cycle. During this period, women face many problems. Menstruation is not only confined to physical symptoms; it also affects the mental health of female adolescents. A lack of information about menstruation leads to unhygienic menstrual problems. Only 32 women (20%) had an idea of menarche regarding menstruation. 65% of women used only sanitary pads and 30% used only cloth pieces, while 5% used both pads and cloth pieces. All those who reused cloth pieces washed the used cloth pieces with soap and water, and 50% of them dried those under sunlight. All women face some kind of restriction during menstruation. About 4% of individuals did not take regular baths during their bleeding period; many women (37.5%) suffered from recurrent productive tract infections due to unhygienic menstrual practices. Most of the study subjects (95.6%) disposed of used napkins in municipal vats. By providing proper counseling sessions and workshop programs, girls can be educated about menstruation. There **is a** need to build their confidence, encourage healthy habits, and break down taboos.

Introduction

Menstruation is the shedding of the endometrial (uterine) lining. Menstruation is also known as menses. The word menses is derived from the Latin menses, meaning ‘months’. The word menstruation comes from old French menstrual, which comes from Latin menses’ mining ‘monthly,’ especially "of or having monthly courses. The menstrual cycle is normally five days long. Menstruation is a natural biological process, a manifestation of the female reproductive abilities, so significant that the existence and proliferation of mankind are dependent on it. However, its social impact in defining the way women are perceived and treated worldwide is more significant than its biological genesis.

Since ancient times, the societal taboos related to women and their ostracism within their households has resulted in mental and physical agony for women. With time, the scientific genesis of menstruation got obfuscated and obliterated under the dominant rule of patriarchal power. The irony remains that most of these practises are defined and adopted based on the convenience and beliefs of the community or even individuals. Its impact on the social and mental health of tamales reveals the various irons that exist in our society while attempting to establish a narrative for the contemporary social relevance of menstrual practises and their future evolution in line with our social progression. Since the inception of mankind, the female gender has been bestowed with the role of procreator.

Objective of the study

The research work aims to shed some light on the widespread menstrual taboos in India and emphasize the need to eradicate them. These practices associated with men's striation are inconvenient, embarrassing, humiliating, uncomfortable, traumatic, painful, and, in some cases, life-threatening.

This paper emphasizes the need to bring awareness about menstruation and to be at ease with it. The inhibitions around it must be released and openness about it needs to be established. Both genders should be able to talk about it without any other biological phenomenon. These social norms are hurdles and barriers in the way of learning, creating opportunities for enjoyment, and living a normal life. Every year, women are mocked, shamed, abandoned, and banished temporarily when they need more attention and care. 96922 women in India die due to cervical cancer. Bad menstrual practices and social impositions play a huge role in it. This paper emphasizes the need to develop awareness about menstruation and to be at ease with it.

Research Methodology

A cross-sectional descriptive study was conducted with 45 women from different areas of Rajasthan to learn about their experiences with menstruation. The study aimed to understand from the respondents the practices followed in their families, the restrictions they have faced during certain periods, the difficulties they face, and how they deal with them. The study has successfully been able to map their ideas about menstrual restrictions, their willingness to follow them, and the changes that have come in their lives over the last year.

Findings

Observation Based on the literature review and findings on menstruation as a biological phenomenon, it has social dimensions and relevance in our society today. It occurs once a month in females between the ages of 12 and 50 and is caused by fluctuating hormones. This fluctuation of her moons is called the menstrual cycle, and it results in the formation of the egg by making a thick layer on the vitreous. The ovary releases it. In the case of pregnancy, the thick lining of the uterus provides nature to an embryo. If pregnancy does ensue, the lining drains off and flows out, resulting in menstruation. So it’s to understand what a complex biological phenomenon it is. As it is a compliance mechanism, there are also some side effects attached to menstruation. Since it is an outcome of hormonal change in a female body, it causes many issues like muscle contraction, bloating, fatigue, water retention, breast tenderness, migraine nausea, emotional disturbance, mood swings, and much more. Some women also suffer from menstrual disorders, which can lead to a variety of other health issues such as thyroid imbalance, skin problems, hair loss, and more.

The social paradigm—in ancient menstruation times, practises was established to provide rest and comfort to women who were on their periods. Later, this practice of convenience for others, the patriarchs, started making their own rules to ensure control over the women. Don’t cook because you need to rest. Don’t cook because you are impure and have continued in this form.

Relationship between mental health and menstruation

Serving studies are exploring how menstruation and mental health are associated with each other because menstruating women face many mental health problems like anxiety, depression, over-thinking, and eating disorders. These mental health problems affect every one of us.

Castration taboos and myths current in various cultures influence young adolescent females' attitudes, emotions, and most significantly, health.

In Indian culture, and particularly in the Hindu religion, a negative connotation is given to menstruation. Girls are not allowed to enter temples, water the plants, or enter the kitchen at home. They are restricted to a diet and are further advised not to take a bath. The main restriction for females in cities is that they do not participate in the pooja ceremony, whereas rural females are not allowed to enter temples, water the plants, or enter the kitchen at home. They are restricted to a diet and are further advised not to take a bath. The main restriction among young females in cities is not taking part in the pooja ceremony, while rural females are stopped from entering kitchens. According to the UNICEF report, Tamil Nadu is 66%, Uttar Pradesh is 56%, and Rajasthan is 6%. 45% of adolescent women in West Bengel did not know about menstrual hygiene. Menstruation not only affects physical health but also has long-lasting and distressing psychological effects, and it is the leading cause of school dropouts and absenteeism among teenagers and female adolescents. In such a scenario, the psychological effect would be more distressing.

Conclusion

Most of the girls feel an extreme level of difficulty. They do not have much awareness regarding menstruation and hygiene practices. Women suffer from more menstrual difficulties than men, the most common being dysmenorrheal. Menstruation is related to several disorders related to mental health "embarrassment" about menstruation. It is the main difficulty in healthseeking behavior. It is also linked with some disorders like social phobia, anxiety, and depression.

Such accurate and informed discussions will help girls deal better with such problems. Most of the girls take this advice and have a conversation on this topic with their mother. This signifies that the education of mothers regarding menstrual health is crucial in tackling health problems associated with menstruation. It is necessary to provide basic menstrual knowledge to all teachers. It is critical that female teachers, in particular, are inspired to discuss and talk with all young adolescent females about both physical and mental health problems, and that every girl has sessions with a health counselor to discuss difficulties and misunderstandings surrounding health issues, particularly menstruation. All government and private schools and colleges appoint health counselors to address young adolescent female health difficulties and reframe taboos and misconceptions regarding menstruation.

The last but not the least and most significant point is that today's teenagers represent the future women who will eventually play the roles of responsible mother, teacher, and social reformer. As a result, it is critical to educate them on all aspects so that they can pass on comprehensive information to future generations to equip them with scientific facts that will lead them to appropriate menstrual hygiene management. On one hand, the next generation of teens will be free from the myths and stigmas attached to this very natural phenomenon, and on the other hand, they can prevent many of the associated infections. Menstruation will not be something to be ashamed of. As a result of this research, an attempt will be made to comprehend the role of intergenerational transmission in social-cultural practices and to identify attitudinal and behavioral change across generations.

REFERENCE

1. Cervical cancer (20019 Agu) available http: // cancerindia.org.in/cervical cancer
2. Kirk J.sommer M.Menstruation and body awareness linking girls health with girls education 2006
3. How these Teenagers are Busting Period Myths 2019 july 26 available http: Time of India India.com
4. Greydanus D.E & Mc .narneyey, E.R 1982 Menstruation and its disorders in adolescence .curre Probi pediatr 121-61
5. World health organization 1996 programming for addescent health and development
6. Singh A.J 2006 Place of menstruation in the reproductive lives of women of rurd north India .Indian journal of community medicine.
7. Garg.s Tanu and Anand 2015 menstruation related myths in India. Strategies for combating it

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Biodiversity Conservation: Innovative Methods

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Abstract

Our planet's biodiversity faces threats of historic and unprecedented proportions. Development of land, urbanization, pollution, diseases, all of these have been wreaking havoc on our biodiversity, pushing many species to the edge of extinction. All species play vital roles in building our Earth's Life-Support systems as we all depend on these different species for our very own survival. To curb this crisis and to save these species from going extinct, it's imperative that we protect the biodiversity of the world. Certain areas in the world tend to have higher species richness due to the conditions that prevail in these regions and as a result, these areas have been given the label 'Biodiversity Hotspot'. Around the world, 36 such areas have been identified and these hotspots represent over 2.5% of the earth's land surface and support nearly half of the world's flora and fauna and over 43% of these species are endemic to these regions. In many of these areas, human activity tends to threaten the lives of the native species and as a result, these areas have become important locations for the conservation of biodiversity. This report goes over a few innovative methods that have been employed by the field of conservation and how they have benefited the whole process.

Keywords – Biodiversity, Conservation, Biodiversity Hotspot

Introduction

Biological diversity or Biodiversity is the scientific term for the variety of life on Earth. It refers to the species, the ecosystem and differences in genes within a single species (Lovejoy, 1980). It is the variety and differences among living organisms from all sources that including terrestrial, marine and other ecosystems and ecological complexes that the organisms are a part of. Biodiversity includes genetic biodiversity, species diversity and ecosystem biodiversity and thus represents all of life on earth.

Biodiversity supports the provision of ecosystem services such as food, fresh water, fuelwood, fiber, biochemicals, ecotourism which are central to economic activities. The economics are clear, for governments and businesses alike: the costs of action are dwarfed by the costs of inaction. If managed well and sustainably, nature holds the key to our prosperity. Each year, around US$125 trillion worth of ecosystem services are provided to the global economy through drinkable water, water for industrial processes, food, fresh air, heat absorption, productive soil, and forests and oceans that soak up carbon.

A healthy ecosystem has clean water, purifies the air, maintains the soil, regulates the climate, recycles nutrients, and provides food for the organisms. They also provide us with raw materials and resources for the production of medicines and other goods, and thus serve as the foundation of all civilizations, allowing us to sustain our economies and way of life in the absence of these 'ecosystem services.'

Our planet's climate and its ecosystems are very closely coupled as the stability of the ecosystem and climate im important for the various species on earth to thrive. Chapter 13 of Agenda 21 recognizes mountains and uplands as major components of our global environment. It states the role of mountains in it while expressing concerns about the decline in the general environmental quality of these ecosystem elements (Earth Summit, 1992).

The change in biodiversity of any area can be due to one of three basic ecological processes:

a. Invasive or foreign species

b. Progressive Succession

c. Retrogressive Succession

Unfortunately, we are losing biodiversity at an unprecedented rate, according to the Living Planet Report of 2018 which shows us a 60% fall in just over 40 years — a grim reminder and perhaps the ultimate indicator of the pressure we exert on the planet and on species.

While biodiversity can be conserved in a number of ways, this paper discusses a number of these methods such as Camera Traps (through the example of M-StRIPES), Bioacoustics, Genetic Analysis and DNA barcoding and Remote Sensing Technologies.

Why We Need to Conserve Biodiversity?

Biodiversity has been under constant threat since the dawn of time. As we grow, we remove, change, and use land to meet our needs. Natural habitats are frequently harmed, and biodiversity is reduced as a result of the changes we make. Loss of habitat is one of the most serious threats to biodiversity. This can be accomplished by clear-cutting forests, polluting oceans, or doing anything else that alters the natural habitat. We harvest a large number of natural resources, and when this is not done in a sustainable manner, the results are disastrous.

Land development is one of the leading causes of habitat destruction. Over the last century, as urbanization has increased, more and more land has been repurposed, destroying natural habitat and increasing noise and pollution. When habitats change, animals flee or die, drastically reducing biodiversity in the area.

Climate change is inextricably linked to urbanization and habitat loss. Human development has increased as urbanization has increased, resulting in increased consumption of many natural resources. Climate change alters regional climates, making it difficult for many species that are specifically adapted to those regions to survive. Furthermore, as the climate changes, species will migrate to new areas, altering the ecosystems that already exist there. Finally, some climates will vanish as a result of these changes. Glaciers will melt, and islands will be submerged.

Invasive species are a final threat to biodiversity. Invasive species are plants or animals that are not native to a region and often come from a long distance away. We move these organisms both intentionally and unintentionally. New animals are sometimes brought to an area as pets or sneakily hitch a ride on human transport. When invasive species are introduced to a new area, they can sometimes thrive because the existing ecosystem is not adapted to their presence.

Invasive species frequently outcompete native species, causing them to become extinct. The brown tree snake, which was accidentally introduced to Guam via aircraft in the 1950s, is one example of this. The brown tree snake is blamed for the extinction of three bird and five reptile species in Guam over the last 50 years.

As our society grows, we use more resources, which degrades natural biodiversity, but growth also leads to advances in science and technology. Science and technology are currently two of the most important tools in conservation biology. To understand the web of interactions in our biomes, we use science, specifically ecology. Scientists can identify key species in ecosystems by understanding these interactions. This data is used to direct conservation efforts.

In conservation biology, technology is becoming increasingly important. Sustainable technologies, such as renewable energy, biodegradable packaging, and recycling, help to reduce our environmental impact. Furthermore, technologies such as cloning enable scientists to resurrect species that were previously thought to be extinct.

There will be disastrous consequences if nothing is done to mitigate these changes. There are numerous things we can do in politics, science, and even our daily lives to assist in resolving these issues. As humans, we must understand the risks associated with our consumer lifestyles and work diligently to repair what has already been harmed and prevent future harm.

Camera Traps

The evolution of the camera trap is a story of human curiosity and innovation, rooted in the cultural fascination with nature photography that flourished in England at the end of the nineteenth century. By hacking together, a camera, a flashlight, and an ingenious system of trip wires, photographer George Shiras created one of the first successful remote camera traps. When wild animals tripped the wires, they took pictures of themselves. There was no need for a human to operate the shutter.

Camera traps are remote cameras that take photos when a sensor detects the movement of an animal or person and, increasingly, send the image to the operator in real time. For decades, they have assisted researchers in documenting the presence of elusive wildlife, but forward-thinking scientists have begun to apply this technology to new environments and species. Camera traps installed in trees, for example, have successfully documented canopy use by arboreal mammals.

As the number of camera trap studies grows, so does the number of "bycatch" photos—photos taken of species that are not the subject of the study for which the camera traps were set up. One research team has urged scientists to share photos of non-target species, particularly those with few occupancy studies, for others to use. They also devised ideas for making bycatch photosets easier to find, search for, and use.

Modern cameras can be powered by solar energy, withstand humidity, heat, rain, and cold, use infrared and motion sensors instead of trip wires, and even transmit real-time images to your smart phone in your pocket via cellular networks. These capabilities make this technology a very versatile tool with scientists all over the world use them for a variety of purposes.

M-Stripes is an example of a camera trap technology that is currently being used in India to aid in the conservation process. It is a mobile app designed to collect, manage, and compile data sets on specific taxa and ecosystems, and was inspired by existing handheld data collection tools such as CyberTracker and Open Data Kit. The app allows field patrols to use smartphones to quickly collect and upload data on tigers and their prey to a central server in order to modernize the country's tiger population estimates.

M-StRIPES, an android-based software, will be used in all of the country's national tiger reserves. According to reports, the use of this system in the Pench Tiger Reserve resulted in "a significant reduction in anti-forest and anti-wildlife activities."

According to the four-yearly report, India had 2,967 tigers in 2018, up from 2,226 in 2014. According to the report, more than 80% of tigers' photographs were captured using camera-trapping methodology this time, up from 70% in 2014.

Nearly 27,000 camera traps were set up in 141 locations covering 1,21,337 square kilometers, and nearly 3.48 crore photographs were taken, with approximately 80,000 of them being of tigers. Other software used for tiger estimation included Spatially Explicit Capture Recapture (SECR) and Extract Compare, which aid in distinguishing between tigers' stripes because each has a unique pattern.

Remote Sensing Imagery

Remote sensing began in the 1840s, when daring observers combined cameras and balloons to photograph the Earth below. Over the next 170 years, remote sensing (a term coined and defined by Evelyn Pruitt of the United States Office of Naval Research in the 1950s) advanced so far beyond those early aerial photographs that it would make Jules Verne's head spin.

Today, remote sensing – the art and science of "identifying, observing, and measuring an object without coming into direct contact with it" – encompasses a wide range of tools, from high-resolution satellite imagery to lasers that measure minute shifts in glaciers and shorelines to small, unmanned aerial vehicles (drones) that can photograph, map, and record vast amounts of data to 2-centimeter resolution. As UAV technology advances and drones become smaller, more capable, and less expensive, their utility in conservation may become almost limitless.

Data from Indian Remote Sensing Satellites (IRS) have been extensively used to map mangroves and other coastal vegetation along the entire Indian coastline. IRS data have been used to identify dominant plant communities in a variety of mangrove areas, including Bhitarkanika, Coringa, the Mandovi estuary in Goa, and the Gulf of Kachchh, among others. Along with the mangroves, seaweed, seagrass beds, and dune vegetation have all been accurately mapped.

Tamil Nadu's evergreen forests are divided into four distinct hill ranges: Nilgiri, Anamalai, Palni, and Tirunelveli, each with its own topographic, bioclimatic, and disturbance levels. The evergreen forests in these four hill ranges are distinguished by their distinct patch characteristics and phytosociology. Using IRS LISS III satellite data, a vegetation type map was created and used to investigate patch characteristics such as patch size, number, shape, porosity, and landcover diversity (LD).

The spatial analysis assisted in the identification of homogeneous large patches of evergreen forest that can be used to develop appropriate conservation strategies. For phytosociology, 342 tree species with a total of 4490 stems were evaluated. In terms of species distribution, only 15–28 percent similarity was found across the hill ranges. (Amarnath and colleagues, 2003)

Other technologies have advanced in a similar manner. Terra-i is an artificial intelligence program that predicts how green a given habitat should be based on real-time rainfall data, and then compares that prediction to images of the habitat from an Earth-monitoring satellite. And lidar, a laser-based method of remotely mapping forests, has proven to be an effective and accurate tool for measuring the effects of low-impact logging in Indonesia.

The ability to collect massive amounts of data is the most significant advantage of using remote sensing technologies for research. However, AI is proving to be the most efficient way forward for sifting through the terabytes of acoustic data I collect. After manually analyzing a small portion of my data, I can train AI to look for the presence of a specific species or type of call in the data.

Combining remote sensing imagery with other types of data can help with monitoring, particularly over large areas or in remote areas with difficult terrain. With sharks under threat from overharvest, researchers compared the simultaneous locations of satellite-tracked fishing vessels and tagged shark locations to examine the proximity and potential threat to sharks from accidental or intentional catch.

Research linking high-resolution imagery to detect high-carbon tropical forests with camera trap photo data to assess species presence showed that high-carbon forests support more wild species.

Bioacoustics

The natural world is full of bioacoustics, which are more than just a nice soundtrack — they provide valuable data to scientists and conservationists. Bioacoustics, a new field of study, is now using the entire scope of data, often referred to as the soundscape, as a rough measure of biodiversity.

In the forest, researchers place sensitive acoustic and ultrasonic recorders. Acoustic recorders capture sounds between 1 and 24 kilohertz, roughly within the normal range of human hearing, including vocalizations from birds, some bats, frogs, mammals, and the majority of insects. The ultrasonic recorders capture sound at frequencies up to 96 kilohertz, allowing us to collect data on bats and insects that vocalize at frequencies beyond the range of human hearing.

These acoustics provide a rough estimate of biodiversity, allowing researchers to determine whether conservation efforts are effective. The Nature Conservancy is currently using bioacoustics to determine the best forest management practices for wildlife conservation in Borneo, as well as the conservation effectiveness of land use plans in Papua New Guinea.

Animals make a lot of noise, as evidenced by automated bioacoustic monitoring devices. Acoustic sensors, like camera traps, can record the presence of animals through their sounds 24 hours a day, seven days a week, and store the data in a web-based platform for users to manage and analyze.

They are especially beneficial to aerial and underwater species that move in three dimensions rather than along trails. Above-ground acoustic devices have assisted researchers in correlating the buzz signatures of wild bees to their body measurements, pollination potential, and the composition of the bee community in a given area. When chainsaws are detected in a forest, acoustic sensors can detect them and alert authorities or local indigenous groups in near real-time.

New users of these and other data-collection technologies can learn more from a comprehensive new online resource that debuted in 2017 and details best practices for using specific technologies such as camera traps, acoustic monitoring, and LiDAR.

Monitoring bioacoustics in forests, in addition to looking for enigmatic species, can help with conservation. Researchers frequently consider recordings as ‘soundscapes,' or the collection of all sounds in a specific landscape.

Climate change could result in more gradual changes. Researchers all over the world have documented phenological changes caused by global warming, such as birds and frogs calling for mates earlier in the season. Bioacoustic monitoring of forests can help to clarify the relationship between rising temperatures and changes in animal behavior ecology.

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DNA Bar Coding and Genetic Analysis

DNA barcoding (a tool for rapid species identification based on DNA sequences) and genomics (which compares entire genome structure and expression) share an emphasis on large-scale genetic data acquisition that provides new answers to questions that were previously beyond the scope of traditional disciplines. DNA barcodes are made up of a standardized short sequence of DNA (400–800 bp) that should be simple to generate and characterize for all species on the planet.

A biological specimen is assigned to a species using DNA barcoding. In cases involving the sale of incorrectly identified food, DNA-based procedures have become the preferred forensic tool for criminal prosecution.

Similar to how genomics has accelerated the process of identifying novel genes and comparing gene function, DNA barcoding will allow users to efficiently recognize known species while also hastening the discovery of species yet to be discovered in nature. DNA barcoding aims to use information from one or a few gene regions to identify all species of life, whereas genomics, the inverse of barcoding, describes the function and interactions across all genes in one (e.g., humans) or a few selected species. The work of Lahaye et al., published in an issue of PNAS, brings the use of DNA barcoding in plants one step closer to reality.

DNA barcoding, which compares DNA samples of unknown identity to reference databases using a gene found in all animals, has revolutionized species identification for both researchers and wildlife officials. The rhino database RHODIS aids in determining the origin of horn material carried by poachers or traders. Similarly, barcoding even processed market specimens can assist trade officials in distinguishing between legal and illegal species: one study discovered that the majority of shark and ray products are illegal. Recent advances in portability and barcoding technology have resulted in handheld DNA analysis devices that will assist officials in quickly identifying species from wildlife parts on the spot. Such knowledge is still only one aspect of combating wildlife crime; the use of DNA results in courts of law varies by country, partly due to the system's presumption of guilt or innocence.

Environmental DNA (eDNA) is collected from the environment (typically from skin, scales or scat) and thus is non-invasive. It is particularly helpful in searching for rare aquatic species and determining fish community diversity, which is difficult to survey manually.

Conclusions

To help prevent future pandemics, we must drastically reduce the opportunities for viruses to spread from animals to humans. The loss and degradation of natural habitats must be recognized as a major contributor to the emergence of infectious diseases in wildlife. While this is a complex and context-dependent relationship, the general trend is that habitat loss increases the likelihood of species carrying potential viruses being in close proximity to people.

Protecting and restoring nature is more than just a moral imperative. It is also essential for our overall health and well-being. When an area of land is deforested and converted for agriculture or infrastructure development, for example, it reduces the natural habitat available to species and can bring them into closer contact with each other as well as humans. This increases microbes' ability to move between species and make the transition to humans. Preventing unsustainable practices and protecting wildlife populations can help prevent future pandemics. It is critical that nature is on the road to recovery in order to achieve a nature-positive and carbon-neutral world by 2030.

References

1. https://theunfoldingearth.com/10-things-you-can-do-to-protect-biodiversity/
2. Amarnath, G., Murthy, M., Britto, S. *et al.* Diagnostic analysis of conservation zones using remote sensing and GIS techniques in wet evergreen forests of the Western Ghats – An ecological hotspot, Tamil Nadu, India. *Biodiversity and Conservation* **12,** 2331–2359 (2003). https://doi.org/10.1023/A:1025858713716
3. Amarnath, G., Murthy, M., Britto, S. *et al.* Diagnostic analysis of conservation zones using remote sensing and GIS techniques in wet evergreen forests of the Western Ghats – An ecological hotspot, Tamil Nadu, India. *Biodiversity and Conservation* **12,** 2331–2359 (2003). https://doi.org/10.1023/A:1025858713716
4. Co-operation on Health and Biodiversity. 2010. Biodiversity and Human Health Policy Brief..
5. FAO. 2010. The State of World Fisheries and Aquaculture: 2010
6. Gairola, Sanjay & Procheş, Şerban & Rocchini, Duccio. (2013). High-resolution satellite remote sensing: A new frontier for biodiversity exploration in Indian Himalayan forests. International Journal of Remote Sensing. 34. 2006-2022. 10.1080/01431161.2012.730161.
7. Gogoi, B., Wann, S.B. & Saikia, S.P. DNA barcodes for delineating *Clerodendrum* species of North East India. *Sci Rep* **10,** 13490 (2020). https://doi.org/10.1038/s41598-020-70405-3
8. Groom M J, Meffe G K, & Carroll, C R. 2006. Principles of Conservation Biology, 3rd ed. Sunderland, Massachusetts, USA: Sinauer Associates.
9. http://nopr.niscair.res.in/handle/123456789/4622
10. http://www.indiaenvironmentportal.org.in/content/471337/all-india-elephant-tiger-and-leopard-estimation/
11. https://croplife.org/news/top-10-ways-you-can-protect-biodiversity/
12. https://gadgets.ndtv.com/science/features/bioacoustics-soundscapes-indian-forests-study-ecosystems-ncf-2304261
13. https://greentumble.com/10-ways-to-conserve-biodiversity/
14. https://ntca.gov.in/our-work-m-stripes/#m-stripes
15. https://sites.utu.fi/amazon/events/using-remote-sensing-to-map-biodiversity/
16. https://solarimpulse.com/news/technologies-to-protect-biodiversity
17. https://wwf.medium.com/5-ways-to-protect-biodiversity-5def3447e103

18. https://www.ecowatch.com/conservation-tech-innovations-2522754536.html
19. https://www.epa.gov/enviroatlas/enviroatlas-benefit-category-biodiversity-conservation
20. https://www.indiawaterportal.org/articles/conservation-across-landscapes-study-various-mechanisms-biodiversity-conservation-india
21. https://www.nap.edu/read/989/chapter/12#397
22. https://www.nasa.gov/feature/esd/2020/nasa-fosters-innovative-ways-to-understand-biodiversity/
23. https://www.pnas.org/content/117/42/25951
24. https://www.researchgate.net/post/How-to-increase-the-effectiveness-of-environmental-protection-programs-natural-ecosystems-and-biodiversity
25. https://www.researchgate.net/publication/277124537_Biodiversity_Conservation_in_India
26. https://www.sciencedirect.com/science/article/abs/pii/S0168952507000364
27. https://www.sciencedirect.com/science/article/pii/B9780128130643000193
28. https://www.sciencedirect.com/science/article/pii/S2590332220306576
29. Kumar, V., Sharma, N. & Sharma, A. DNA barcoding of the Indian blackbuck (*Antilope cervicapra*) and their correlation with other closely related species. *Egypt J Forensic Sci* **7,** 31 (2017). https://doi.org/10.1186/s41935-017-0034-6
30. Kumar, Ved & Shukla, Malay & Rajpoot, Ankita & Thakur, Mukesh & Nigam, Parag & Kumar, Dhyanendra & Mehta, Anil & Goyal, Surendra. (2018). DNA barcoding as a tool for robust identification of cervids of India and its utility in wildlife forensics. Mitochondrial DNA Part B. 3. 250-255. 10.1080/23802359.2018.1438858.
31. Mcloughlin MP, Stewart R, McElligott AG. 2019 Automated bioacoustics: methods in ecology and conservation and their potential for animal welfare monitoring. J. R. Soc. Interface 16: 20190225. http://dx.doi.org/10.1098/rsif.2019.0225
32. Rosser Alison and Mainka, SA. 2002. Overexploitation and Species Extinctions. Conservation Biology, vol 16 (3), p 584 - 6.
33. United Nations Environment Program. 2005. Millennium Ecosystem Assessment. Ecosystems and Human Well-being: Current State and Trends. CH 4: Biodiversity.
34. Wrege, Peter & Rowland, Elizabeth & Keen, Sara & Shiu, Yu. (2017). Acoustic monitoring for conservation in tropical forests: Examples from forest elephants. Methods in Ecology and Evolution. 8. 10.1111/2041-210X.12730.
35. https://link.springer.com/article/10.1007/s13280-019-01281-z
36. https://www.biorxiv.org/content/10.1101/236075v2.full.pdf
37. https://www.mdpi.com/2071-1050/10/6/1846
38. https://blog.nature.org/science/2017/04/17/7-science-innovations-changing-conservation/
39. https://blog.nature.org/science/2016/06/02/10-innovations-changing-conservation/
40. https://india.mongabay.com/2020/07/listen-closely-using-bioacoustics-in-wildlife-conservation/
41. https://www.greenfacts.org/en/biodiversity/l-3/1-define-biodiversity.htm
42. http://www.biodiv.be/biodiversity/threats/
43. https://openoregon.pressbooks.pub/envirobiology/chapter/21-2-threats-to-biodiversity/
44. https://openoregon.pressbooks.pub/envirobiology/chapter/5-3-preserving-biodiversity/
45. http://blogs.ei.columbia.edu/2011/04/30/what-you-can-do-to-protect-biodiversity/
46. https://www.motherjones.com/politics/2012/04/protected-planet/
47. http://www.jamaicachm.org.jm/BHS/conservation.htm

48. https://www.agroprofessional.com/article/update-worlds-15-largest-seed-banks
49. https://www.environment.nsw.gov.au/resources/nature/landholderNotes15WildlifeCorridors.pdf
50. https://ncbi.nim.nih.gov/books/NBK219322/
51. https://www.frontiersin.org/articles/10.3389/fmars.2019.00109/full

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A Conceptual Study on Work- Life Balance of Female Employees

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Abstract:

Overseeing work life adjust (WLB) has turned into an issue for both the representatives and HR divisions since WLB pressures may lessen execution, general employment fulfillment lastly increments the variance rate. Having a harmony amongst work and non work is a greatest test for the expert individuals. The part of working ladies has changed all through the world because of financial conditions and social requests. This has brought about a situation in which working ladies have colossal strain to build up a profession as vigorous as their male partners while supporting dynamic engagement in individual life. The regularly expanding work weight is inflicting significant damage on the working ladies abandoning them with less time for themselves. The expanding obligations on the individual front with the innovative favors like propelled cell phones, notebooks, and so on that keeps work life coordinated with individual life additionally makes weight on individual and expert fronts in this learning age. This influences the individual's physical, passionate and social prosperity. Accordingly, accomplishing work life adjust is a need for working ladies to have a decent personal satisfaction. This paper is an endeavor to investigate the intense difficulties looked by working ladies in keeping up a harmony between their own and expert life.

Keywords: Work- Life Balance, Female, Personal Life, Professional, Stress.

INTRODUCTION: -

Indian families are experiencing quick changes because of the expanded pace of urbanization and modernization. Ladies of the early hundreds of years were for the most part restricted to their kitchens and the individuals who were utilized worked in processing plants, homesteads or shop works. Not very many ladies had the entrance to advanced education and they were compelled to be helpless before their fathers' or spouses' states of mind towards ladies and work. Indian ladies having a place with all classes have gone into paid occupations. Right now, Indian ladies' presentation to instructive open doors is generously higher than it was a few decades back, particularly in the urban setting. Vocation and objectives are the most essential factors throughout everyday life. The vast majority of the ladies are approaching to work with a specific end goal to help their family. This change is presently normal and dynamic because of progress of condition and monetary conditions. The greatest test for ladies is the manner by which to adjust the requests of family and profession. Work Life Balance of Women worker has turned into a critical subject since the ladies are similarly sharing the gaining obligation regarding the improvement of their family. This paper expects to audit the current writing on Work Life Balance of Women Employee with a recognizable proof of different qualities towards the accomplishment of WLB. Ladies are landing into positions and they keep on working even after marriage. A wedded lady has more duty than man in dealing with youthful kids and family. The working ladies productively conquer troublesome circumstances by their dedication and steadiness. The investment of ladies in salary age exercises loans them to fulfill their home needs to a more prominent degree.

LITERATURE REVIEW: -

Vijaya Mani (2013) has uncovered the central point impacting the Work Life Balance of Women experts in India, for example, part strife, absence of acknowledgment, authoritative governmental issues, sexual orientation segregation, and elderly and kids mind issues, nature of wellbeing, issues in time administration and absence of appropriate social help.

K.Santhana, Lakshmi et al, (March 2013) have inspected that the Educational foundations should address the Work Life Balance related issues among their staff, particularly ladies and adopt an all encompassing strategy to outline and actualize the approaches to help the instructing staff to deal with their WLB.

KumariK.Thriveni et al, (2012) have contemplated and dissected the noteworthy connection between the statistic factors and WLB. Further Shalini and Bhawna 2012 announced in their investigation, Quality of work life is being utilized by the associations as a key instrument to pull in and hold the representatives and all the more critically to help them to keep up work life adjust with meet consideration on execution and duty at work.

S.McMillan et al, (2011) recommended that the individual amicability and its belongings has built up another Harmony in light of contention and advancement.

N.Krishna Reddy et al, (2010) presumed that the wedded ladies representatives without a doubt encounter Work Family Conflict (WFC) while endeavoring to adjust their work and family lives. Along these lines, Organization needs to define rules for the administration of WFCs since they are identified with work fulfillment and execution of the representatives.

Niharika and Supriya (2010) have contemplated the work based variables and family related elements that are considered to add to work life adjust. Work based elements are flexi time, alternative to work low maintenance and opportunity to telecommute and the family related elements are youngster mind office and adaptability to deal with crises at home. Masako SETO et al, (2004) have inspected the impacts of business related factors and Work Family Conflict on depressive side effects among working ladies living with youthful kids in a Japanese Metropolis.

RESEARCH METHODOLOGY: -

This investigation is fundamentally to assess the pervasiveness of work life among wedded working ladies. The intention is additionally to show and examine particularly the issues wedded ladies look during the time spent adjusting their work and family life. The examination likewise means to through some light on the impact of work-life adjust on the personal satisfaction of wedded working ladies. Already, the female workforce in India was chiefly utilized in non-administrative, subordinate or low-profile positions. Presently, they possess all classifications of positions in the work environment. These adjustments in work culture have added to ladies' obligations and duties to their family and in addition to society. The contentions between contending work requests and individual and family needs appear to be the most plausible explanation behind this situation of work-life clashes.

Variables Influencing Work – Life Balance: -

Work-Life Balance implies the capability to plan the hours of an individual Professional and Personal life in order to lead a solid and serene life. It underlines the qualities, dispositions and convictions of ladies with respect to their age to work in arranging and adjusting their work and individual life. (K.Santhana Lakshmi &S.Sujatha Gopinath, March 2013).

The accompanying factors impacting the experience of WLB were distinguished while evaluating the different written works.

- ✓ Work Family Conflict and Family Work Conflict
- ✓ Women in different parts
- ✓ Career Advancement
- ✓ Work Stress
- ✓ Child mind Work Life adjusts isn't something that simply happens.

It includes the endeavors of various accomplices: the worker, the association for which the representative works, the family with whom the representative lives and the general public in which all are installed. It includes shared comprehension and regard between these players. (N.Gayathri and Dr.P.Karthikeyan, August 2013).

Work Family Conflict and Family Work Conflict: -

Scientists characterize the contrariness between the area of work and the space of family as work-family strife. Strife between these areas happens when cooperation in one part is more troublesome because of interest in the other part. Today, work-family strife (work meddling with family) is more predominant than family-work struggle (family meddling with work) however both can happen. Be that as it may, paying little heed to the course of causation, when one space is grating with another area, the outcome is struggle and expanded weight on the person. As working ladies get hitched, they have extra duties and when they move toward becoming moms, they need to deal with the essential care of kids and more distant family and are along these lines, under more noteworthy strain to proceed on a vocation way. Working moms of today satisfy family obligations and furthermore attempt to remain completely associated with their vocations adapting up to the contending requests of their numerous parts. The minding obligations that working moms have lays a substantial weight on them when it is joined with their expert obligations. The endeavor of working ladies to incorporate, compose and adjust the different issues and exercises in their distinctive parts at the same time puts them under colossal weight.. Other than the fast increment of wedded ladies entering the work drive while proceeding to keep up most of the family and family duties (Jackson, Tal, and Sullivan, 2003), the enthusiasm for the theme has likewise in vast measures been fuelled by the acknowledgment that work-family concerns are very notable for the prosperity of representatives. Exact proof likewise affirms that work-family struggle is frequently a serious pressure factor at work prompting different negative results, including disabled prosperity (Karatepe and Tekinkus, 2006).

The idea of work-family struggle has been clarified by Kahn, Wolfe, Quinn, Snoek, and Rosenthall (1964) utilizing the part hypothesis structure. They suggested that the significant determinant of a person's conduct is the desire of conduct that others have for him or her. The part hypothesis predicts that the desire encompassing every one of these distinctive parts a man performs can produce between part struggle when they include strain to command the season of the central individual to fulfill all desires of his or her work and family parts since every part requires time, vitality and responsibility. Utilizing this system, Kahn et al. (1964) characterized work family struggle as a type of between part strife in which the part weights from work and family circles are commonly incongruent. Such contrariness is shown by the way that support in the work part is made more troublesome by righteousness of interest in the family part and the other way around.

Role of Women and WLB: -

Ladies are for the most part into full time benefits and are working 8 hours for every day and 5 days in seven days least and are gone up against by expanding workload consistently. Along these lines, the greater part of them convey work and duties to home however adjusting between these two complex circumstances in the present day quick life requires ability, consideration, expertise and alert. Ladies need to adapt up to high work targets, office responsibilities, tight gathering plans and the obligations and duties of life and home. Businesses should focus on encircling different strategies and plans to encourage Work life adjust to empower and draw in ladies representatives. (Sayanti Ghosh, 2010)

As indicated by Powell and Greenhaus (2006), ladies may experience issues dealing with their own particular work/life adjust, particularly in work settings where they don't get much formal help from their manager. On the off chance that they need to strike any harmony amongst work and their lives outside work, they should set this as an objective and locate their own specific manners of accomplishing it. Ladies must want to take control of their own work/life adjust and step up, speaking to their own particular individual exertion went for securing this work/life adjust. As per Wrzesniewski and Dutton (2010), so as to pick up control over work and their character in the working environment, ladies need to elucidate with their supervisors' the assumptions about the workload that they can deal with. They additionally need to deal with life partners' and companions' thoughts regarding how hard they have to function. An occupation incorporates segments and necessities unbiasedly characterized by the association; in any case, work/life adjust must be developed by a person.

There are various types of informal strategies or practices that a lady, as her very own dynamic administrator work/life adjust, can utilize. For instance, contingent upon the activity, a lady might have the capacity to control the length and timing of her working day by overseeing when her work really starts. A few people might have the capacity to settle on decisions about business, employment or work ventures in light of the hours they figure they will have at work. A lady might have the capacity to draw nearer to her working environment keeping in mind the end goal to lessen the measure of time she spends setting out to and from work each day. For occupations with less adaptable calendars, a lady should need to examine long haul work desires, objectives and pay with her manager, so she can turn into a dynamic member in her organization's choices about her profession. Having these kinds of talks with administration may open up a positive discourse and take into account more adaptability than expected.

Work stress and Work Life Imbalance: - Worry at work, the worry of bringing up youngsters, the anxieties that accompany maturing guardians - any of these circumstances could give a respectably high measure of pressure. At the point when ladies are looked with various parts, all of which convey substantial requests, they confront levels of pressure that are sufficiently high to add to medical issues, missed work, and a decreased ability to go up against additional. Ladies are multi-taskers by nature and include undertakings inside assignments.

The Common reasons for work put worry of ladies are:

- ✓ Unreasonable requests for execution
- ✓ Lack of relational correspondence between the business and the workers
- ✓ Lack of relational connections among the workers
- ✓ The dread of losing one's activity
- ✓ Long working hours
- ✓ Less time to go through with the family
- ✓ Harder to adjust work and home requests

- ✓ Treated poorly to your male partners

Vijaya Lakshmi et al (2013) have contemplated and discover the issues and issues of ladies staff working in instructive foundations. Likewise found that ladies employees experienced extreme worry during the time spent accomplishing Work Life Balance. Proceeded with work weight brought about poor execution. The outcome uncovered that numerous female educators have ignored their wellbeing during the time spent enhancing the life of their relatives and their understudies. G.Shiva (2013) considered that "Ladies experts in high position in their office have come back from office in revise time, cook, clean and take care of their family undertakings. This makes them more pressure and prompts some medical issues. The main source of pressure emerges in light of correspondence with Superior". Gunavathy (2007) in the examination among wedded ladies representatives of BPO organizations illustrated the causes, results of work life irregularity and mediations for work life adjust. The examination uncovered that in excess of two third of the respondents detailed work life awkwardness essentially by virtue of work impedance with individual life. Likewise finished up from this examination, push and burnout, sick wellbeing and poor work execution are the outcomes of work life unevenness.

LIFE PREFERENCES AND CAREER OF WOMEN EMPLOYEES: -

The isolation of men and ladies into various occupations is the main purpose behind profit contrasts amongst men and ladies. The word related isolation confines individuals' decision of profession, particularly in the pivotal early years of grown-up life. This was the explanation behind both the European Commission and ILO conviction in regards to the word related isolation can and ought to be disposed of (Catherin Hakim, 2006). Rajesh K. Yadav, Nishant Dabhade (2013) has inferred that the ladies working in a wide range of callings showing that there are no sexual orientation contrasts in work. The expanding requests at work put, the interface between work life and individual life needs more consideration. It prompts pressure and such circumstance influences individual's wellbeing both physiologically and mentally. Ramadoss (2012) saw in his investigation that high occupation control, chief help for family related issues and one's own adapting assets were fundamentally identified with positive overflow from work to family and the heading of the connections were certain for ladies in IT empowered areas.

CONCLUSION : -

To accomplish WLB, each lady should set the objective and exceed expectations both in vocation and family. A portion of the methodologies and aptitudes at work, for example, arranging, sorting out and setting points of confinement can be utilized at home and work put for achieving a fantastic and satisfying all around healthy lifestyle both professionally and actually. Ladies worker should mind the family both physically and monetarily to fulfill the family needs. Additionally work for the achievement of hierarchical destinations and individual upliftment to fulfill the vocation needs. Associations need to receive human asset procedures and approaches to conquer the issues of the work life adjust of ladies in the present business condition. Frances and Patricia (200&) inferred that Family Policy, Welfare state arrangement and work showcase structure carry on mutually to decide unmistakable models of work family adjust and the monetary results related with them.

REFERENCES: -

Doble N, Supriya MV. Gender differences in perception of work life blance. Management 2010; 4(5): 331-342.

Gayathri N, Karthikeyan P. A Review on Green Human Resource Managemetn with Exclusive Allusion to Green Work Life Balance.

Gayathri N, Karthikeyan P. Work life blance in India–A social responsibility or a competitive tool. International Research Journal of Business and Management 2013; 1: 103109.

Heather MS, Morris ML, KateAtchley E. Constructs of the Work / Life interface : A synthesis of the Literature and Introduction of the Concept of Work / Life Harmony. Human Resource Development Review 2011; 10(1): 6-25. International Research Journal of Business and Management 2013; 5: 40-45.

Padma S, Sudhir Reddy M. Impact of Child care responsibility on Work Life Balance (WLB) of School Teachers. International Journal of Advanced Research in Business Management and Administration 2013; 1(1).

Krishna Reddy N, Vranda MN, Ahmed A, Nirmala BP, Siddaramu B. Work Life Balance among married women employees. India Journal of Psychological Medicine 2010; 32(2): 112-118.

Krishna Reddy N, Vranda MN. “Work Life balance among married women employees” Indian Journal of Psychological Medicine 2010; 32(2): 112-118.

Kumari KT, Devi VR. Impact of Demographic Variables on Work Life Balance of Women Employees (with special reference to Bangalore City). International Journal of Advances in Management and Economics 2012; 1(6): 226-229.

Mani V. Work Life Balance and Women Professionals. Global Journal of Management and Business Research Interdisciplinary 2013; 13(5): 2013.

Mohan N, Ashok J. Stress and Depression Experienced by Women Software Professionals in Bangalore, Karnataka, Global Journal of Management and Business Research. Global Journals Inc. (USA) 2011; 11(6).

Powell, G., & Greenhaus, J. (2006). Managing incidents of work-family conflict: A decision-making perspective. *Human Relations 59*(9): 1179–1212.

Ramdoss K. Job demand, Family Supportive Organisational Culture and Positive Spillover from work-to-family among employees in the information technology enabled services in India. International Journal of Business and Social Science 2012; 3(22): 33-41.

Santhana Lakshmi K, Sujatha Gopinath S. Work Life Balance of Women Employees with reference to Teaching faculties. International Monthly Refereed Journal of Research in Management and Technology 2013; II.

Sheel S, Khosla Sindhwani B et al. Quality of Work life, employee performance and career growth opportunities. Zenith International Journal of Multidisciplinary Research 2012; 2(2): 13-21.

Shiva G. A study on Work Family Balance and Challenges faced by working women. IOSR Journal of Business and Management 2013; 14(5): 1-4.

Singh A. A study on the perception of work life balance policies among software professionals. IUP Journal of Management Research, Hyderabad 2010; 9(2): 51-29.

Singh S. Work Life Balance: A Literature Review. Global Journal of Commerce & Management Perspective 2013; 2(3): 84-91.

Susi S, Jawaharrani K. Work life balance: The key driver of employee engagement. Asian Journal of Management Research 2011; 2(1): 474-483.

Vijayalakshmi, Navneetha. Work Life Balance of Women Faculty working in Educational Institutions: issues and problems. International Journal of Research in Commerce, Economics and Management 2013; 3(4): 73-75

Wichert I. Kenexa High Performance Institute, Enabling Women's Career Progression, 2012.

Yadav RK, Dabhade N. Work Life Balance amongst the working women in Public Sector Banks–a case study of State Bank of India. International letters of Social & Humanistic Sciences 2013; 7: 1-22.

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ઘડિયાળ ઉદ્યોગનો ઉદભવ અને વિકાસ

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પ્રસ્તાવના

ઘડીયાળ એ સૌથી જૂની માનવ શોધો માની એક છે. જે કુદરતી એકમો કરતા ઓછા સમયના અંતરાલ અને માપવાની જરૂરિયાતને પૂરી કરે છે. સમય એ માનવી માટે અમૂલ્ય છે પહેલા જ્યારે ઘડિયાળની રચના ન હતી ત્યારે સૂર્યના સ્થિતિના પ્રકાશને લઈને સમયની કલ્પના કરવામાં આવતી હતી. પરંતુ તે સમયનો અંદાજ સચોટ કે વિશ્વસનીય ન હતો. પ્રથમ યાંત્રિક ઘડિયાળની શોધ ઇંગ્લેન્ડમાં ૧૩૩૬ અને ફ્રાન્સમાં ૧૩૮૯ થઈ હોવાનું મનાય છે. સ્વભાવિક રીતે યાંત્રિક ઘડિયાળો સૂર્ય અથવા રેતી પર આધાર રાખતી હતી. આ યાંત્રિક ઘડિયાળો વધુ સચોટ અતિ આધુનિક યાંત્રિક ઘડિયાળની શોધ જર્મનીના પીટર દ્વારા થઈ હતી. ઇંગ્લેન્ડ દ્વારા ૧૭મી સદીની શરૂઆતથી લોકોએ દિવાલ ઘડિયાળની ડિઝાઇન પર વધુ ધ્યાન આપવાનું શરૂ કર્યું જ્યારે ૧૯મી સદી સુધી દિવાલ ઘડિયાળની પદ્ધતિમાં કોઈ ફેરફાર થયો ન હતો. ત્યાર બાદ સમય જતાં સ્માર્ટ ઘડિયાળનો ઉદભવ થયો તે સમય ઉપરાંત ફેશનમાં પણ અભૂતપૂર્વ ભાગ ભજવે છે. પ્રાચીનકાળની સમય ગણતરીમાં નિમેષ, કાષ્ઠા, કલા, ઘડી, મુહુર્ત, દિવસ, પક્ષ. માસ, અને વર્ષની ગણતરી થતી હતી. નક્ષત્ર, સૂર્ય, ચંદ્રની સ્થિતિને ધ્યાનમાં રાખીને કરવામાં આવતી. અહીં નિમેશ એટલે આંખના પલકારા જેટલો સમય એવો અર્થ થાય છે.

સંશોધન અભ્યાસનો હેતુ

- ઘડિયાળ ઉદ્યોગનો ઉદભવ અને વિકાસ તપાસવો

માહિતીનુ એકત્રિકરણ

પ્રસ્તુત સંશોધન ગૌણ માહિતી એટલે કે દસ્તાવેજી પદ્ધતિ દ્વારા કરવામાં આવેલું છે. જેમાં ઇન્ટરનેટ, સામાયિકો, વર્તમાનપત્ર, પુસ્તકો વગેરેનો અભ્યાસ કરવામાં આવ્યો છે.

સંશોધન અભ્યાસની પદ્ધતિ

પ્રસ્તુત સંશોધન ઘડિયાળ ઉદ્યોગનો ઉદભવ અને વિકાસ જાણવા માટે કરવામાં આવ્યો છે. જેમાં વર્ણનાત્મક સંશોધન પદ્ધતિનો ઉપયોગ કરવામાં આવ્યો છે.

ઘડિયાળ ઉધોગનો ઈતિહાસ / વિકાસ

1. **છાયા ઘડિયાળ**

છાયા ઘડિયાળ એ સૌથી જૂનામાં જૂની ઘડિયાળ છે. આ છાયા ઘડિયાળ ઇજિપ્તની છે. આ ઘડિયાળ ખડકમાંથી બનાવવામાં આવતી હતી આ છાયા ઘડિયાળ પાંચ ચલ નિશાનીઓ ધરાવતા લાંબા થડ અને દાંડાની બનેલી હતી જે નિશાનીઓ પર પડછાયો પાડે છે. જેને સવારમાં પૂર્વની તરફ અને બપોરના પશ્ચિમની તરફ ફેરવવામાં આવતુ જેથી તેના પર જે ચિંન્હ પડે તેના પરથી ઇજિપ્તના લોકો સમયની ગણતરી કરતા. પરંતુ આ ઘડિયાળ એ પૂર્ણ સ્વરૂપે સૂર્ય પર આધારિત હતી જેથી જો વાદળછાયું વાતાવરણ હોય તો આ ઘડીયાળ સમય બતાવવાનુ કાર્ય કરતી નહીં. જેથી ઇજિપ્તના લોકો તેના વૈકલ્પિક સ્વરૂપે જળઘડિયાળ અને રેતી ઘડિયાળ તેમજ તારાઓનાં જાણકારી દ્વારા સમયની ગણતરી કરતા જેમાં જળ ઘડિયાળ અને રેતીની ઘડિયાળની શોધ પણ ઇજિપ્તમાં થઈ હતી.

2. **જળ ઘડીયાળ**

આ ઘડિયાળમા તળિયામાં નાના કાણા ધરાવતો કટોરો હોય છે. જે પાણી ઉપર તરતો રાખવામાં આવતો અને લગભગ સ્થાયી દરે તે ભરાય તેવી ગોઠવણ પણ ધરાવતો હતો. જેમ કટોરાનું પાણી ભરાતું જાય તેમ તેની નિશાની ઉપરથી સમય બતાવે આમ જળ ઘડિયાળ સમય બતાવવામાં ઉપયોગી થતી.

3. **રેતીની ઘડિયાળ**

રેતીની ઘડિયાળની શોધ પણ ઇજિપ્તમાં જ થઈ હતી. આ ઘડિયાળ બે ઉભા અને એક રેખામાં ગોઠવેલા કાચના ખાનાઓની બને છે. જે એકદમ નાના કાણાથી એકબીજા સાથે જોડાયેલ હોય છે. જ્યારે

રેતીની ઘડિયાળને ઉંધી કરીને મૂકવામાં આવે ત્યારે રેતી એક ખાનામાંથી બીજા ખાનામાં જાય છે અને આ રીતે સમયની ગણતરી કરવામાં આવતી.

4. ખગોળીય ઘડિયાળ

ખગોળશાસ્ત્રીય માહિતી દર્શાવતી કોઇ પણ ઘડિયાળના સંદર્ભ આપવા માટે થાય છે. આમાં આકાશમાં સૂર્ય અને ચંદ્રનું સ્થાન અને ચંદ્રના તબક્કાઓ, ગ્રહણ પર સૂર્યની સ્થિતિ અને વર્તમાન રાશિચક્ર સૂચિત કરવા માટે થાય છે. ૧૧મી સદી દરમ્યાન આ ઘડિયાળનો ઉદભવ થયો હોય તેવું કહેવામાં આવે છે. ખગોળીય ઘડિયાળ સામાન્ય રીતે જિયો સેન્ટ્રીક મોડલનો ઉપયોગ કરીને સૂર્યમંડળનું પ્રતિનિધિત્વ કરે છે. ખગોળીય ઘડિયાળ સોંગ રાજવંશના ચાઈનીઝ હોરોલોજીસ્ટ મિકેનિકલ ઈજનેર અને ખગોળશાસ્ત્રીય સુસધગે કૈફેગ શહેરના તેના પોતાના ઘડિયાળ ટાવર માટે જ સંચાલિત ખગોળીય ઘડિયાળ બનાવી હતી.

5. તુર્ક યાંત્રિક ઘડિયાળ

તુર્ક યાંત્રિક ઘડિયાળો એ 1556ની આસપાસ લખાયેલા પુસ્તક ધ બ્રાઇટટેસ્ટ ફોર ધ કોન્સ્ટ્રક્શન ઓફ મિકેનિકલ કલોસમા તાકી અલ-દિને એક વજન સંચાલિત ઘડિયાળનું વર્ણન કર્યું છે. જેમાં વર્ષ અને ફીલીઆર્ટ ગતિ નિયમક તેમજ ચંદ્રની કળાઓને પ્રતિનિધિત્વ સહિતનું માર્ગદર્શન આપ્યુ છે. આ તુર્ક યાંત્રિક ઘડિયાળોમાં વિશેષ કરીને એલારામ ગોઠવવાની કળાને પ્રાધાન્ય આપવામાં આવ્યું હતું. ઉપરાંત આ ઘડિયાળ કલાક, ડિગ્રી અને મિનિટ એમ ત્રણ ડાયલ ધરાવતી હતી.

6. ગિઅર અને ગતિનિયામક કળ ધરાવતી ઘડિયાળ

ગ્રીક ઇજનેર બ્વઝાન્ટિયમના ફિલોએ ઈ.સ. પૂર્વે ત્રીજી સદી દરમિયાન પ્રવાહી સંચાલિત ગતિનું સૌથી પહેલું ઉદાહરણ તેના ગ્રંથોમાં વર્ણવ્યું છે. જેમાં તેમના દ્વારા દર્શાવવામાં આવ્યું છે, ઉપરાંત તેમના દ્વારા વોરા સ્ટેન્ડની ગતિ નિયામક કળની યંત્રરચનાને જળ ઘડિયાળ રચના સાથે સરખાવે છે. તેમ જ તેની ગતિ નિયામક કળનો ઉપયોગ કરતી અન્ય એક શરૂઆતની ઘડિયાળ ઈ.સ. ૭મી સદી દરમિયાન ચાંગ અને તાંત્રિક સાધુ અને ગણિતશાસ્ત્રી થીઝીગ દ્વારા ગિઅર અને ગતિની નિયામક કળ ધરાવતી ઘડિયાળ બનાવવામાં આવી હતી.

7. લોલક ઘડિયાળ

લોલક ઘડિયાળ એ એક એવી ઘડિયાળ છે જે ઝુલતી રીતે સમય નિર્ધારણ તત્વ તરીકે કામ કરે છે. સમય માટે લોલકનો ફાયદો એ છે કે તે એક હાર્મોનિક એસીલેટર છે. તેની લંબાઈના આધારે ચોક્કસ સમય અંતરાલમાં આગળ પાછળ ફરે છે. ૧૬૫૬માં ગૅલિલિયો ગૅલિલિ દ્વારા પ્રેરિત ક્રિશ્ચયન દ્વારા તેની શોધ થઇ હતી ૧૯૩૦ સુધી લોલક ઘડિયાળ વિશ્વની સૌથી સચોટ સમય માપક હતી જે તેના વ્યાપક ઉપયોગ માટે પણ ખૂબ જ જાણીતી હતી. ૧૮મી અને ૧૯મી સદી દરમિયાન ઘર, કારખાના, ઓફિસો અને સ્ટેશનમાં લોલક ઘડિયાળ રોજિંદા જીવન કામની પાળી અને જાહેર પરિવહનના સમયપત્રક માટે પ્રાથમિક સમયના ધોરણે તરીકે કામ કરતી હતી. ૧૯30 અને ૧૯૪૦ ના દાયકામાં આ ઘડિયાળ ઓછી ખર્ચાળ સ્ક્રીનસ અને ઇલેક્ટ્રિક ઘડિયાળ દ્વારા બદલવામાં આવી હતી. પ્રથમ લોલક ઘડિયાળની શોધ ૧૬૫૬માં ડચ વૈજ્ઞાનિક અને શોધક ક્રિસ્તિઆન દ્વારા કરવામાં આવી હતી. ત્યારબાદ ૧૯મી સદી દરમ્યાન ઘણા સુધારા થયા ત્યારબાદ ક્વાર્ટઝ ઘડિયાળની શોધ થઈ પરંતુ તે પહેલાં લોલક ઘડિયાળ ખૂબ જ ઉપયોગી સાબિત થઈ છે.

8. કવાર્ટઝ ઘડિયાળ

રસાયણિક રીતે ક્વાર્ટસ એ સિલિકોન ડાયોક્સાઇડ નામના સંયોજનનું ચોક્કસ સ્વરૂપ છે. ક્વાર્ટઝ ઘડિયાળ એ ૧૯૨૭માં વોરેન મેરિસન અને જે. ડબલ્યુ હોર્ટાને કેનેડામાં બેલ ટેલીફોન લેબોરેટરી ખાતે પ્રથમ આ ઘડિયાળ બનાવી હતી ત્યારબાદના દાયકાઓમાં ચોક્કસ સમય માપન, સમયમાં પણ સાધન તરીકે પણ ભારેખમ અને નાજીક કાઉન્ટિંગ ઇલેક્ટ્રોનિક નિર્વાન નળીઓ સાથેની ક્વાર્ટઝ ઘડિયાળનો વિકાસ થયો. ૧૯૬૯માં સેઈકોએ વિશ્વની સૌથી પહેલી ક્વાર્ટર્સ ઘડિયાળ ઉત્પાદિત કરી અને ત્યારબાદ ૧૯૮૦ના સમયગાળા દરમિયાન ઘડિયાળનું પ્રભુત્વ બજારમાં ખૂબ જ વધવા લાગ્યું.

9. અણુ ઘડિયાળો

અણુ ઘડિયાળ એક એવી ઘડિયાળ છે જે અણુઓના રેડિયેશનની આવર્તનનું નિરીક્ષણ કરીને સમયને માપે છે. તે વિવિધ ઉર્જા સ્તરો ધરાવતા અણુઓ પર આધારિત છે અણુમાં જે ઈલેક્ટ્રોન

અવસ્થાઓ વિવિધ ઉર્જા સ્તરો સાથે સંકળાયેલી હોય છે અને આવી અવસ્થાઓ વચ્ચેના સંક્રમણમાં તેઓ ઇલેક્ટ્રોમેગ્નેટિક અત્યંત ચોક્કસ આવર્તન સાથે ક્રિયાપ્રતિક્રિયા કરે છે આ ઘટના એકમોની આંતરરાષ્ટ્રીય સિસ્ટમની સેકન્ડની વ્યાખ્યા માટેના આધાર તરીકે કામ કરે છે. ૧૯૪૯માં સૌપ્રથમ અણુ ઘડિયાળ શોધવામાં આવી આ ઘડિયાળ સમયદર્શક સાધનોમાં સૌથી ચોક્કસ સમય દર્શાવતું સાધન છે. ૧૯૬૭માં ઇન્ટરનેશનલ સિસ્ટમ ઓફ યુનિટસે તેના સમયના એકમ સેકન્ડને સેસિયમના ગુણધર્મ અનુસાર નિયત કર્યો હતો.

10. કાંડા ઘડિયાળ

કાંડા ઘડિયાળનો ખ્યાલ ૧૬મી સદીના પ્રારંભમાં થયો હોવાનું અનુમાન કરવામાં આવે છે. એવું કહેવામાં આવે છે કે વિશ્વમાં સૌપ્રથમ ૧૮૧૦મા નેપલ્સની રાણી કેરોલીન મુરત માટે અબ્રાહમ લુઇસ બ્રેગ્યુએટ દ્વારા બનાવવામાં આવી હતી. કાંડા ઘડિયાળને સોળમી સદીથી વીસમી સદીના સંશોધન કર્તાઓએ અલગ- અલગ યાંત્રીકરણના મદદથી અલગ-અલગ રૂપ આપ્યું હતું. કાંડા ઘડિયાળનું સૌથી વધુ ઉત્પાદન સ્વિટ્ઝર્લેન્ડમાં થાય છે અને સૌથી વધુ પ્રખ્યાત પણ સ્વિટ્ઝર્લેન્ડની કાંડા ઘડિયાળને જ ગણવામાં આવે છે. પ્રવર્તમાન સમયમાં કાંડા ઘડિયાળ ફેશનને અનુરૂપ ડિઝાઇન કરવામાં આવે છે. ઉપરાંત ફેશનના અનુરૂપ તેની કિંમત પણ લેવામાં આવે છે અમુક પ્રખ્યાત કંપનીઓ દ્વારા કાંડા ઘડિયાળની કિંમત ખૂબ જ મોંઘી લાદવામાં આવે છે.

ઉપસંહાર

આમ ઉપરોક્ત સંશોધન માહિતી પરથી સ્પષ્ટ થાય છે કે ઘડીયાળ ઉદ્યોગનો ઉદભવ તેમજ વિકાસ દર્શાવવામાં આવ્યો છે જેમાં ઘડિયાળ ઉદ્યોગની છાયા ઘડિયાળની શરૂઆત થી ઘડિયાળ ઉદ્યોગનો ઇલેક્ટ્રોનિક યુગ દર્શાવવામાં આવ્યો છે.

સંદર્ભે સાહિત્ય

http://en.wikipedia.org/wiki/Hindu_units_time
https://www.thoughtco.com/clock-and-calendar-history-1991475
https://en.m.wikipedia.org/wiki/History_of_timekeeping_devices
https://en.m.wikipedia.org/wiki/Clock
http://www.historyofwatch.com/clock-history/
https://www.british-history.ac.uk/vch/middx/vol2/pp158-165

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A Study on Leverage Analyses and Its Impact on Profitability of Selected Fertilizer Companies Traded in NSE

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ABSTRACT

The fundamental goal of this find out about is to analyze and apprehend the impact of leverage on the profitability of the chosen fertilizer agencies which are traded in National Stock Exchange of India. It analyze the relationship between leverage and EPS of this sector. It targets to analyze how incomes capability of this quarter is affected by way of operating cost and fixed financial charges. In this study selected fertilizer companies are taken for analysis and hypothesis are examined with the help of correlation and test of significance and also analysis of variance (ANOVA).

Keywords: Leverage – DOL, DFL, DCL, EPS, ANOVA Test, Regression Analysis

INTRODUCTION

The concept of leverage is common in the business world. It is mostly used to boost the returns on equity capital of a company, especially when the business is unable to increase its operating efficiency and returns on total investment. Because earning on borrowing is higher than interest payable on debt, the company's total earnings will increase, ultimately boosting the earnings of stockholders. Leverage is an essential tool a company's management can use to make the best financing and investment decisions.

It gives a range of financing sources with the aid of which the company can gain its goal earnings. Leverage is additionally a necessary method in investing as it helps organizations set a threshold for the enlargement of commercial enterprise operations. The have an effect on of leverage is measured via subtracting the monetary profitability ratio from the return on equity ratio after deducting company tax. Because stockholders' return on fairness of capital is normally greater than economic return ratio, leverage performs a vital position in assisting to attain investors' expectations involving return on equity.

LITERATURE REVIEWS

- **Khushbakht Tayyaba (2013)** wrote paper on, "Leverage" – An Analysis and Its Impact On Profitability With Reference To Selected Oil And Gas Companies. The motive of this lookup paper is to learn about and recognize the impact of leverage on the profitability of the oil and fuel sector. Researcher analyses how incomes capability of this quarter is affected by means of running charges and constant monetary charges. It additionally suggests the relationship between the Debt fairness ratio and Earning per Share (EPS) and how this area does debt financing efficiently. In this study, hypotheses are examined with the balanced panel the usage of descriptive statistics, correlation and estimate equation.
- **V.Kalpana (2014)** achieved her lookup on "A Study on Leverage Analyses and its Impact profitability of Select Steel Companies Traded in BSE" (From 2003 To 2012). Author analyses the relationship amongst (financial leverage, working leverage and Composite leverage) with incomes per share of the firms. In addition to this it investigates how the profitability is influenced by way of constant economic expenses and constant running cost. He examined speculation with the assist of correlation and take a look at of magnitude and additionally evaluation of variance (ANOVA). The end result suggests that the use of debt and constant fee charges would limit the profitability of the firms. It implies that in order to make bigger the salary the companies want to minimize the use of debt in capital shape and constant fee in operation of the firm.
- **Liaqat Ali** described his lookup work on, "The Determinants of Leverage of the Listed-Textile Companies in India." Fixed outcome's regression mannequin used to be used for the evaluation of penal records of pattern companies. Firm size, boom in complete assets, non-debt tax shields, profitability and asset tangibility are used as explanatory variables, whilst leverage ratio is the based variable in the model. The consequences exhibit that the variables of size, non-debt tax shields, and tangibility have notably full-size high-quality relationship with the leverage ratio($p<0.01$), whilst on the contrary, increase and profitability have exceptionally enormous terrible relationship with debt ratio ($p<0.01$)

CONCEPT OF LEVERAGE

The term Leverage in general refers to a relationship between two interrelated variables. In monetary evaluation it represents the have an impact on of one economic variable over some different associated monetary variable. These monetary variables may additionally be costs, output, income revenue, salary earlier than activity and tax, salary earlier than tax, incomes per share, etc.

There are three commonly used measures of leverages in financial analysis. These are:

(i) Operating Leverage:

Operating Leverage is described as "the firm's capability to use fixed running costs to enlarge consequences of adjustments in income on its earnings before interest and taxes". In different phrases running leverage is the tendency of the operating income to range disproportionately with sales. It is stated to exist when an association has to pay fixed cost regardless of quantity of output or sales.

The operating leverage can be calculated by the following formula:

$$\text{DOL} = \frac{\text{\% Change in EBIT}}{\text{\% Change in in Sales}} \ (\text{or}) \ \frac{\text{Contribution}}{\text{EBIT}}$$

(ii) Financial Leverage:

The financial leverage is described as the capacity of a company to use constant economic costs to amplify the results of modifications in operating profits, on the firm's earning per share. In different words, the financial leverage is the tendency of a residual internet profits to fluctuate disproportionately with operating profit. It suggests the trade that takes region in the taxable profits as an end result of change in the operating income.

The financial leverage can be computed by the following formula:

$$\text{DFL Formula} = \frac{\text{\% Change in Net Income}}{\text{\% Change in EBIT}}$$

$$\text{DFL Formula} = \frac{\text{EBIT}}{\text{EBT}}$$

(iii) Combined Leverage:

The operating leverage explains the operating risk and financial leverage explains the financial threat of the firm. However, a company has to seem into general threat or total risk of the firm i.e., operating risk as properly as financial risk. Hence, if we mix the operating risk and financial risk, the end result is combined leverage. Combined leverage therefore expresses the relationship between income on account of income and the taxable income.

The combined leverage can be computed by adopting following formula:

$$DCL = DOL * DFL$$

$$DCL = \frac{\text{Contribution Margin}}{\text{EBIT}} * \frac{\text{EBIT}}{\text{EBIT} - \text{Interest}}$$

STATEMENT OF THE PROBLEM

"A Study on Leverage Analyses and Its Impact on Profitability of Selected Fertilizer Companies Traded in NSE."

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

- To find out the leverage of selected fertilizer companies traded in NSE.
- To understand and analyze the leverage effects on EPS of the selected sample companies.

PERIOD OF THE STUDY

The study covered the period of 10 years 2012-13 to 2021-22.

SOURCES OF THE DATA

The study is mainly based on secondary data from the published annual reports of the selected fertilizer companies of India. The required information is also obtained from various publications, various books, magazines, journals, websites, etc.

SAMPLE DESIGN

Out of 20 Fertilizer companies listed in NSE, the researcher selected top 03 companies based on market capitalization as on July-2022, which are as under:

- Coromandel International Ltd.
- Tata Chemicals Ltd.
- Chambal Fertilizers and Chemicals Ltd.

TOOLS USED FOR ANALYSIS

For the purposes of analysis, the collected data were systematized, tabulated and analyzed. The data were analyzed using mean, standard deviation, analysis of variance (ANOVA) and Regression Analysis.

- **Degree of Operating Leverage**

TABLE 1 – DEGREE OF OPERATING LEVERAGE

Year	Coromandel Int.	Tata Chem.	Chambal Fer.
2022	0.21	2.46	-0.30
2021	2.07	-10.37	5.86
2020	-27.56	1.13	2.16
2019	0.74	0.44	1.19
2018	2.68	0.04	1.35
2017	-2.29	-0.11	-0.63
2016	-6.12	0.32	1.83
2015	0.60	0.45	1.97
2014	-0.35	-8.60	-0.59
2013	2.75	1.21	-1.13
MEAN	-2.7293	-1.30324	1.169925
SD	9.116249	4.395527	2.052235

(Source: Calculated from Annual Published Report of Selected Companies)

The above desk suggests that the mean DOL of Chambal Fertilizer ltd. was once excessive as 1.16.while Coromandel ltd. And Tata Chemicals Ltd. suggests bad outcomes of mean DOL. The SD value of Coromandel ltd. Was once comparatively excessive which suggests that it has excessive variation in its fixed cost expenditure whereas SD value of Chambal Fertilizer Ltd used to be decrease with 2.05 and it is followed by way of Tata Chemicals Ltd. with the standard deviation of 0.18 respectively.

ANOVA - HYPOTHESIS TESTING:

Ho: The DOL position of the selected Fertilizer companies does not differ significantly.

H1: The DOL position of the selected Fertilizer companies differs significantly.

TABLE 2: F TESTS FOR DEGREE OF OPERATING LEVERAGE

Source of Variation	*SS*	*df*	*F*	*F crit*
Between Samples	77.84731	2	1.095019	3.354131
Within Samples	959.745	27		

(Source: Data processed by the researcher)

The above Table shows that since the critical value at 5% significant level is 3.35, which is greater than F, calculated 0.348, the null hypothesis is accepted. Hence, it is concluded that the DOL position of Coromandel International Ltd, Tata Chemicals Ltd. and Chambal Fertilizer Ltd does not differ significantly.

- **Degree of Financial Leverage**

TABLE 3 – DEGREE OF FINANCIAL LEVERAGE

Year	Coromandel Int.	Tata Chem.	Chambal Fer.
2022	1.04	1.02	1.02
2021	1.06	1.03	1.03
2020	1.17	1.05	1.11
2019	1.25	1.10	1.14
2018	1.18	0.47	2.52
2017	1.31	1.27	1.03
2016	1.37	1.28	1.07
2015	1.36	1.22	1.12
2014	1.45	1.71	0.85
2013	1.31	1.45	0.90
MEAN	1.25	1.16	1.18
SD	0.136376	0.324391	0.479749

(Source: Calculated from Annual Published Report of Selected Companies)

The above table shows that the calculated mean value of Coromandel International Ltd. was higher as 1.25. The standard deviation of Coromandel International Ltd. is comparatively low which indicates that the company is less risky in terms of the financial risk.

ANOVA- HYPOTHESIS TESTING:

Ho: The DFL position of the selected fertilizer companies does not differ significantly.

H1: The DFL position of the selected fertilizer companies differs significantly.

TABLE 4: F TESTS FOR DEGREE OF FINANCIAL LEVERAGE

Source of Variation	*SS*	*df*	*F*	*F crit*
Between Samples	0.046011	2	0.194	3.35
Within Samples	3.185881	27		

(Source: Data processed by the researcher)

The above Table shows that since the critical value at 5% significant level is 3.35, which is greater than F, calculated 0.194, the null hypothesis is accepted. Hence, it is concluded that the DFL position of Coromandel International Ltd, Tata Chemicals Ltd. and Chambal Fertilizer Ltd does not differ significantly.

- **Degree of Combined Leverage**

TABLE 5 – DEGREE OF COMBINED LEVERAGE

Year	Coromandel Int.	Tata Chem.	Chambal Fer.
2022	0.22	2.50	-0.31
2021	2.19	-10.69	6.03
2020	-32.29	1.19	2.41
2019	0.92	0.49	1.35
2018	3.15	0.02	3.40
2017	-3.02	-0.14	-0.65
2016	-8.39	0.41	1.96
2015	0.82	0.55	2.19
2014	-0.51	-14.70	-0.51
2013	3.60	1.76	-1.02
MEAN	-3.33	-1.86	1.49
SD	10.75	5.84	2.21

(Source: Calculated from Annual Published Report of Selected Companies)

The above table indicates that the mean DCL of Coromandel International Ltd, Tata Chemicals Ltd. were shows negative result 3.33 and 1.86 respectively which shows less risk involved for both companies. The standard deviation shows Chambal Fertilizer Ltd, Tata Chemicals Ltd., Coromandel International Ltd. that have lesser risk with the standard deviation value of 2.21, 5.84, and 10.75 respectively.

ANOVA - HYPOTHESIS TESTING:

Ho: The DCL position of the selected fertilizer companies does not differ significantly.

H1: The DCL position of the selected fertilizer companies differs significantly.

TABLE 6 F TESTS FOR DEGREE OF COMBINED LEVERAGE

Source of iation	*SS*	*df*	*F*	*F crit*
Between Samples	121.8159	2	1.181501	3.354131
Within Samples	1391.886	27		

(Source: Data processed by the researcher)

The above table shows that since the critical value at 5% significant level is 3.35, which is greater than F, calculated 1.18, the null hypothesis is accepted. Hence, it is concluded that the DCL position of Coromandel International Ltd, Tata Chemicals Ltd. and Chambal Fertilizer Ltd does not differ significantly.

- **Earning Per Share**

TABLE 7 – EARNING PER SHARE

Year	Coromandel Int.	Tata Chem.	Chambal Fer.
2022	48.14	31.46	30.92
2021	44.76	18.81	32.36
2020	36.2	268.5	29.42
2019	24.41	33.55	13.1
2018	22.57	69.36	11.54
2017	16.35	27.19	10.22
2016	12.29	26.15	2.07
2015	13.85	25.04	5.69
2014	12.05	17.12	7.28
2013	15.7	25.25	7.34
MEAN	24.57	23.03	5.94
SD	2.462636	5.140545	1.417090909

(Source: Annual Published Report of Selected Companies)

The above table indicates that the EPS of Tata chem is greater than that of Coromandel International Ltd and Chambal Fertilizer Ltd. Tata chem has generated the EPS of Rs.268.5, which is the highest among all, accompanied through Coromandel International Ltd.(48.14), Chambal Fertilizer Ltd(32.36). Standard deviation value of Tata Chemical ltd is higher(5.14) which suggests a higher variation in incomes per share during the study period while other companies have low standard deviation values such as Coromandel International Ltd(2.46) and Chambal Fertilizer Ltd(1.41) respectively.

❖ REGRESSION ANALYSIS

The Coefficient describes the mathematical relationship between every independent variable and the dependent variable. The low p-values (<0.05) suggests that reject the null hypothesis which suggests that changes in the predictor's value are associated to changes in the response variable. Conversely, a large p-value suggests that changes in the predictor are not related with changes in the response.

- **Regression of DOL on EPS**

H_0: There is no significant impact of operating leverage on EPS of selected fertilizer companies of NSE during the study period.

H_1: There is a significant impact of operating leverage on EPS of selected fertilizer companies of NSE during the study period.

TABLE 8 REGRESSION ANALYSIS: IMPACT OF DOL ON EPS

Company Name	R^2	P-value	@ 5% significance level	Ho Result
Coromandel Int.	0.1879	0.0009	0.05	Rejected
Tata Chem.	0.2671	0.0487	0.05	Rejected
Chambal Fer.	0.4528	0.0164	0.05	Rejected

(Source: Data processed by the researcher)

The independent variable (here, DOL) is the cause and the dependent variable (here, EPS) is the effect. The Results indicates in Coromandel Int., Tata Chem., Chambal Fer. the DOL has a significant effect on EPS. Because the regression result indicates that its p-value (0.0009,0.0487 & 0.0164) is lower than the significant value.

- **Regression of DFL on EPS**

H_0: There is no significant impact of financial leverage on EPS of selected fertilizer companies of NSE during the study period.

H_1: There is a significant impact of financial leverage on EPS of selected fertilizer companies of NSE during the study period.

TABLE 9 REGRESSION ANALYSIS: IMPACT OF DFL ON EPS

Company Name	R^2	P-value	@ 5% significance level	Ho Result
Coromandel Int.	0.947	8.1E-06	0.05	Accepted
Tata Chem.	0.274	0.216	0.05	Accepted
Chambal Fer.	0.0675	0.150	0.05	Accepted

(Source: Data processed by the researcher)

The independent variable (here, DFL) is the cause and the dependent variable (here, EPS) is the effect. The Results indicates in Coromandel Int., Tata Chem., Chambal Fer. the DFL has no significant effect on EPS. Because the regression result shows that its p-value is more than the significant value. For Coromandel Int., there is error shown while applying the regression model.

- **Regression of DCL on EPS**

H_0: There is no significant impact of combined leverage on EPS of selected fertilizer companies of NSE during the study period.

H_1: There is a significant impact of combined leverage on EPS of selected fertilizer companies of NSE during the study period.

TABLE 10 REGRESSION ANALYSIS: IMPACT OF DCL ON EPS

Company Name	R^2	P-value	@ 5% significance level	Ho Result
Coromandel Int.	0.1798	0.00099	0.05	Rejected
Tata Chem.	0.2573	0.04979	0.05	Rejected
Chambal Fer.	0.3932	0.02412	0.05	Rejected

(Source: Data processed by the researcher)

The independent variable (here, DCL) is the cause and the dependent variable (here, EPS) is the effect. The above Results shows that Coromandel Int., Tata Chem., Chambal Fer. the DCL has significant effect on EPS. Because the regression result shows that its p-value is less than the significant value. This would be considered a good fit to the data.

❖ CONCLUSION

This paper defined the research on the leverage analysis and its impact on profitability with reference to chosen fertilizer companies. Using the Panel data of organizations between 2013 and 2022, we examined that whether there is effect of leverage on profitability or not. In the analysis Earning per share as dependent variables and degree of financial leverage, degree of operating leverage and degree of combined leverage as independent variables. After applying regression, So there is significant impact of DOL and DCL on EPS.While DFL has no significant impact on EPS, because null hypothesis end result suggests accepted. Leverage is a vital factor which is having an impact on profitability of the firm which in turn affects the wealth of the shareholders.

❖ REFERENCES

- Mr. Hitarth Kansara, Dr. Sanjay R. Ajmeri, An Impact of Financial Leverage on Capital Structure of Selected Textile Companies in Gujarat, International Journal of Managerial Studies and Research (IJMSR), Volume 9, Issue 10, PP 8-12
- Mr. Bhatt Satyaki J., Leverage Analysis of Aurobindo Pharma, Paripex - Indian Journal of Research, Volume: 4, Issue: 8
- Khushbakht Tayyaba, "Leverage" – An Analysis and Its Impact On Profitability With Reference To Selected Oil And Gas Companies, International Journal of Business and Management Invention, Volume 2, Issue 7, PP.50-59
- Ayan Chakraborty, Impact of Leverage & Coverage Ratios on ITC Ltd, International Journal of Current Engineering and Technology, Vol.7, No.3
- V. Kalpana, A Study on Leverage Analyses and its Impact on Profitability of Select Steel Companies Traded in BSE" (From 2003 To 2012), Indian Journal of Applied Research, Volume: 4, Issue: 10.
- Liaqat Ali, The Determinants of Leverage of the Listed-Textile Companies in India, European Journal of Business and Management, Vol 3, No.12, 2011
- Why Is Financial Leverage Important? (upcounsel.com)
- Leverage Analysis: Meaning, Concept, Types, Pattern, EBIT-EPS Analysis (economicsdiscussion.net)
- Difference Between Operating Leverage and Financial Leverage (with Formula and Comparison Chart) - Key Differences
- www.Moneycontrol.com
- http://www.coromandel.biz
- http://www.tatachemicals.com
- http://chambalfertilisers.com

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Progress and Prospects of Financial Inclusion Programs in India

Ms. Vidya Bhat and Mr. Shrihari Karanth

ABSTRACT

Access to a formal financial system can economically and socially empower the individuals, particularly poor households, farmers, small entrepreneurs and other vulnerable section of the society by allowing them to better formal economy. According to population survey 2011, the majority of the poor in India lives in rural area and the proper rural finance is one of the several tools to be used, to fight with rural financial crises. But lack of access to a formal financial institution is still a major concern in financial services delivery to poor and households. In the present paper, different tools implemented by the Government to make the inclusive India and the secondary data collected through the reports of NABARD, Reserve Bank of India and Government of India related to past six years performance of financial inclusion tools. It is identified that even after the increment of number of accounts holding, depositing and credit availing, Direct Beneficiary Transfer facilities, SHG participation and bank linkage etc. the rural part of the India is still facing the problem of financial exclusion due to lack of proper income and employment. The government should constantly evaluate the effectiveness of the implemented schemes and they should measure the financial literacy and awareness among the rural and poor population and make sure that, the people belong to the grassroot level are understanding the terminologies and having the basic knowledge of financial services.

Key Words: Financial Inclusion, PMJDY, Direct Beneficiary Transfer, Business Correspondents

INTRODUCTION

Access to the Financial system can economically and socially empower each individual like, farmers, households, small entrepreneurs who resides in the rural areas. The financial service access can provide the risk coverage for everyone to protect themselves from many of the day-to-day uncertainties. Formal financial institution access is now cost efficient and one account in formal financial institution can provide savings and deposit facilities, Debit and credit cards, insurance access and also digitalized opportunities for the bank account holders. It is increasing the income of individuals of rural people and that awareness can create the thought of personal financial planning. Due to these the people can manage their day-to-day uncertainties and help them to make an effective financial decision making. The progress of Indian economy is not solely relay on agriculture and industrialization. But the development of financial inclusion and financial literacy among the people in the country can contribute more towards the country's growth. But, the major barrier for the financial inclusion in India is lack of awareness and financial literacy among rural population. It is hindering the growth of rural population today.

The rural financial inclusion is popularized with the credit disbursement to the population through primary agriculture co-operative societies from 1904. After that the government of India concentrated on increasing the banking facilities through NABARD to the rural areas. The Business Correspondents (BCs), Self-Help Group Bank Linkage Program, Issuance of credit cards in the name of Kisan Credit Card, Micro Finance development etc., are initiated with the support of commercial banks, Regional Rural Banks and also Private Banks from 1987 to till today. The contribution of co-operative banks and agricultural societies contribution are remarkable in the field of rural financial inclusion. To support the efforts of the banks and other financial institutions, the government of India initiated some of the schemes called Swabhiman in the year 2011to achieve inclusive growth across the country. In the 2014, the NDA government-initiated Pradhan Mantri Jan Dan Yojana (PMJDY) to make a transformation in the financial sector of the country. The PMJDY scheme is there to provide No-frill accounts, easy KYC, debit card facilities and also it is a. package of social security schemes namely Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Atal Pension Yojana (APY). The sole mission of PMJDY was to make India financially included. As defined by K.C. Chakabarthy, 2011 "Financial Inclusion is the process of ensuring access to appropriate financial products and services needed by all the sections of the society including vulnerable group such as weaker section and lower income group at an affordable cost in a fair and transparent manner by mainstream institutional players". The issue is now a nation as well as world-wide burning issue and gaining importance from the researcher's point of view.

LITERATURE REVIEW

According to (Christabell, 2012) the financial inclusion in rural area is relay on credit facilities provided by the formal financial institutions. The micro finance can be an effective tool to reach rural population by providing small loans and savings facilities to those who are excluded. The Self-Help Group and Micro finance can make the rural livelihood to encourage and make them engage in the small entrepreneurial activities and achieve inclusive growth impactfully ((Prabhakar, 2016)). Not only the Micro finance and SHGs but also the nation-wide scheme called PMJDY is the prime factor to make major part of India become financially included. According to (Gupta, 2019), PMJDY could enhance the bank account ownership, penetrate the bank branches and facilities and it also can double the trust among all the people through simple social security scheme. There is one another way to improve the financial inclusion in rural area apart from all the schemes. That is Fintech and digitalization. The fintech can provide the low-cost financial services without any geographical area barriers they can reach the excluded population across the country (Lemieux, 2017). (Pranita, 2020), Government of India concentrated on rural financial inclusion in many different ways. The PMJDY, Direct beneficiary Transfers, Digitalized banking and most importantly microfinance and Self -Help Group can make the rural population is financially included. The study mentioned the major problem with the rural population is financial literacy. Half of the rural population is unaware about the financial products and services introduced by the Government and Reserve Bank of India.

OBJECTIVES

To understand the purpose of financial inclusion and analyze performance of selected financial inclusion programs implemented in India

METHODOLOGY

The data for the present study is gathered from various secondary sources like, Annual Reports of Reserve Bank of India, Ministry of Finance, Annual Reports of NABARD and World Bank data base. The collected data set is analysed with different statistical tools.

RESULTS & DISCUSSION

1. Pradhan Mantri Jan Dan Yojana (PMJDY)

The Pradhan Mantri Jan Dhan Yojana is a national mission implemented by the Government of India in the year 2014. After the ineffective performance of Swabhiman scheme, there was a need of inclusive financial growth in Indian economy. The PMJDY was concentrated on opening of bank account by unbanked to collect the deposit from them and provide the banking facility to the excluded and vulnerable section of the society. The Government of India and Reserve Bank of India issued the circular that the Commercial banks, Private Sector banks and Regional rural banks are all must be the part of PMJDY and they should work towards the financial inclusion. Government's goal was not only the opening of bank accounts but also provide the debit card facilities, Credit facilities along with social security to the people at affordable cost and make all section of the society into the main stream of the financial sector of the country. The following chart contains the number of accounts opened under the PMJDY scheme in rural area by different types of banks (Table 1.1) and the below table includes the information of total amount of deposits (Rs.) and Rupay debit cards issued by Commercial banks, Regional rural banks and private banks (Table 1.2) are displayed.

Table 1.2

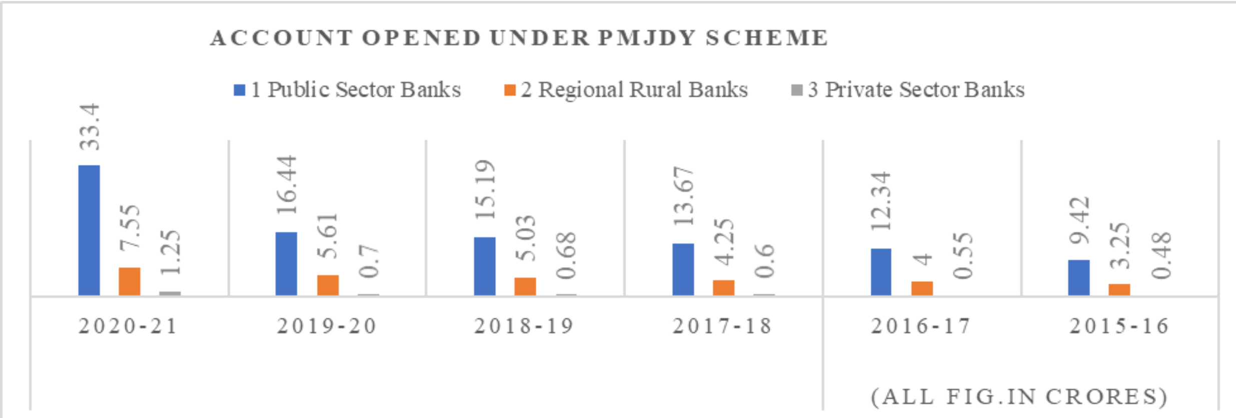
Amount deposited in Jan Dhan account and Rupay debit card issued

(All fig.in crores)

Sl. No	Agency	Particulars	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16
1.	**Public Sector Banks**	Deposits in account	1,13,145	94,838	76,696	63,021	49,265	28,139
		Number of Rupay debit card issued	26.34	24.42	22.89	19.06	17.60	14.31
2.	**Regional Rural Banks**	Deposits in account	28,122	21,554	16,590	13,296	11,609	6,178
		Number of Rupay debit card issued	3.50	3.44	3.85	3.67	3.54	2.69
3.	**Private Sector Banks**	Deposits in account	4,282	3,288	2,819	2,175	2,098	1,354
		Number of Rupay debit card issued	1.12	1.15	1.15	0.91	0.84	0.74

(Source: www.pmjdy.gov.in , Annual Reports of NABARD)

CHART NO. 1.1



(Source: www.pmjdy.gov.in)

The above drafted table and Graph depicts that, out of three types of banks the performance of public sector bank is contributing more to the robust development of PMJDY in terms of account opening, Rupay card disbursement and even in the maintenance of deposits in the customer's account. Where in case of Regional Rural Banks, their contribution is much better than the private sector banks but they couldn't able to reach the top of public sector banks due to the limited number of services and restricted orbit for the branch penetration. But it is appreciated that, there is a gradual improvement showed by the private sector banks from last six years. In the initial stage of PMJDY, the public sector banks opened 9.42 crore bank accounts, the RRBs opened 3.25 crore bank accounts and the private sector banks opened 0.48 crore account in a single year. As of the year end of previous financial year the number got increased to 33.4 crore, 7.55 crore and 1.25 crore respectively by the banks.

1. **Direct Beneficiary Transfer (DBT)**

Direct Beneficiary Transfer was rolled out by the Government of India in selected districts in the year 2013. The DBT was implemented with the help of bank accounts seeded with Aadhaar numbers. Banks were further advised to ensure that opening of bank accounts and seeding of Aadhaar numbers with existing or new accounts of eligible beneficiaries opened for the purpose of Direct Benefit Transfer (DBT) under social welfare schemes. The following table (Table2.1) shows that progress of Direct Beneficiary Transfers through different government schemes.

Table 2.1

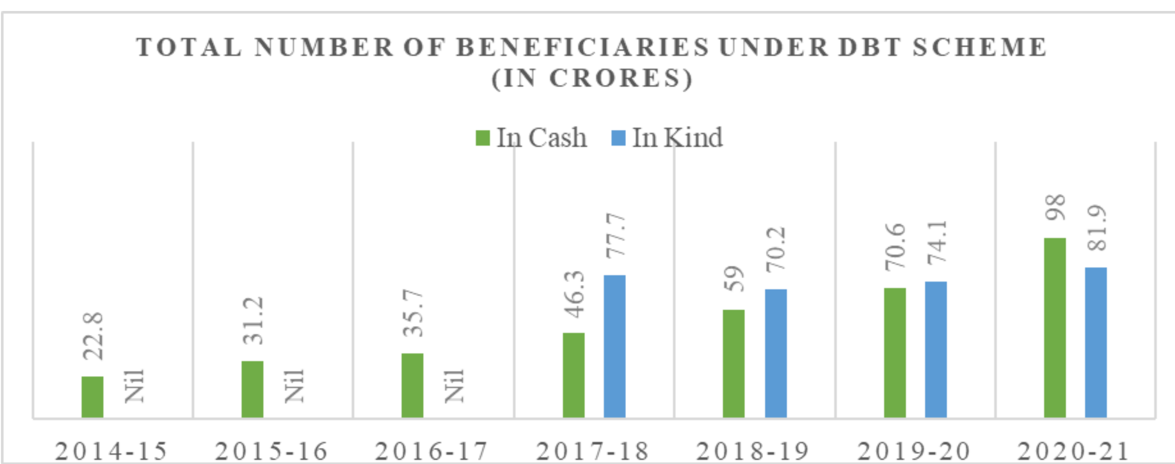
Fund transferred directly to the account of beneficiaries under different schemes

Year	Amount (in crores)				
	PAHAL	NSAP	MNREGA	Scholarships	Others
2014-15	9,384	6,049	20,010	-	3,482
2015-16	21,421	8,364	25,861	5,119	1,175
2016-17	15,876	5,409	37,311	12,859	3,231
2017-18	23,502	9,684	33,751	11,660	26,455
2018-19	34,604	8,351	46,181	10,813	68,754
2019-20	24,821	8,114	46,046	7,010	1,09,852
2020-21	15,054	7,230	67,218	9,121	1,49,701
Total	104,787	37,857	163,114	40,451	103,097

(Source: Annual reports of NABARD, www.dbtbharat.gov.in)

In the current situation of pandemic every sector and every poor are struggling to overcome the difficulties. The Direct Beneficiary Transfer scheme of financial inclusion helped the whole population as well as many of the students to get the subsidies, compensations and scholarships on time. The scheme Pratyaksh Hastantarit Labh (PAHAL) initiated to transfer the subsidies for LPG. The same way National Social Assistance Program (NSAP), which is benefited to provide support to aged persons, widows, disabled persons and bereaved families on the death of major earner of the family. The monetary benefit transferred through MNREGA to the employment done by the rural households and many of the scholarships and other programs benefited by the DBT initiatives.

CHART NO. 2



(Source: Annual Reports of NABARD)

2. Business Correspondents (BCs):

Business Correspondents are the retail agents engaged by the banks for providing banking services at locations other than a bank branch or ATM. Business Correspondents enable a bank to provide its limited range of banking services at a low cost. Reserve Bank of India has allowed banks to appoint entities and individuals as agents for providing basic banking services in remote area where they can't practically start a branch. Business Correspondents are the solution to extend basic banking services to nearly 6,00,000 village habitations in the country. Business Correspondents allows bank to provide door step delivery of services especially cash in, cash out transactions. At that time the Business Correspondent act as a major carrier for the increasing the financial inclusion effectively. The following table (Table 3.1) contains progress of financial inclusion through BCs.

Table 3.1

Progress of financial inclusion through Business Correspondents

Sl.No	Particulars	End of 2010	End of 2017	End of 2018	End of 2019	Dec. 2020
1.	Banking outlet through BC's in village with population of more than 2000 persons	8,390	1,05,402	1,00,802	1,30,687	1,49,106
2.	Banking outlet through BC's in village with population of less than 2000 persons	25,784	4,38,070	4,14,515	4,10,442	3,85,587
3.	Total No. of banking outlets in village: BCs (No. in lakhs)	34,174	5,43,472	5,15,317	5,41,129	12,36,809
4.	Basic Savings Bank Deposit through BC's (No. in lakhs)	130	2,800	2,890	3,190	3,601
5.	Basic Savings Bank Deposit through BC's (amount in crores)	1,100	28,500	39,100	53,195	77,163

(Source: RBI Annual Report 2020-21)

From the table 3.1 includes the performance of business correspondents from the year 2010 to the last financial year 2020. The grasping point in the above-mentioned table is, there is low progress of BCs before the implementation of PMJDY in the country. After 2014 the business correspondents actively performed and hit the number of 12.3 lakhs in the opening of banking outlets in the rural area. It is expected that, there will be a gradual growth of financial inclusion with the help of BCs if the trend will remain same in the future.

3. Self -Help Group Bank Linkage Program (SHG-BLP)

With the help of NABARD and RBI, the micro financial institutions are acting as a key for financial inclusion in rural part of the country. To increase the savings capacity of the members of SHGs and provide sufficient credit facilities to them directly by the bank is the focused theme of SHG Bank Linkage Program. Most of the Indian villages are filled with women SHGs which are engage in many activities like, small business, hand made products production, food industries and etc., all are encouraging the women to develop their skill and increase their decision-making skill in every aspect of their life. Through SHGs women are becoming self-Reliant. The SHG- Bank Linkage Program provide the facility of easy access to the credit and safe place for the savings of the members at normal rate of interest and help them to get escape from the hands of private money lenders. From past five years the SHG Bank Linkage was constantly increasing from 79 lakhs to 106 lakhs. Year to year nearly 50 families are adding on to the SHGs and doing their financial activities with SHGs linked to the banks. As a concept of digitalization in India, promoted by Government of India, Self-Help Groups are also getting digitalized. the concept of JAM i.e., Jan Dhan, Aadhaar and Mobile phones made every village digitalized. at the end of year 2018, 2.06 lakhs SHGs are linked with credit and 3.8 lakhs SHGs are digitalized. the digitalization of SHG is initiated under the scheme called E-Shakti and many of the women in the country are independently living with the help of this scheme.

Table 4.1

Progress of Self-Help Groups Bank Linkage Programme

(No. in lakhs)

Sl. No	Particulars	2019-20	2018-19	2017-18	2016-17	2015-16
1.	Total number of SHGs savings linked with banks	106.97	100.14	87.44	85.77	79.03
2.	Total number of SHGs credit linked during the year.	31.46	26.98	22.61	18.98	18.32
3.	Number of families covered	1241	1224	1055	1010	1010

(Source: Progress of SHGs BLP, NABARD)

FINDINGS & CONCLUSION

Financial Inclusion in our country is a required part for overall growth and development. Previously identified problems like poverty, un employment, existence of traditional methods of finance, informal money lenders like pawn lenders etc., low literacy and financial awareness are the string reason for the slow growth of financial inclusion among poor. All people are not illiterate but they are unaware about many of the financial inclusion awareness programs and government-initiated programs. Some of the rural people are bounded with their traditions and believes, some of them are hesitating to take part in the activities of financial institutions due to insecurity and lack of awareness. With the help of present study, it is found that, the Pradhan Mantri Jan Dhan Yojana is getting positive response year by year, the major contribution was done by commercial banks of the country is appreciable. People also accessing the debit cards and the percentage of operating the PMJDY account by depositing their money is increasing from past five years. The government used Direct Beneficiary Transfer (DBT) method to make rural financial inclusion effective. The schemes like PAHAL, NSAP, MNREGA, PMAYG and so many of the scholarship and other agricultural subsidies etc., are provided with the help of DBT through in cash as well as in kind. The performance of direct beneficiary transfer scheme is expected more for the digitalized financial inclusion drive in the excluded areas of the country in the future. Under the concept of reach the un reach, the Business Correspondents (BCs) increased the outlets throughout the country and trying to reach very remote area from banks point of view. The initial count of BCs in the year 2014 was just 34,174 but, in the year 2020 the number increased tob12.36 lakhs. To make the rural financial inclusion Self-Help Groups contribution was appreciable.

There is almost everything to achieve proper financial inclusion in unreachable part of the country. The tools like bank branches and services penetration, different beneficial schemes like, PMJDY, issuance of Kisan Credit Cards, SHG-Bank linkage, Micro financial institutions, increasing the Business Correspondents outlets and Direct Beneficiary Transfers schemes etc. some of the social security schemes also introduces under the PMJDY program. The identified problem for this situation is financial illiteracy. Through this paper it is suggested that, the Stale Level Bankers Committee (SLBC) who is the major in charge for the financial inclusion for the state, should provide the financial literacy programs frequently to the vulnerable excluded peoples, through its financial inclusion program called Lead Bank Scheme (LBS)and Financial Literacy Camps (FLCs). There is humble need of financial literacy centers and financial literacy programs to the rural part of the country. Many of the Non-Government Organizations (NGOs) are contributing their attention and also many of the researchers group giving their knowledge to the development of vulnerable section of the society. The Lead Banks can go deep into the concept of providing financial knowledge and also can make effective use of financial literacy center concept previously initiated by the Canara Bank and other banks of the country as soon as possible.

REFERENCES

Christabell, D. (2012). Financial Inclusion in Rural India: The role of Microfinance as a Tool. *IOSR Journal of Humanities and Social Science, 2*(5), 21-25.

Gupta, B. &. (2019). Pradhan Mantri Jan Dhan Yojana as a Financial Inclusion Drive: A Case Study of West Bengal. *Decision*. doi:http://doi.org/10.1007/s40622-019-00226-5

Kapuria, K. &. (2020). Determinants of financial inclusion in rural India: does gender matter? *International Journal of Social Economics, 47*(6), 747-767.

Lal, T. (2018). Measuring Impact of Financial Inlcusion on Rural Development Through Co-operatives. *International Journal of Social Economics*.

Lemieux, J. &. (2017). Fintech & Lending: Financial Inclusion Risk Pricing and Alternative Information. *Working Paper of Federal Reserve Bank of Philidelphia*.

Loan Thi-Hong Van, A. T. (2019). Financial Inclusion and Economic Growth: An International Evidence. *EMERGING MARKETS FINANCE AND TRADE*. doi:10.1080/1540496X.2019.1697672

M. Bhuvana & S, V. (2016). Self Help Group Bank Linkage Programme- An Index of Measuring Financial Inclusion. *Indian Journal of Science and Technology, 9*(43).

PMJDY. (2021). *Pradhan Matri Jan Dhan Yojana.* Government of India.

Prabhakar, K. (2016). Microfinance Facilities Available to SHGs and Its Impact on Livelihood Options in Rural Areas of Karnataka. *Asia-Pacific Journal of Rural Development, 26*(2).

Pranita, D. (2020). Rural Financial Inclusion in India. *Indian Place Names, 40*(38).

Rangarajan, C. (2008). *Financial Inclusion.* Reserve Bank of India.

RBI. (2021). *Annual Reports.*

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Liquidity of Leading Indian Automobile Companies

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Abstract

India has a huge automobile sector which is having a turnover of 16 trillion INR with 2.26 crore vehicles. Various companies are involved directly and indirectly in auto sector. All these are contributing significantly in auto sector growth. It has been witnessed that there are few companies which are having a problems in discharging their current liabilities. They find it difficult to meet day to day operations comfortably as there is some problem of liquidity. To guess whether this problem is significant; this study was taken into hand in which the liquidity position of top 10 automobile companies have been studied in detail with the help of quick ratio and current ratio. It has been found that these companies are not having liquidity problem. They are quiet enough funds to pay their debts in time.

Key words: liquidity, automobile companies, current ratio, quick ratio

1. Introduction:

Liquidity is very essential for short term solvency of any business organization. It is essential for a company to discharge its short term liabilities and stay solvent. If the company is making default in its short term liabilities, its goodwill hampers, it has to be take short term loan or overdraft facility from the banks. If the liquidity problem is serious and lasts for longer period, it may even lead to the bankruptcy so in order to run the business smoothly company has to maintain the liquidity to keep the concern going.

Sundry debtors and creditors play big role in the working capital of company and there appropriate management is required to maintain the liquidity of company. Short term solvency and discharge of financial liability depends on adequate liquidity. (Reddy and patkar, 2004)[1]

Study was conducted on five 2 wheeler companies for a period of five years i.e. from 2011-12 to 2015-16. During this period working capital management of automobile industries companies working in India was measured and it was found that there was the deficit of working capital. Consequently the liquidity was not up to the desired level. (Inna, 2016)[2]

A research was conducted on four automobile companies: Maruti Suzuki, Tata Motors, Mahindra & Mahindra and TVS Motors. Liquidity and profitability position of these companies were studied and found that TVS Motors had sufficient liquidity and also enjoys high profitability in the studied year. There was a strong correlation between liquidity and profitability so it was recommended to maintain higher quick ratio (Jothi and Geethalakshmi, 2016).[3]

Indian economy faced problem of liquid in 2008. Most of the automobile companies were having shortage of quick funds and they find it difficult to manage the adequate working capital. It was desirable that they reduce inventory turnover days in order to increase the liquidity and to maximize the profit. (Kumari and Anthuvan, 2017)[4]

Automobile companies find it difficult to pay taxes in time because of insufficient funds. There liquidity is quite moderate and need to be improved. Companies are not able to foresee the sales with precision due to volatility of Indian maket which is hugely dependent on monsoon (Mehta Anurag and Prateek Jain, 2017).[5]

Further study was conducted on the liquidity of three automobile companies and found that Hero Motocorp is having good liquidity and its turnover ratio is also better than others and that has resulted into its higher profitability compared to its other competitive companies working in auto sector. This study was conducted for a period from 2013 to 2017 (Kanagavalli and Devi, 2018).[6]

2. Research Objective:

This research study was executed with an objective to know the liquidity position of top Indian automobile companies.

3. Research Hypothesis:

$H_{1.1.}$ Liquidity position of top Indian automobile companies is not satisfactory.

$H_{1.1.}$ Liquidity position of top Indian automobile companies is satisfactory.

4. Sample:

Top ten automobile companies which are registered in National Stock Exchange (NSE) namely India’s Hero Motocorp, Maruti Suzuki India Ltd., TVS Motor Company Ltd., Mahindra & Mahindra Ltd., Isuzu Motors Ltd., Ashok Leyland Ltd., Tata Motors Ltd., Bajaj Auto Ltd., Eicher Motors Ltd. and Bosch Ltd. were selected for this study.

5. Research Tool:

To measure the liquidity of chosen ten automobile companies their quick ratio and current ratio was calculated from the recently available data of 2019-20. From the published final accounts of these companies both ratios were calculated.

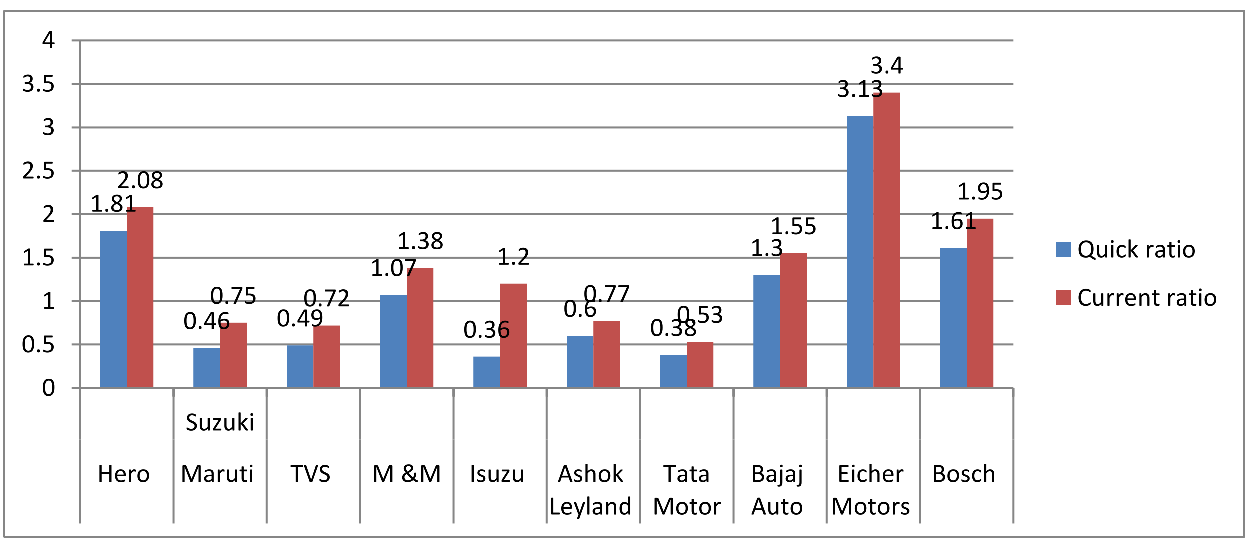
6. Data analysis and interpretation:

It has been found that quick ratio of all the chosen 10 companies varies. These are not similar but hovering somewhere around 1.2 and average quick ratio for all the studied companies is 1.23. Similarly the current ratio is also not similar but it is at an average of 1.64.

Table 1: Liquidity Ratio of Auto Companies

Name of company	Hero	Maruti Suzuki	TVS	M &M	Isuzu	Ashok Leyland	Tata Motor	Bajaj Auto	Eicher Motors	Bosch
Quick ratio	1.81	0.46	0.49	1.07	0.36	0.6	0.38	1.3	3.13	1.61
Current ratio	2.08	0.75	0.72	1.38	1.2	0.77	0.53	1.55	3.4	1.95

Chart 1: Liquidity Auto Companies: Quick Ratio V/s Current Ratio



When we see that the companies have such different liquidity levels; it is appropriate to check their overall liquidity significance.

For that purpose both the current ratio and quick ratio were taken into consideration of all the ten big automobile companies. Their significance test was done with T test. Calculated T value is 2.711 which is more than the table value 2.086 at 95% confidence level. Significance value 0.014 which is less than 0.05 so it is inferred that the overall liquidity position of the auto industry is significantly good. Liquidity is not a big problem.

Table 2: Significance Test of Liquidity

N	Degree of freedom	Mean (Avg. of quick & current ratio)	Standard Deviation	T value	Sig
20	19	1.277	0.869	2.711	0.014

7. Conclusion:

Overall liquidity of automobile industry is satisfactory. There is no big concern yet companies like TVS Motors, Maruti Suzuki, Isuzu Motors and Tata Motors have to improve their liquidity level in order to gain more efficiency in their operations. As it is essential to you have adequate funds to grab and exploit any current unexpected opportunity. For that purpose enough funds are required at any point of time. Companies having volatile market must have adequate liquidity.

8. References:

1. Y.V. Reddy and S.B. Patkar (2004) Working Capital and Liquidity Management in factory, A Comparative study of SBI and Canara Bank factors. The Management Accountant, Vol. 39 No.5, page No-373-380.
2. Inna (2016) Comparitive analysis of working capital management in Automobile industry of india. International journal of commerce, business and management, vol. 5 (5).
3. Jothi, K., & Geetalakshmi, A. (2016). Liquidity and Profitability Position of Select Automobile Companies in India. International Journal of Advanced Research in Computer Science and Management Studies, vol. 6(1).
4. Kumari and Anthuvan (2017) Impact of working capital management on profitability of leading listed automobile companies in India.

5. Mehta Anurag and Prateek Jain (2017) Tax revenue composition: A relative assessment, Research expo international multidisciplinary research journal, Volume-VII, issue-VI, Part II, pp.12-17.
6. Kanagavalli, G., & Devi, R. (2018). Financial Performance of Selected Automobile Companies. International Journal of Management, vol. 9(4), pp-14-23.

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ભારતમાં ઉપલબ્ધ વિવિધ રોકાણ સ્ત્રોતોનો અભ્યાસ

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સારાંશ

વર્તમાન સમયમાં પૈસા એ વ્યક્તિના જીવનનું એક મહત્વનું સાધન છે. તેથી જ બધા પૈસા કમાવા, પૈસા બચાવવા અને પૈસા વધારવા માટેના પ્રયત્નો બધા કરતા હોય છે. તેથી લોકો પોતાની આવકનો અમુક ભાગ વર્તમાન ખર્ચા પાછળ વાપરે છે અને આવકના અમુક ભાગની બચત કરે છે. પરંતુ બચત કરેલા પૈસા તિજોરીમાં રાખવાથી વધતા નથી પણ ફુગાવાના કારણે તેના મૂલ્યમાં ઘટાડો થાય છે. તેથી વ્યક્તિએ વધુ આવક મેળવવા માટે બચતનું રોકાણ કરવું જોઈએ. પરંતુ બચત કરેલા પૈસાનું ક્યાં રોકાણ કરવું, ક્યાંથી વળતર સારું મળશે, કેટલા સમય માટે રોકાણ કરવું તેવા અનેક પ્રશ્નો રોકાણકાર સામે ઊભા થાય છે.વર્તમાનમાં ભારતમાં અનેક રોકાણો સ્ત્રોતો છે પ્રસ્તુત સંશોધન પેપરમાં ભારતમાં ઉપલબ્ધ રોકાણ વિકલ્પો જેમ કે બેંક ડિપોઝિટ, મ્યુચ્યુઅલ ફંડ, જીવન વીમો, પબ્લિક પ્રોવિડન્ટ ફંડ, સુકન્યા સમૃદ્ધિ યોજના વગેરે જેવા રોકાણ વિકલ્પોની વિસ્તૃત ચર્ચા કરવામાં આવી છે.

- **પ્રસ્તાવના**

વર્તમાનમાં રોકાણ કરવા માટેના અનેક સ્ત્રોત ઉપલબ્ધ છે. શેર, ડિબેન્ચર, સ્થાવર મિલકત બોન્ડ, F. D., PPF, ચાંદી, હીરા, પોસ્ટ ઓફિસ ડિપોઝિટ, વીમો, મ્યુચ્યુઅલ ફંડ વગેરે જેવા અનેક સાધનો ઉપલબ્ધ છે. રોકાણ પ્રક્રિયામાં સૌ પ્રથમ વ્યક્તિગત રોકાણકારે પોતાના રોકાણના લક્ષ્ય નક્કી કરી લેવા જોઈએ. વ્યક્તિ પોતાના જ્ઞાન અને અનુભવના આધારે રોકાણના યોગ્ય નિર્ણય લઈને વધુ આવક મેળવી શકે છે.

- **અભ્યાસના હેતુ**

(1) ભારતમાં ઉપલબ્ધ વિવિધ રોકાણ સ્ત્રોતોનો અભ્યાસ કરવો.

(2) ભારતમાં ઉપલબ્ધ વિવિધ રોકાણ સ્ત્રોતોના વ્યાજદરનો અભ્યાસ કરવો.

➢ **માહિતી એકત્રીકરણ અને સંશોધન પદ્ધતિ**

પ્રસ્તુત અભ્યાસમાં પુસ્તકો, સંશોધન નિબંધ, અને વેબસાઈટ પરથી ગૌણ માહિતી એકત્રીત કરીને પ્રસ્તુત લેખ તૈયાર કરવામાં આવ્યો છે. અને સંશોધન પદ્ધતિઓ પૈકીની વર્ણાનાત્મક સંશોધન પદ્ધતિનો ઉપયોગ કરવામાં આવ્યો છે.

➢ **ભારતમાં ઉપલબ્ધ વિવિધ રોકાણ સ્ત્રોતો**

- **મુદતી થાપણો (Fixed or Time Deposits)**

સમાજમાં એક એવો વર્ગ છે જેની પાસે ફાજલ નાણાં છે અને તેમને તે ફાજલ નાણાની અમુક સમય સુધી જરૂર પડવાની નથી. આ લોકો તેમની પાસેના વધારાના નાણાં અમુક ચોક્કસ સમય માટે બેંકમાં બાંધી મુદત તરીકે મૂકીને ઉંચા દરે વ્યાજની આવક મેળવે છે. બાંધી મુદતની થાપણો એટલે અગાઉથી નક્કી કરેલી સમય મર્યાદા સુધી જ્યારે બેંકમાં થાપણો જમા કરવામાં આવે ત્યારે તેને મુદતી થાપણ કહેવામાં આવે છે. જ્યારે નક્કી કરેલો સમય પૂરો થાય ત્યારે મુદતી થાપણમા રોકેલા નાણાં ગ્રાહકને પાછા મળે છે. મુદતી થાપણો પર વ્યાજના દર ઊંચા હોય છે જે મુદત વધુ લાંબી તેમ વ્યાજના દર ઊંચા હોય છે.

- **મ્યુચ્યુઅલ ફંડ**

રોકાણ કરવા માટેના અનેક વિકલ્પોમાંથી એક વિકલ્પ છે મ્યુચ્યુઅલ ફંડ. મ્યુચ્યુઅલ ફંડ એટલે એક Asset Management Company હોય છે. આ AMC ઘણા બધા રોકાણકારો પાસેથી પૈસા એકઠા કરે છે. AMC એક ફંડ મેનેજર રાખેલ હોય છે આ ફંડ મેનેજર એકઠા કરેલા પૈસાને શેર, બોન્ડ એમ જુદી જુદી જગ્યાએ રોકાણ કરે છે. આ કામ કરવા માટે AMC અમુક ચાર્જ લે છે

- **પબ્લિક પ્રોવિડન્ટ ફંડ**

PPF એટલે Public Provident Fund. PPF શરૂઆત ભારતમાં 1968માં કરવામાં આવી છે. Public Provident Fund લાંબાગાળાનો શ્રેષ્ઠ રોકાણ વિકલ્પ છે. કોઈપણ ભારતીય નાગરિક PPF માં રોકાણ કરી શકે છે. NRI ખાતું ખોલાવવા માટે પાત્ર નથી. PPFમાં 15 વર્ષનો કાર્યકાળ હોય છે. ત્યારબાદ વ્યક્તિને

જો રોકાણ ચાલુ રાખવું હોય તો પાંચ પાંચ વર્ષ વધારી શકે છે. PPFમાં રોકાણ કરવા માટે નાણાકીય વર્ષમાં ઓછામાં ઓછા રૂપિયા 500 અને વધુમાં વધુ રૂપિયા 1,50,000 ની મર્યાદા છે.

- **સુકન્યા સમૃદ્ધિ યોજના Sukanya Samridhi Yojana (SSY)**

સુકન્યા સમૃદ્ધિ યોજના દીકરીના ભવિષ્યને સુરક્ષિત કરવાના હેતુથી ભારત સરકાર દ્વારા 22 જાન્યુઆરી 2015ના રોજ શરૂ કરવામાં આવી છે. દીકરીના જન્મથી તે 10 વર્ષની ઉંમર પૂર્ણ કરે ત્યાં સુધીમાં તેના નામે SSYનું ખાતું ખોલાવી શકાય છે. SSY ખાતુ સ્ત્રી સંતાનના માતા- પિતા કે કાનૂની વાલી દ્વારા ખોલાવી શકાય છે. SSY ખાતામાં નાણાકીય વર્ષ દરમિયાન ઓછામાં ઓછા રૂપિયા 250 અને વધુમાં વધુ 1,50,000નું રોકાણ કરી શકાય છે.

- **બોન્ડ (Bond)**

જ્યારે કોઈ વ્યક્તિને પૈસાની જરૂર પડે છે ત્યારે તે કોઈ પાસેથી ઉધાર પૈસા મેળવે છે. તેવી જ રીતે જ્યારે સરકાર કે કોઈ પણ કંપનીને પૈસાની જરૂર પડે છે ત્યારે તે બોન્ડ બહાર પાડીને લોકો પાસેથી પૈસા ઉધાર મેળવે છે. અને લોકોને નિયમિત નિશ્ચિત કરેલ વ્યાજ ચૂકવે છે. કોઈપણ કંપનીને જ્યારે પૈસાની જરૂર પડે ત્યારે તે શેરબજાર, બેંક વગેરે પાસેથી પણ પૈસા મેળવી શકે છે. પરંતુ બોન્ડની તુલનામાં બેંકને વધુ વ્યાજ ચૂકવવું પડે છે અને શેરના બદલામાં રોકાણકારને કંપનીની અમુક ભાગીદારી આપવી પડે છે. તેથી કંપની બોન્ડ બહાર પાડીને લોકો પાસેથી ઉછીના નાણાં મેળવે છે અને ત્યારબાદ વ્યાજ સાથે પાછા આપી દે છે.

- **કિસાન વિકાસ પત્ર (Kisan Vikas Patra)**

ભારત સરકાર દ્વારા 1988માં કિસાન વિકાસ પત્ર યોજના શરૂ કરવામાં આવી છે. આ યોજના લાંબાગાળાની યોજના છે. જે લોકો જોખમ લેવા તૈયાર નથી અને એક નિશ્ચિત વળતર મેળવવાની ઇચ્છા રાખે છે તેના માટેની શ્રેષ્ઠ યોજના છે. કિસાન વિકાસ પત્ર રોકાણનો એક સુરક્ષિત વિકલ્પ છે. 18 વર્ષથી વધુ ઉંમરના કોઈપણ ભારતીય નાગરિક આ યોજનામાં રોકાણ કરી શકે છે. NRIs અને HUF (Hindu Undivided Family) કિસાન વિકાસ પત્રમાં રોકાણ કરી શકતા નથી. કિસાન વિકાસ પત્રમાં ન્યૂનતમ રૂ.1000 રોકાણ કરી શકીએ છીએ. મહત્તમ થાપણ મર્યાદા નથી. આ યોજનામાં જેટલા પૈસાનું

રોકાણ કરવામાં આવે છે તે પૈસા નિર્ધારિત સમય પછી બમણા થઇને મળે છે. 2022ની યોજના પ્રમાણે 10 વર્ષ અને 4 મહિના (124) મહિનામાં પૈસા બમણા થઈને મળે છે.

- **સોનું**

ભારતમાં સૌથી વધારે લોકપ્રિય રોકાણ સોનું છે. ભારતમાં બીજા રોકાણ સાધનોની તુલનામાં સોનાને વધુ પસંદ કરવામાં આવે છે ક્યારેક આકસ્મિક મુશ્કેલીમાં પૈસાની જરૂર પડે તો તરત જ સોનું વેચીને પૈસામાં ફેરવી શકાય છે. Sovereign Gold Bond સરકાર બહાર પાડે છે. આમાં નિશ્ચિત વ્યાજદર રોકાણ કરીને મેળવી શકી છી. આ સિવાય digital gold, gold mutual fund, gold ETF માં રોકાણ કરી શકાય છે.

- **શેર બજાર**

બજાર એટલે એવી જગ્યા કે જ્યાં વસ્તુઓનું ખરીદ-વેચાણ કરી શકાય. તેવી રીતે જ્યા કંપનીઓના શેરનું ખરીદી-વેચાણ કરતા હોય તેને શેરબજાર કહેવાય છે. કોઈપણ દેશના આર્થિક વિકાસ માટે શેર બજાર મહત્વનો ભાગ ભજવે છે. દેશના વિકાસ માટે ઉદ્યોગ-ધંધા ખૂબ જરૂરી છે અને ઉદ્યોગ-ધંધાના વિકાસ માટે ખૂબ વધારે પૈસાની જરૂર પડે છે. આ પૈસા શેરબજાર દ્વારા મેળવી શકાય છે અને ઉદ્યોગ ધંધાનો વિકાસ કરી શકાય છે. સામે પક્ષે રોકાણકારને પણ ફાયદો થાય છે. શેરબજારએ કંપનીઓ અને રોકાણકારને એકબીજાને સાથે જોડે છે. શેરબજારના માધ્યમથી કોઈપણ વ્યક્તિ મોટા ઉદ્યોગમાં ભાગીદારી કરી શકે છે.

જે લોકો પોતાના ઉદ્યોગ- ધંધા માટે શેરબજાર દ્વારા પૈસા મેળવવા ઈચ્છતા હોય તેને પોતાની કંપની સ્ટોક એક્સચેન્જમાં નોંધાવવી પડે છે. તે માટે સૌ પ્રથમ સેબી પાસેથી મંજૂરી મેળવીને સ્ટોક એક્સચેન્જમાં નોંધણી કરાવી શકાય છે. નોંધણી કરાવ્યા બાદ કંપનીના શેર બહાર પાડીને પૈસા મેળવી શકે છે. લોકો પાસેથી પૈસા મેળવે છે અને તેના બદલામાં શેર આપે છે. શેર ખરીદવા એટલે તે કંપનીનો થોડોક હિસ્સો તેમને મળે છે જ્યારે કંપની પહેલીવાર લોકો પાસેથી પૈસા મેળવે તેને IPO કહેવાય છે. IPO એટલે Initial Public Offering.

- **સ્થાવર મિલકત**

લાંબા સમય માટે રોકાણ કરવા માટે સ્થાવર મિલકત એક સારું સાધન છે. સ્થાવર મિલકતમાં ખેતીની જમીન, મકાન, દુકાન, ફ્લેટ, હોટલ, ફેક્ટરી વગેરે જેવી મિલકતનો સમાવેશ થાય છે. સ્થાવર મિલકતમાં રોકાણ કરવા માટે ખૂબ વધારે રકમની જરૂર પડે છે. પરંતુ Real Estate Investment Trust દ્વારા નાના રોકાણકારો પણ સ્થાવર મિલકતમાં રોકાણ કરીને નફો કમાઈ શકે છે. REIT એ મ્યુચલફંડની જેમ કાર્ય કરે છે. નાના નાના રોકાણકારો પાસેથી પૈસા ભેગા કરીને સ્થાવર મિલકતમાં રોકાણ કરે છે. ભારતમાં શરૂઆત 2014માં થઈ છે REIT સેબી દ્વારા નિયમન કરવામાં આવે છે.

- **જીવન વીમો**

વીમાના બધા પ્રકારમાં જિંદગીનો વીમો ખૂબ જ મહત્વનું સ્થાન ધરાવે છે. માનવીને પોતાના રોજિંદા જીવનમાં જે જુદા જુદા જોખમોનો સામનો કરવો પડે છે તે જોખમો જીવન વીમો અટકાવી શકતો તો નથી પણ તે જોખમથી થતા આર્થિક નુકસાન સામે તે રક્ષણ આપે છે.

જિંદગીનો વીમો એક કરાર છે. જીવન વીમો લેનારની નિયમિત રીતે નાના હપ્તાઓમાં પ્રીમિયમના હપ્તા ભરી બચત કરી શકે છે. વીમો પાકે ત્યારે પૈસા મળે છે. અને વીમો લેનાર મૃત્યુ પામે તો પણ તેના વારસદારને નિશ્ચિત રકમ મળે જ છે. જેથી તેના કુટુંબીજનોને આર્થિક સહાય મળી રહે છે.જીવન વીમામાં રોકાણ અને રક્ષણ બેવડા લાભ રહેલા છે.

- ➢ **માહિતીનું વિશ્લેષણ**
- ➢ **સુકન્યા સમૃદ્ધિ યોજના વ્યાજદર**

ક્રમ	વર્ષ	વ્યાજ દર
૧	3/12/2014 થી 31/3/2015	9.1
૨	1/4/2015 થી 31/3/2016	9.2
૩	1/4/2016 થી 30/9/2016	8.6
૪	1/10/2016 થી 31/3/2017	8.5

૫	1/4/2017 થી 30/6/2017	8.4
૬	1/7/2016 થી 31/12/2017	8.3
૭	1/1/2018 થી 30/9/2018	8.1
૮	1/10/2018 થી 30/6/2019	8.5
૯	1/7/2019 થી 31/3/2020	8.4
૧૦	1/4/2020 થી 31/3/2020	7.6

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અર્થઘટન

ઉપરોક્ત કોષ્ટકમાં સુકન્યા સમૃદ્ધિ યોજનાના વ્યાજદર દર્શાવવામાં આવ્યા છે. માર્ચ 2015 માં વ્યાજદર 9.1% હતો. જે ઘટીને માર્ચ 2020 સુધીમાં 7.6 % જોવા મળે છે. આમ ઉપરોક્ત કોષ્ટક દ્વારા જોવા મળે છે કે વ્યાજ દરમાં ઘટાડો થયો છે.

➢ **પબ્લિક પ્રોવિડન્ટ ફંડનો વ્યાજદર**

ક્રમ	વર્ષ	વ્યાજદર
1	1/4/2012 થી 31/3/2013	8.8
2	1/4/2013 થી 31/3/2016	8.7
3	1/4/2016 થી 30/9/2016	8.1
4	1/10/2016 થી 31/3/2017	8
5	1/4/2017 થી 30/6/2017	7.9
6	1/7/2017 થી 31/12/2017	7.8
7	1/1/2018 થી 30/9/2018	7.6
8	1/10/2018.થી 30/6/2019	8
9	1/7/2019 થી 31/3/2020	7.9
10	1/4/2020 થી 31/3/2022	7.1

. https://www.nsiindia.gov.in

અર્થઘટન

ઉપરોક્ત કોષ્ટકમાં પબ્લિક પ્રોવિડન્ટ ફંડના જુદા જુદા વર્ષના વ્યાજદર દર્શાવવામાં આવ્યા છે. માર્ચ 2013 માં વ્યાજદર 8.8% હતો. જે માર્ચ 2016 સુધીમાં ઘટીને 8.7% થયો છે. ત્યારબાદના વર્ષોમાં વધારો- ઘટાડો થયેલો જોવા મળે છે. અને માર્ચ 2022માં વ્યાજદર ઘટીને 7.1% થયો છે.

- **કિસાન વિકાસ પત્રનો વ્યાજદર**

ક્રમ	વર્ષ	વ્યાજદર
1	23/9/2014 થી 31/3/2016	8.7
2	1/4/2016 થી 30/9/2016	7.8
3	1/10/2016 થી 31/3/2017	7.7
4	1/4/2017 થી 30/6/2017	7.6
5	1/7/2017. થી 31/12/2017	7.5
6	1/1/2018 થી 30/9/2018	7.3
7	1/10/2018 થી 30/6/2019	7.7
8	1/7/2019 થી 31/3/2020	7.6
9	1/4/2020 થી. 31/3 /2022	6.9

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- **અર્થઘટન**

ઉપરોક્ત કોષ્ટકમાં કિસાન વિકાસ પત્રના વ્યાજદર દર્શાવવામાં આવ્યા છે. માર્ચ 2016માં વ્યાજદર 8.7 % હતો. જે ઘટીને માર્ચ 2022 માં 6.9% થયો છે. આમ ઉપરોક્ત કોષ્ટક જોતા સ્પષ્ટ થાય છે કે વ્યાજદરમાં ઘટાડો થયો છે.

➢ **તારણો**

- **માર્ચ 2015ની તુલનાએ માર્ચ 2020માં સુકન્યા સમૃદ્ધિ યોજનાના વ્યાજદરમાં ઘટાડો થયેલો જોવા મળ્યો છે.**

- **માર્ચ 2013ની તુલનાએ માર્ચ 2022માં પબ્લિક પ્રોવિડન્ટ ફંડના વ્યાજદરમાં ઘટાડો થયેલો જોવા મળ્યો છે.**
- **માર્ચ 2016ની તુલનાએ માર્ચ 2022માં કિસાન વિકાસ પત્રના વ્યાજ દરમાં ઘટાડો થયેલો જોવા મળ્યો છે.**
- **ઉપરોક્ત સંશોધન પત્ર દ્વારા જાણવા મળે છે કે સુકન્યા સમૃદ્ધિ યોજના, પબ્લિક પ્રોવિડન્ટ ફંડ અને કિસાન વિકાસ પત્રના વ્યાજદરમાં વર્તમાનમાં ઘટાડો થયેલો જોવા મળ્યો છે.**

➢ સંદર્ભ સૂચિ

(૧) Narayan, K. (2018), How to Invest Right and Prosper: your personal guide, Notion Press.

(2) Vaiiiyappan, C. (2018), Share Bazar Secrets, Prabhat Prakashan

(3) એ. સી. ચોક્કસી, આર. સી. જોશી અને એન. ડી. ગામી (2014),બેન્કિંગ અને વીમાના મૂળતત્વો.સુરત.

(4) https://www.nsiindia.gov.in

(5) https://wikifinancepedia.co

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નવમાં ધોરણના વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેના મનોવલણનો અભ્યાસ

લીંબોલા પ્રતિજ્ઞા એચ.
પીએચ.ડી. સ્ટુડન્ટ, શિક્ષણશાસ્ત્ર ભવન,રાજકોટ.

સારાંશ

પ્રસ્તુત અભ્યાસમાં નવમાં ધોરણના વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેના મનોવલણનો અભ્યાસ કરવામાં આવ્યો હતો. પ્રસ્તુત અભ્યાસનો મુખ્ય હેતુ નવમાં ધોરણના વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેના મનોવલણ પર જાતિયતાની અસર તપાસવાનો હતો. વ્યાપવિશ્વ તરીકે રાજકોટ શહેરના નવમાં ધોરણના વિદ્યાર્થીઓનો સમાવેશ કરવામાં આવ્યો હતો. પ્રયોજકે નમૂના તરીકે રાજકોટ શહેરની વિવિધ શાળાઓમાંથી નવમાં ધોરણના 326 વિદ્યાર્થીઓનો સમાવેશ કર્યો હતો. પ્રસ્તુત અભ્યાસનું ક્ષેત્ર શિક્ષણનું મનોવિજ્ઞાન અને ભાષા શિક્ષણ હતું. તથા વ્યવહારીક સંશોધન તથા સંખ્યાત્મક પ્રકારનું હતું. ઉપકરણ તરીકે કોમલ ભાલોડિયા રચીત અંગ્રેજી વિષય પ્રત્યેના મનોવલણ માપદંડની રચના કરવામાં આવી હતી. પ્રસ્તુત અભ્યાસના અંતે જાણવા મળ્યુ કે રાજકોટ શહેરના નવમાં ધોરણમાં અભ્યાસ કરતા કુમારો અને કન્યાઓની અંગ્રેજી વિષય પ્રત્યેના વલણના સરેરાશ પ્રાપ્તાંકો વચ્ચે 0.01 કક્ષાએ સાર્થક તફાવત જોવા મળ્યો હતો.

1. પ્રસ્તાવના :

શાળાએ સમાજનું અંગ છે. દેશના ભાવિ નાગરીકોનો મહત્વનો વિકાસ માધ્યમિક અને ઉચ્ચતર માધ્યમિક શાળાઓમાં થાય છે. બાળ મનોવૈજ્ઞાનિકોના મતે બાળકોમાં આ વર્ષો તેના વિકાસ માટે ખુબ જ અગત્યના પાયારૂપ છે અને બાળવિકાસના શ્રેષ્ઠ તબક્કામાં વિદ્યાર્થી વિવિધ પ્રકારની ભુમિકા ભજવે છે.

વિદ્યાર્થીએ શાળાનો એક અમૂલ્ય હિસ્સો છે જે શાળા સંચાલકો, શિક્ષકો, વિદ્યાર્થીઓ, વાલીઓ અને સમાજ જેવા ઘટકો સાથે સંકળાયેલા હોય છે. તેથી આ ઘટકોના કેટલાક પ્રશ્નોની જવાબદારી થોડેઘણે અંશે વિદ્યાર્થી પર હોય છે. વિદ્યાર્થીની આ જવાબદારીઓ પ્રત્યેની સભાનતા માટે સતત જાગૃત રહેવું પડે છે. જેથી તેમને તેમના કાર્યમાં સંતોષ પ્રાપ્ત થાય એ ખુબ જ જરૂરી છે અને તેના આ વ્યાવસાયિક

સંતોષને આધારે તે સ્વનો, સમાજનો સર્વાંગી વિકાસ સાધી શકે છે. આથી અહી પ્રત્યેક વિદ્યાર્થીનો અંગ્રેજી વિષય પ્રત્યે મનોવલણ તપાસવાનો પ્રયોજકનો નમ્ર પ્રયાસ કરેલ છે.

2. સમસ્યા કથન :

પ્રસ્તુત અભ્યાસને નીચે મુજબ શબ્દબદ્ધ કરવામાં આવ્યું હતું.

નવમાં ધોરણના વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેના મનોવલણનો અભ્યાસ

પ્રયોજકે આ અભ્યાસના ભાગરૂપે રાજકોટ શહેરમાં આવેલ ધોરણ નવમાં અભ્યાસ કરતા વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેનું મનોવલણ જાણવાનું હતું. તેમાં વિદ્યાર્થીઓની જાતિયતાની અસર તપાસી હતી.

3. અભ્યાસના હેતુઓ :

પ્રસ્તુત અભ્યાસના હેતુઓ આ પ્રમાણે હતા.

નવમાં ધોરણના વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેના મનોવલણ પર જાતિયતાની અસર તપાસવી.

4. અભ્યાસની ઉત્કલ્પનાઓ :

પ્રસ્તુત અભ્યાસની શૂન્ય ઉત્કલ્પના આ પ્રમાણે હતી.

નવમાં ધોરણમાં અભ્યાસ કરતા કુમારો અને કન્યાઓની અંગ્રેજી વિષય પ્રત્યેના મનોવલણ પ્રાપ્તાંકોની સરાસરીઓ વચ્ચે સાર્થક તફાવત નહિ હોય.

5. અભ્યાસના ચલ :

પ્રસ્તુત અભ્યાસમાં સ્વતંત્ર ચલ તરીકે જાતીયતા જેની બે કક્ષાઓ (1) કન્યા અને (2) કુમારો હતા.

પ્રસ્તુત અભ્યાસમાં પરતંત્ર ચલ તરીકે અંગ્રેજી વિષય પ્રત્યેના મનોવલણના પ્રાપ્તાંકો હતા.

6. અભ્યાસનું ક્ષેત્ર :

પ્રસ્તુત અભ્યાસનું ક્ષેત્ર “શિક્ષણનું મનોવિજ્ઞાન” અને “ભાષા શિક્ષણ” હતું.

7. અભ્યાસનો પ્રકાર :

પ્રસ્તુત અભ્યાસ વ્યવહારિક અને સંખ્યાત્મક પ્રકારનું હતું.

8. અભ્યાસનો વ્યાપવિશ્વ અને નમુનો :

પ્રસ્તુત અભ્યાસનું વ્યાપવિશ્વ રાજકોટ શહેરની વિવિધ શાળાઓના **વિદ્યાર્થી**ઓનો સમાવેશ કર્યો હતો. જેમાં નવમાં ધોરણના 326 **વિદ્યાર્થી**ઓનો યાદૃચ્છિક નમૂના પદ્ધતિ દ્વારા પસંદ કરવામાં આવ્યા હતા.

9. અભ્યાસની પદ્ધતિ:

પ્રસ્તુત અભ્યાસ વર્ણનાત્મક પદ્ધતિઓમાંથી સર્વેક્ષણ પ્રકારની પદ્ધતિ પસંદ કરવામાં આવી હતી. તેમજ જાતિયતાની અસર તપાસવાની હતી તેથી કારણ-તુલનાત્મક પદ્ધતિનો પણ સમાવેશ કર્યો હતો.

10. અભ્યાસનું ઉપકરણ :

પ્રસ્તુત અભ્યાસનું ઉપકરણ તરીકે કોમલ ભાલોડિયા રચિત નવમાં ધોરણના વિદ્યાર્થીઓના અંગ્રેજી વિષય પ્રત્યેના મનોવલણ માપદંડ્નો સમાવેશ કરવામાં આવ્યું હતું.

11. માહિતિનું એકત્રીકરણ :

પ્રસ્તુત સંશોધનમાં માહિતિ એકત્ર કરવા માટે સંશોધકે પસંદ કરેલી શાળાઓના આચાર્યોનો સંપર્ક કરવા તેમની રૂબરૂ મુલાકાત લીધેલી હતી. પ્રથમ સંશોધનનો હેતુ સમજાવી કસોટીનો પરીચય આપ્યો હતો. ત્યારબાદ માહિતિ એકત્રિત કરવા દેવાની મંજુરી મેળવી હતી.

સંશોધકે નિશ્ચિત સમયે હાજર રહ્યા બાદ વિદ્યાર્થીઓને વલણ માપદંડ કસોટીની માહિતિ આપી ઉત્તરપત્રો ભરવાની જરૂરી માહિતિ વિગતે સમજાવી ઉત્તરો કેવી રીતે આપવાના છે તે અંગેની તમામ જરૂરી સૂચનાઓ વિદ્યાર્થીઓ સમક્ષ રજૂ કરેલ હતી.

આ કસોટીના ઉત્તરો આપવા માટે વિદ્યાર્થીઓને 30 થી 35 મિનિટનો સમય લાગ્યો હતો અને આ માહિતિ એકત્રિત કરવામાં આવી હતી.

12. માહિતીનું પૃથક્કરણની પ્રવિધિ :

પ્રસ્તુત અભ્યાસમાં પ્રયોજકે સંશોધનકાર્ય કરવા પાછળનો હેતુ મુજબ સંશોધનમાં સમાયેલા ચલોની કક્ષાઓ વચ્ચે તફાવત છે કે નહિ તેની તપાસ કરી હતી. આ તફાવત ચકાસવા માટે આંકડાશાસ્ત્રની ટી-પ્રયુક્તિનો ઉપયોગ કર્યો હતો. ટી-મુલ્ય શોધવા માટે પાત્રોના ગુણોત્તર મનોવલણાંકની સરાસરી અને પ્રમાણવિચલન શોધવામાં આવ્યા હતા. આ મુલ્યો મેળવવા માટે કમ્પ્યુટર પ્રોગ્રામ SPSS નો ઉપયોગ કરવામાં આવ્યો હતો.

13. માહિતીનું પૃથક્કરણ અને અર્થઘટન :

પ્રસ્તુત અભ્યાસમાં રાજકોટ શહેરની વિવિધ શાળામાં અભ્યાસ કરતા નવમાં ધોરણના 326 વિદ્યાર્થી પર હાથ ધરવામાં આવ્યો હતો. જેની રજુઆત નીચે મુજબ સારણીમાં કરવામાં આવેલ છે.

સારણી

ક્રમ	જૂથ	સંખ્યા	સરાસરી	પ્રમાણવિચલન	ટી-મૂલ્ય	સાર્થકતા કક્ષા
1.	કુમાર	163	107.67	15.17	2.95	સાર્થક તફાવત છે.
2.	કન્યા	163	111.92	10.86		

સારણીનું અવલોકન કરતાં જણાય છે કે કુમારો અને કન્યાઓનાં ઇત્તરવાચન પ્રત્યેના મનોવલણના સરાસરી વલણાંકો વચ્ચે સાર્થક તફાવત નથી.

તેનું ટી-મૂલ્ય 2.95 છે. જે 0.01 કક્ષાએ સાર્થક હતુ. આથી શૂન્ય ઉત્કલ્પના “નવમાં ધોરણમાં અભ્યાસ કરતા કુમારો અને કન્યાઓની અંગ્રેજી વિષય પ્રત્યેના મનોવલણ પ્રાપ્તાંકોની સરાસરીઓ વચ્ચે સાર્થક તફાવત નહિ હોય.”નો અસ્વીકાર થયો હતો.

આ ઉપરથી કહી શકાય કે કુમાર કે કન્યાઓનું અંગ્રેજી વિષય પ્રત્યેનું મનોવલણ અસમાન હતું.

14. અભ્યાસના તારણો :

પ્રસ્તુત અભ્યાસના તારણો આ પ્રમાણે હતા.

રાજકોટ શહેરના નવમાં ધોરણમાં અભ્યાસ કરતા કુમારો અને કન્યાઓનું અંગ્રેજી વિષય પ્રત્યેના મનોવલણના સરેરાશ પ્રાપ્તાંકો વચ્ચે 0.01 કક્ષાએ સાર્થક તફાવત જોવા મળ્યો હતો.

સંદર્ભ:

Buch, M.B. (2000). Fifth survey of research in Education, volume, New Delhi: National council of educational Research and Training.

ઉચાટ,ડી.એ. અને અન્યો (2006) શૈક્ષણિક સંશોધનોના સારાંશ.

રાજકોટ : શિક્ષણશાસ્ત્ર ભવન, સૌરાષ્ટ્ર યુનિવર્સિટી.

ઉચાટ,ડી.એ.(2005). સંશોધન દર્શન. રાજકોટ: પારસ પ્રકાશન.

શાહ,ડી.બી.(2004), શૈક્ષણિક સંશોધન. અમદાવાદ: યુનિવર્સિટી ગ્રંથ નિર્માણ બોર્ડ.

દેસાઇ, એચ.જી. અને કે.જી. દેસાઇ.(2000).

મનોવિજ્ઞાનિક માપન, અમદાવાદ: યુનિવર્સિટી ગ્રંથનિર્માણ બોર્ડ, ગુજરાત રાજ્ય.

પટેલ, ભાઇલાલભાઇ અને ઉપાધ્યાય ઇ.જ.(1994).

ઉચાટ,ડી.એ.(1988). સંશોધન અહેવાલનું લેખન શી રીતે કરશો ? રાજકોટ: નિજ્જિન સાયકો સેન્ટર.

બુદ્ધદેવ, પી.વી.(1991). મનોવલણ અને તેનું માપન. રાજકોટ: સૌરાષ્ટ્ર યુનિવર્સિટી.

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Profitability Analysis of Selected Private Sector Banks

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Abstract:

The main objective of this study is to know the profitability position of the selected private sector banks. In this study researcher has select five banks as a sample unit by using (lottery method) simple random sampling. The period of the study is five financial years started from 2017 to 2021. Here researcher has taken profitability ratios as an accounting tool and one way ANOVA as a statistical tool and findings were discussed.

Key words: Profitability ratio, banking sector, one way Analysis of variance.

Introduction

Banking sector is governed under the banking regulation act 1949. This sector is the backbone of Indian economy. If banking sector doesn't perform well then industrial and agriculture activities are also affect. Well-organized banking activities are reflecting sound intermediation process and contribution towards the growth of economy. Today the private sector banks are achieved twenty percent in deposit and advances, as a growing market growth in Indian economy. Profitability analysis is helpful to know the banking business life. Increasing the profit is normally attract to the investor and it is also helpful to long term survival in the market.

Review of Literature

(Agarwal, 2019), was analyses profitability analysis of Public and Private sector banks. Researcher had taken four profitability ratios and made a comparative analysis of public and private sector banks. Furthermore researcher have done compound annual growth rate to observe the growth in profitability. For proven the hypothesis researcher used independent t-test. Researcher found that significance difference in only Net Interest margin ratio.

(Priya, 2014), researcher analyzed profitability of Axis bank, ICICI bank, Karur vysya bank and South India Bank. They have taken 10 years for the period of the study and 5 financial ratios.

Researcher used Chi- square test and she was found that no significant in net profit margin ratio and interest spread ratio.

(Rajan, 2019), the main aim of this study is to evaluate liquidity and profitability analysis with reference to pre and post merger. Researcher analyzed a CAMEL model and data envelopment analysis. The pre and post phase during 1986 to 2016 and 17 sample size includes public and private banks. Researcher found that ICICI bank was performing well after the merger years.

Objectives of the study

The main objective of this study is to know the profitability position of selected private sector banks.

To analyse which banks are perform best.

Hypothesis of the study

H0= There is no significant difference between Ne profit margin Ratio of selected private sector banks during the period of study.

H1= There is a significant difference between Ne profit margin Ratio of selected private sector banks during the period of study.

Research Methodology

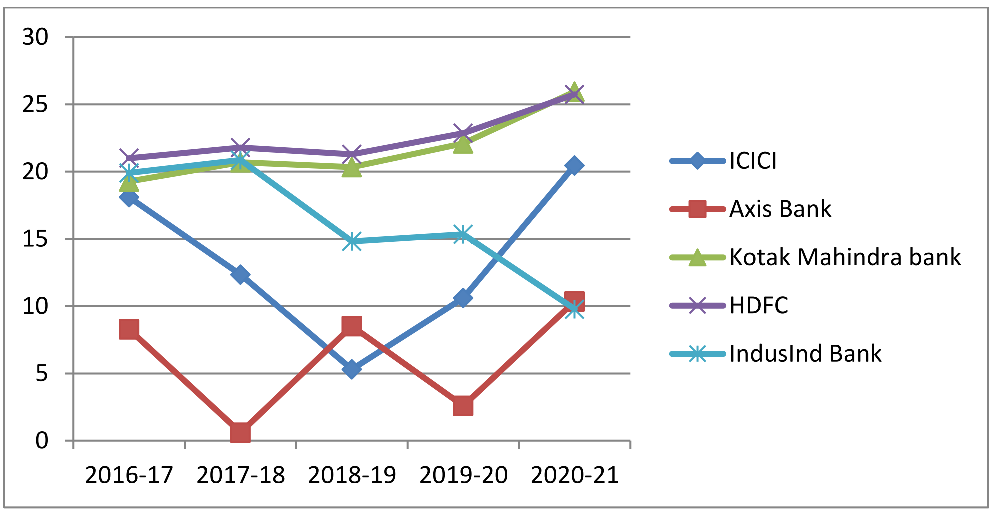
Types of study	Analytical study
Types of Data	Secondary data collected from moneycontrol.com
Sample size	Five Private sector Banks
Sampling Technique	Simple Random Sampling
Selected years	2017 to 2021
Tools and Techniques	Ratio analysis and one way Analysis of Variance

Data Analysis and Interpretation

- **Net profit Margin Ratio (%)**

Years	ICICI	Axis Bank	Kotak Mahindra bank	HDFC	IndusInd Bank
2016-17	18.09	8.26	19.27	20.99	19.90
2017-18	12.33	0.60	20.68	21.79	20.86
2018-19	5.30	8.50	20.32	21.29	14.82
2019-20	10.60	2.59	22.08	22.86	15.34
2020-21	20.46	10.35	25.94	25.74	9.78
Min	5.30	0.60	19.27	20.99	9.78
Max	20.46	10.35	25.94	25.74	20.86
Average	13.356	6.06	21.658	22.534	19.812

(Sources: moneycontrol.com)



Interpretations

The above table and graph shows net profit margin ratio of selected five private sector banks. In the year 2016-17 the net profit margin ratio of ICICI bank was 18.09%and that was decrease in the year 2017-18 up to 12.33% and also decrease in the next year up to 5.30% than after it was continuous increase in next two years. In ICICI bank the highest ratio was in the year 2020-21 that is 20.46%. The performance of Axis bank was comparatively poor, because the net profit margin ratio of the Axis bank was lower. We can see in table the data of Axis bank are also in fluctuating trend. The higher net profit margin ratio of Axis bank in the year 2020-21 that is 10.35% and lower in the year 0.60%. The highest net profit margin ratio of Kotak Mahindra bank in the year 2020-21 25.94% and lower in the year 2016-17 that was 19.27%. The ratio of Kotak Mahindra bank was continuous increasing trend. That was decrease only 2018-19 as compared to previous year. The lower net profit margin ratio of HDFC bank was 20.99% in the year 2017-18 and highest in the year 2020-21 25.74%. HDFC is highly profitable bank as compare to other. Higher Net profit margin ratios of IndusInd Bank was in the year 2017-18, 20.86% and after that year it was in decreasing trend.

Summary of one way Analysis of variance

Groups	Count	Sum	Average	Variance
Column 1	5	66.78	13.356	36.60623
Column 2	5	30.3	6.06	17.76255
Column 3	5	108.29	21.658	6.74072
Column 4	5	112.67	22.534	3.71743
Column 5	5	80.7	16.14	19.812

Analysis of Variance

Source of Variation	**SS**	**df**	**MS**	**F**	**F crit**
Between Groups	902.5368	4	225.6342	13.32922	2.866081
Within Groups	338.5557	20	16.92779		
Total	1241.092	24			

Interpretation

From the above table of one way ANOVA it can be said that the f-critical value is 2.866 that is lower than F calculated value. It means null hypothesis is rejected. So that we can say that there is a significant difference in Net profit margin ratio between selected units.

Conclusion

In this study researcher was analyzed Net profit margin ratio of five selected private sector banks. Here researcher analyzed only one ratio and it differ from other research in time perspective. As per this research highly profitable bank was HDFC bank. The average net profit margin ratio was higher than other selected banks. Than after highest profitable bank was Kotak Mahindra bank and Axis bank was lower profitable bank and need to improve their performance.

The major findings of the study were all selected banks are profitable high or more. No one was a loss making bank and there were significant difference between each other.

References:

Agarwal, P. (2019). Prifitability of Indian Public and Private sector Banks: A Comparative Study. *International Journal of Research and Analytical Revies (IJRAR) , 6* (1), 919-928.

Majhi, P. *Research Methodology (Concept, Method, Technique and SPSS)*. Himalaya Publishing House.

Priya, S. (2014). An Analysis of Profitability Position of Private Sector Banks in India. *International Journal of Business and Management Invention , 3* (2), 45-53.

Rajan, M. (2019). Research on Profitability and Liquidity position of banks with reference to Pre and Post Merger. *International Journal of Recent Technology and Engineering (IJRTE) , 8* (1S4), 253-261.

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Green Marketing And Consumer Buying Behaviour: A Study Of Select Age Group In Rajkot

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ABSTRACT:

Consumers are becoming more aware about the environmental problems and have started realizing that majority of issues are because of the increasing population, our consumption habits and are the costs of technological advancements. These awakened consumers are ready to change their preferences from mainstream products to greener products nowadays, which have the minimum impact on the environment. This paper investigates the reasons that motivate select age group consumers to buy green products like organic food, cosmetics and electrical appliances and avoiding harmful single use plastic packages like carry bags, bottles and disposable products.

Key Words: Green Marketing, Eco-Friendly Products, Consumer preferences, Sustainability

1. INTRODUCTION:

Green Marketing is the latest and popular trend in market which facilitated for the environment-friendliness in individual, animal and planet. Just a decade ago, the term green marketing or green business strategy evoked visions of fringe environmentalism and adding cost to existing normal goods.6 Most of the industries had the perception that consumers are willing to buy products at best competitive prices and associate no value for environmentally friendly products. They felt that the pressure for making business environment green and behaving in a more responsible manner especially comes from Government and its legislations and consumers have nothing to do with it.7 But, now that old perception of companies is changing, they have started realizing the changes in consumer perceptions and their behavior. Therefore, these day concepts of green marketing are taking shape as one of the key business strategies of the

6 Suchard and Polonski, 2001
7 Bleda and Valente, 2018

companies for gaining the competitive advantage, ensuring sustainable consumption of their products in the markets and enjoying sustainable development in future.8 Due to increase in climate change and global warming, the public concern for environmental problems is continuously increased over the few decades. The businesses and consumers have started to challenge eco-friendly products as they become more concerned on the environment, health and wellness in order to care the earth's resources. Corporates now have slowly applied green marketing practices in their projects as a part of social conscience and they are demanding to reach the consumers with their green messages.9 As a result, the increasing number of consumers who are willing to buy environmentally friendly products are building opportunity for businesses that are using "eco-friendly" or "environmentally friendly" as an element of their value proposition. Businesses that provide products which are manufactured and designed with an environmental marketing mix have a stable competitive advantage. A better understanding of consumers' buying behavior will support businesses to achieve more market-applicable approach to maintain in the competitive market.10 Moreover, it also allows businesses to bring more consumers and shape their products or services according to their demands or change consumers' behavior towards their products or services.

This research paper therefore, strive to investigate the green consumption behaviour of select age group consumers and offers the results, findings and its implications for betterment of green marketing practices and consumption of the green products.

1.1 Characteristics of the Green Products

A green product is a sustainable product designed to minimize its environmental impacts during its whole life-cycle and even after it's of no use. Green products are usually identified by having two basic goals – reducing waste and maximizing resource efficiency. They are manufactured using toxic-free ingredients and environmentally-friendly procedures and are certified by recognized organizations like Energy star, Forest Stewardship Council, etc. Some of the characteristics of a green product are:

- Grown without the use of toxic chemicals and within hygienic conditions

8 Chatterjee, 2019
9 Alwitt and Pitts, 2006
10 Lee, 2018

- Can be recycled, reused and is biodegradable in nature
- Comes with eco-friendly packing
- Uses the least resources
- Is eco-efficient
- Has reduced or zero carbon footprint

2. REVIEW OF LITERATURE

2.1 Green Marketing Tools

According to Hartmann (2016)11 green marketing generally focuses on the efficiency of cognitive persuasion strategies, and believes that the consumer's high involvement concerning environmental issues is an effect of growing environmental knowledge.

There are several tools being used for the green marketing purpose. Knowledge about these green marketing tools (e.g. eco-label, eco-brand, environmental advertisement) will help to establish an easier perception toward green product attributes and features. Moreover, it'll help to consumers to identify and purchase the green products. Use of such policy tools influences the consumer perception and conduct in purchasing green products (Elham Rahbar, 2021).12

Ginsberg and Bloom (2014)13 claim that there is not any single marketing tool that would be appropriate for all firms. Rather, strategies should be different based on different markets and the degree of consumer concern on the environment.

2.2 Perception of eco-labeling

One of the significant green marketing tools is using eco-label on environmental friendly products. The Environmental labels are increasingly being utilized by marketers to promote the identification of green products (D'Souza et al., 2006). Sammer and Wu¨stenhagen (2006) identify eco-label as an important tool to allocated asymmetry information between sellers and buyers. They also state that labels are a signal to accomplish two main functions for consumers:

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11 Hartmann, 2016
12 Elham Rahbar, 2021
13 Ginsberg and Bloom, 2014

information function that informs them about intangible product characteristics such as product's quality and value function which provide a value in themselves (e.g. prestige).

2.3 Perception of Eco-brand

The American Marketing Association define a brand as ''a name, term, sign, symbol, or design, or the combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of a competitor.'' This definition can be generalized for eco-brand as well. Eco-brand is a name, symbol or design of products that are harmless to the environment. Utilizing eco-brands features can help to consumers differentiate them in some way from other non-green products. Consumers will aspire to buy eco-friendly alternatives for products that generated high level of environmental impact compared to those with low level of environmental impact (Chatterjee, 2019).14 A consumer's evaluation on the environmental performance of brands should be positively affected by environmental labels (Roe et al., 2001). Understanding the influence of brands on consumers' buying decisions is very important for marketers and marketing researchers.

This influence is known as brand equity. According to Aaker (1992)15, brand equity, from a consumer's perspective, can be defined as a differential effect that brand knowledge has on a consumer's response to the marketing of that brand. Green brands should be used to emphasize the position that green products perform the same as non-green ones. Also, green brands should be used to help consumers differentiate green brands from other similar brands with same functions. The significant factor motivating consumers to change actual purchase behavior to buy eco-friendly products is emotional brand benefits (Hartmann et al., 2015).16

2.4 Environmental advertisements

The objective of green advertisements is to influence consumers' purchase behavior by encouraging them to buy products that do not harm the environment and to direct their attention to the positive consequences of their purchase behavior, for themselves as well as the environment. Environmental advertisements help to form a consumer's values and translate these

14 Chatterjee, 2019
15 Aaker (1992)
16 Hartmann, 2015

values into the purchase of green products. As stated by Chase and Smith (2002)17, environmental messages in advertisements and product labeling was found to ‘‘sometimes’’ influence the purchasing decisions of 70 percent of the respondent. In the same study, more than half of the respondents indicated that they paid less attention to such messages due to excess usage, and most respondents reported that environmental advertisements were not credible.

2.5 Consumer’s actual purchase behavior

Green marketing activities are increasing in many countries, and these activities have had an important influence on increasing consumer knowledge and in shifting consumer into purchasing green products (Cohen, 1983).18 Marketers should emphasize the ecological knowledge in their organizations, their products and their advertising in order to achieve the goal of changing the consumer purchasing behavior.

Referencing from the existing literature, it is thus hypothesized that:
H1. A significant and positive relationship exists between green marketing tools and customer’s actual purchase behavior.
H2. A significant and positive relationship exists between eco-label and customer’s actual purchase behavior
H3. A significant and positive relationship exists between eco-brand and customer’s actual purchase behavior.
H4. A significant and positive relationship exists between environmental advertisement and customer’s actual purchase behavior.

3. METHOD

3.1 Sample and procedure

The respondents in the current study were individual consumers in Rajkot. It was obvious that the sample being formed by the individuals of 18-years and above. The reason is respondents above this age are familiar with purchasing of products and are also empowered in their decisions for choosing the right items between many available choices, therefore, considerate to environmental issues in their purchasing behavior. The method of data collection was through

17 Chase and Smith, 2002
18 Cohen, 1983

structured questionnaire. The survey was distributed in some main shopping points and centers in Rajkot city where people purchase their daily necessities from. A total 175 individuals in Rajkot participated in the present study.

3.2. Data Analysis and Interpretation

Data analysis has been carried out through Simple Linear Regression. SPSS based calculation has been processed to obtained the value of parameter constants and preconception parameter values to complete the regression model that has been formulated. The linear regression equation is $\hat{Y} = 25609.271 + 0.641X + e$

In the above equation, the intercept coefficient of 25609.271 indicates the quantum of green products like organic food, cosmetics and electrical appliances purchasing behavior without the influence of green marketing. The regression coefficient of 0.641 indicates that each increase of 1 unit of green marketing will increase the green product purchasing behavior by 6.41 per cent. It also shows that if the green marketing variables increase, then the green product purchasing behavior will also increase.

The equation of the research result is as follows: $\hat{Y} = 0.641 + 0.611X + e$

Influence of Demographic Variables on Consumer Behavior on Green Product purchase

Demographic Variables	Consumer Category	Total	Chi square value	P value
Age	Below 25	61	86.235	0.001**
	26-30	51		
	31-35	37		
	36-40	18		
	41 and Above	8		
Marital Status	Married	82	14.345	1.258
	Unmarried	67		
	Single	26		
Education Qualification	Up to High School	16	89.245	0.001**
	Diploma/ Certificates	32		
	Graduates	42		
	Post Graduate	55		
	Professionals	30		
Family Type	Joint Family	98	26.734	2.563**
	Nuclear Family	77		

Monthly Income	Less than 10000	16	79.179	0.001**
	10000-20000	41		
	20000-30000	72		
	More than 30000	46		
** 1 percent level of Significance				

- There is a significant association between age of the respondent and their behavior on Green products as youngsters has better perception than old people.
- There is no prominent relationship between gender of the sample and behavior on Green products.
- Qualification of the respondent has association with their opinion on Green products. Graduates, Post Graduates and professionals are comparatively feeling good about Green products than that of respondents with school education and diploma.
- Family type of the respondent has no influence on buying behavior of Green products
- There is a notable association between monthly income of the respondent and buying behavior of Green products, the respondents with low income are disagreed whereas with good income are agreed about benefits of organic products.

4. FINDINGS

The results have shown similarity with the study by Nik Abdul Rashid (2017)19, in his research, perception towards eco-label had only two identifiable dimensions, listed as awareness of the label and trust in label. Majority (88%) of the respondents are aware of eco-labels. They agree upon that environmental advertisements are effective techniques to enhance their information about environmentally friendly product brands and purchase green product brands. While willingness to pay more among the respondents found look warm (53%) as our Market is emerging and considered as high price sensitive. 76% of the population in the sample agrees or strongly agrees that the organizations should practice green marketing. While Majority of the people are not concerned about organizations polluting environment as 65% are neutral regarding the issue.

19 Nik Abdul Rashid, 2017

5. DISCUSSION AND IMPLICATIONS

In this study, the relationship between trust in eco-label, eco-brand and purchase behavior are found to be significant. This means that the respondent's trust in eco-label and eco-brand has a positive effect on consumer's actual purchase behavior. Without consumer's confidence and trust of eco-label and eco-brand, it is very difficult to convince them to make purchase decisions. Based on their trust in eco-label and eco-brand, they will choose the environmental friendly products that are less harmful to the environment than their alternatives.

The implication of this study to governmental policy is providing a few guidelines for government to formulate the green policies such as providing promotional incentives to those green products manufacturers who are truly green in their manufacturing processes, encouraging the public to buy products with eco-label. Secondly, government can raise campaigns to promote public awareness of eco-labels as it is proven in this study that trustfulness of eco-labels can exert a significant influence in green purchase behavior of consumers. With the increase awareness on eco labels, it would help in promoting green consumption among consumers. However, government should be monitoring the credibility and trustworthiness of messages carried in eco-labels. Besides, government should endeavor to inform citizens about the meaning and availability of the new eco-labels and eco-brands and the benefits of using eco-labeled and eco-branded products to environment (Rios et al., 2016).20

6. LIMITATIONS AND SUGGESTION FOR FUTURE RESEARCH

While conducting this research, certain limitations were identified, with some suggestions for future studies; it may provide helpful insight to be considered in generating a new framework. First, this study was limited to consumers of Rajkot and did not cover all cities in Gujarat. In future studies, it would be ideal to consider all cities of Gujarat.

References:

- Aaker, D.A. (1992), ''The value of brand equity'', Journal of Business Strategy, Vol. 13 No. 4, pp. 27-33.

20 Rios, 2016

- Alwitt, L.F. and Pitts, R.E. (2006), ‘‘Predicting purchase intentions for an environmentally sensitive product’’, Journal of Consumer Psychology, Vol. 5 No. 1, pp. 49-64.
- Bleda, M. and Valente, M. (2018), ‘‘Graded eco-labels: a demand-oriented approach to reduce pollution’’, Technological Forecasting and Social Change, TFS-17065, p. 13.
- Chatterjee, P. (2019), ‘‘Green brand extension strategy and online communities’’, Journal of Systems and Information Technology, Vol. 11 No. 4, pp. 367-84.
- Chase, D. and Smith, T.K. (2002), ‘‘Consumers keen on green but marketers don’t deliver’’, Advertising Age, Vol. 63, June, p. 63.
- Cohen, M.R. (1983), ‘‘Environmental information versus environmental attitudes’’, Journal of Environmental Education, Vol. 3 No. 2, pp. 5-8.
- Elham R. (2021), ‘‘Strategies for environmental advertising’’, Journal of Consumer Marketing, Vol. 10 No. 2, pp. 19-36.
- Ginsberg, J.M. and Bloom, P.N. (2014), ‘‘Choosing the right green marketing strategy’’, MIT Sloan Management Review, Vol. 46 No. 1, pp. 79-84.
- Hartmann, P. and Iba´n˜ez, V.A. (2016), ‘‘Green value added’’, Marketing Intelligence & Planning, Vol. 24 No. 7, pp. 673-80.
- Lee, K. (2018), ‘‘Opportunities for green marketing: young consumers’’, Marketing Intelligence & Planning, Vol. 26 No. 6, pp. 573-86.
- Nik Abdul Rashid, N.R. (2019), ‘‘Awareness of eco-label in Malaysia’s green marketing initiative’’, International Journal of Business and Management, Vol. 4 No. 8, pp. 132-41.
- Rios, F.J.M., Martı´nez, L.T., Moreno, F.F. and Soriano, P.C. (2016), ‘‘Improving attitudes toward brands with environmental associations: an experimental approach’’, Journal of Consumer Marketing, Vol. 23 No. 1, pp. 26-33.
- Suchard, H.T. and Polonski, M.J. (2001), ‘‘A theory of environmental buyer behaviour and its validity: the environmental action-behaviour model’’, in Gilly, M.C. (Ed.), American Marketing Association, AMA Summer Educators’ Conference Proceedings, Chicago, IL, pp. 187-201.

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An Analytical Study of Cash Flow Statements of Britannia Industries Limited

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Abstract:

Financial analysis discloses trends and patterns, spot strengths and weaknesses, compares performances and predicts future forecasts. Horizontal analysis and vertical analysis are the two techniques of financial analysis that stands out to be useful in determining trends and patterns and comparing performances. As cash flow statements lay emphasis on sources and uses of cash, its analysis would help in spotting strengths and weaknesses in cash position. This research study aims to analyse the cash flow statements of Britannia Industries Limited for a period of five years with the objective to understand trend of operating, investing and financing cash flows and compare company's performance. The study concludes that all three activities have different trend patterns and growth changes and the company has performed comparatively well in FY 2019-20 as the operating cash flows (being core source of cash flows) have the maximum contribution in the net cash flows.

Keywords: Financial analysis, Horizontal analysis, Vertical analysis, Cash flow statements

1. Introduction:

Every business does not remain stable. There are ups and downs in business. Hence, it is inevitable to understand the changes in financial statements and analyse the financial position. Financial Analysis depicts the present situation and helps in forecasting future by using past data.

Horizontal Analysis and Vertical Analysis are techniques of financial analysis that study the behaviour of each item in the statement. When an item is studied at different intervals of time, it is known as horizontal analysis. Whereas when every single item of statement is studied as an inter-relationship with base item in terms of percentages, it is vertical analysis.

Horizontal analysis is an accounting analysis technique which compares and analyses the changes in same line items of financial statements horizontally over a selected period of time.

Changes are calculated either by taking any year as common base year or every previous year as base year and illustrated as absolute changes and percentage changes.

Vertical analysis is an accounting analysis technique which analyses each line item of financial statement as a % of a base figure within the statement. For instance, Vertical analysis of income statement can be done taking net sales as base figure or total assets/total liabilities for balance sheet.

Both horizontal and vertical analysis can be done for any of the three important financial statements; balance sheet, income statement and cash flow statement to reveal financial strengths and weaknesses of business. Balance sheet is a screen picture of the financial position and Income statement reveals revenues and expenses of the business. Cash flow statement, that complements balance sheet and income statement, discloses all the cash related activities and cash movements over the period. Thus, analysis of cash flow statements helps out in understanding the short-term liquidity by looking into the patterns of cash flows.

2. Literature Review:

Samba, Siva & Anand (2021)[1] studied cash flow statements of two selected banks- a public sector bank, State Bank of India (SBI) and a private sector bank, HDFC Bank. The study was carried out with the purpose to undertake comparative analysis and find out the performances. The study found that there was no significant difference between means of operating, investing and financing activities of selected banks. However, with the help of statistical analysis, the researchers concluded that HDFC bank performed well on an overall basis as compared to State Bank of India.

Dhakal (2019)[2] compared cash flow statements of two commercial banks: Himalayan Bank Limited and Global IME Bank Limited. The aim behind this research was to find out sources and uses of cash from all three cash flow activities and analyse and compare the cash flow performance of both the selected banks. It was found that all three cash flow activities had fluctuating trends. It was also found and concluded that cash flows of Himalayan Bank Limited had more consistency than Global IME Bank Limited.

Sri (2019)[3] evaluated cash flow statements of Jet Airways with the purpose to conclude whether the information provided in cash flow statement is similar to the income statement and balance sheet. The researcher found that the cash flow statement gives the idea about the usage of the working capital and concluded that information provided in cash flow statement is not similar to income statement and balance sheet. The researcher mentioned that all three statements are complementary to each other and cannot replace each other.

Omag (2016)[4] evaluated the cash flows from financing activities of Otokar company in Turkish Automotive Industry. The aim behind conducting research was of determining company's strategy for financing cash flows by using horizontal analysis. The researcher found and concluded that company had been distributing dividends despite cash outflows from operations and need to maintain an appropriate level of cash from operations to improve shareholders' wealth. The researcher suggested to have utilization of dividend policy to support continuous improvement of shareholders.

Singh (2016)[5] undertook a comparative study between cash flow statements of Meghmani Chemicals Ltd and Clariant Chemicals Ltd. The purpose of the study was to compare the trends of operating, investing and financing activities and determine the best performance. The researcher found that in case of operating and investing activities, Clariant Chemicals Ltd has increasing trend and in case of financing activities, Meghmani Chemical Ltd has good trend. But on an overall consistency ground the researcher concluded that Clariant Chemicals Ltd performed better.

3. Research Methodology:

Research Aim:

This research study aims to analyse cash flow statements of one of one of the leading FMCG company, Britannia Industries Limited in order to spot trends and growth changes in operating cash flows, investing cash flows and financing flows.

Objectives of the Study:

i. To study the trend inherent in operating cash flows, investing cash flows and financing cash flows.

ii. To determine the growth changes in operating cash flows, investing cash flows and financing cash flows.
iii. To compare performance of the company over the selected period.

Research Type:

The research design that fits in to the particular study is quantitative descriptive research design. As the sample company is randomly selected under the study, the sampling design which suits is random sampling design.

Research Data:

Consolidated data of cash flow statements has been extracted from the published annual reports of Britannia Industries Limited for the period of five consecutive financial years starting from the year 2016-17 up to the year 2020-21.

Research Tools and Techniques:

The tools that have been used for analysis belong to accounting analysis techniques- Horizontal Analysis and Vertical Analysis. Also, the idea of graphical representation of data is used.

- Horizontal Analysis:

For this study, horizontal analysis is done on Y-o-Y basis, by taking every previous year as base year. The calculation of absolute and percentage changes is done as shown in the below table.

Particulars/ Amount	Previous (Base) Year	Current (Comparison) Year	Absolute Changes	% Changes
1	X	Y	Y-X	(Y-X)/X

- Vertical Analysis:

For this study, vertical analysis is done by taking net increase/decrease in cash and cash equivalents as 100, base line item and contribution of all three cash flow activities is calculated.

Particulars/Amount	Current Year	%
1	X	X/Z
2	Y	Y/Z
3	Z	1

Limitations of the Study:

i. The whole research is carried out on the basis of secondary data. Any manipulation or inaccuracy in data may have led to different findings.
ii. The framed objectives have been satisfied using limited research tools. This may have restricted interpretations and conclusions.

Future Scope for the Study:

This study has spotted trend and growth for a period of five years. The future study could be conducted considering more number of years by applying other accounting and statistical tools and techniques.

4. Data Analysis:

Table 1: Consolidated cash flows data

of Britannia Industries Ltd

Year	Cash flows from Operating Activities	Cash flows from Investing Activities	Cash flows from Financing Activities	Net increase/decrease in cash and cash equivalents
2016-17	441.28	(149.85)	(295.08)	(3.65)
2017-18	1248.77	(956.26)	(231.5)	60.76
2018-19	1155.78	(855.53)	(352.68)	(52.43)
2019-20	1484.53	(1531.62)	57.94	10.85
2020-21	1851.07	461.26	(2243.69)	68.64

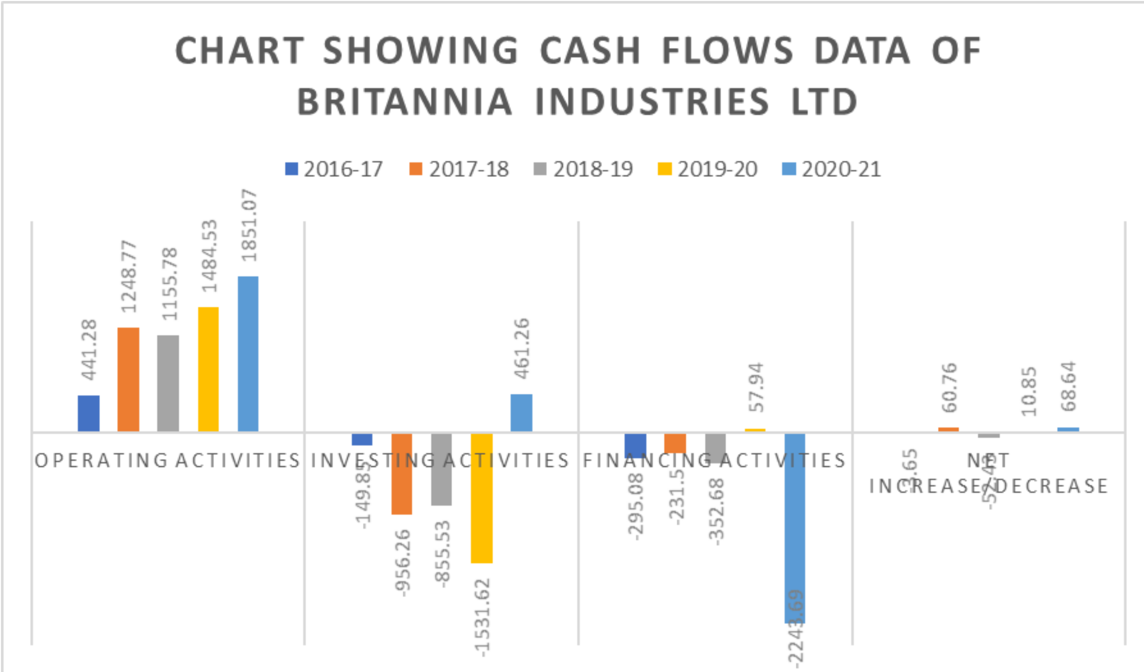
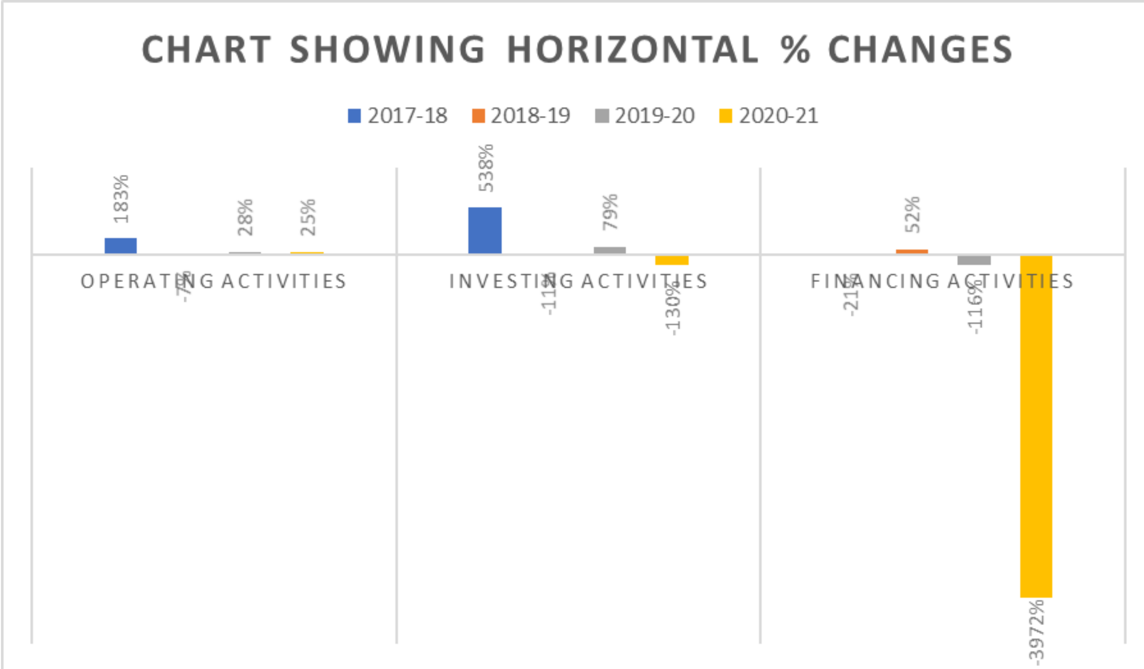


Table 2: Horizontal Analysis of consolidated cash flows data of

Britannia Industries Ltd

Particulars / Cash flows from	**Changes for the year 2017-18**		**Changes for the year 2018-19**		**Changes for the year 2019-20**		**Changes for the year 2020-21**	
	Absolute	**%**	**Absolute**	**%**	**Absolute**	**%**	**Absolute**	**%**
Operating activities	807.49	183%	(92.99)	(7%)	328.75	28%	366.54	25%
Investing activities	(806.41)	538%	100.73	(11%)	(676.09)	79%	1992.88	(130%)
Financing activities	63.33	(21%)	(120.93)	52%	410.62	(116%)	(2301.63)	(3972%)



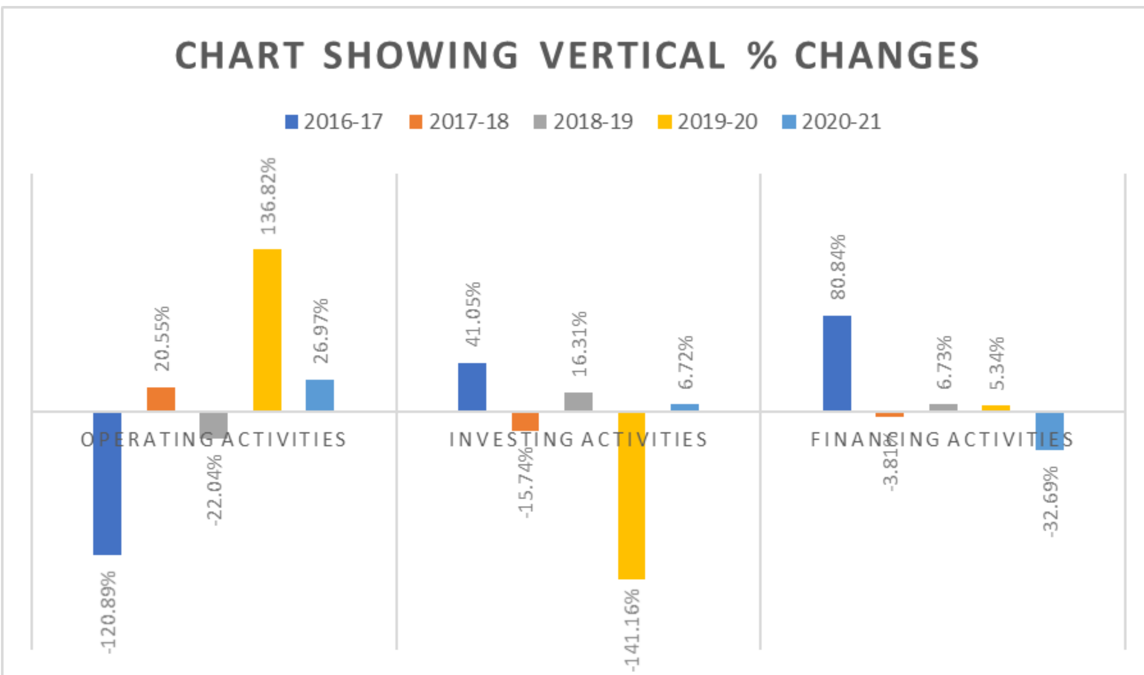
- **Interpretation:**

Horizontal analysis of operating activities shows positive percentage changes over the selected period except for the FY 2018-19 with (7%). The maximum growth of 183% can be seen for the FY 2017-18. The rest FY 2019-20 and 2020-21 show a growth of 28% and 25% respectively. This depicts an overall growth in operating cash flows. Investing activities of the company show maximum 538% growth for FY 2017-18 and next positive growth in FY 2019-20 with 79%. The rest FY 2018-19 and 2020-21 have negative percentages i.e., decline of (11%) and (130%) respectively. This interprets an up-down trend for cash flows from investing activities. The company's financing activities show declining percentages over the selected period except FY 2018-19 with 52%. The hard decline can be seen in the FY 2020-21 with (3972%). This reveals a downward pattern for financing cash flows.

Table 3: Vertical Analysis of consolidated cash flows data of

Britannia Industries Ltd

Particulars/ Cash flows from	**2016-17**		**2017-18**		**2018-19**		**2019-20**		**2020-21**	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Operating activities	441.28	(120.89)	1248.77	20.55	1155.78	(22.04)	1484.53	136.82	1851.07	26.97
Investing activities	(149.85)	41.05	(956.26)	(15.74)	(855.53)	16.31	(1531.62)	(141.16)	461.26	6.72
Financing activities	(295.08)	80.84	(231.75)	(3.81)	(352.68)	6.73	57.94	5.34	(2243.69)	(32.69)
Net inc/ dec	(3.65)	1.00	60.76	1.00	(52.43)	1.00	10.85	1.00	68.64	1.00



- **Interpretation:**

Vertical analysis of cash flow activities for the FY 2016-17 shows that financing activities have contributed 80.84%, more among all three activities for net increase/decrease in cash and cash equivalents. Operating activities have negative impact of (120.89%) and investing activities have 41.05% fluctuations. Operating activities have positive impact of 20.55% in the FY 2017-18 and investing activities and financing activities have (15.74%) and (3.81%). For the FY 2018-19, both investing activities and financing activities have positive contribution of 16.31% and 6.73% whereas operating activities have (22.04%) fluctuations. The company has maximum contribution from operating activities for the FY 2019-20 with 136.82%.

5. Major Findings:

The first objective of the study is ‘to study the trend inherent in operating cash flows, investing cash flows and financing cash flows.’ Data analysis found out there exists an upward trend in operating cash flows, sideways trend in investing cash flows and an overall decreasing trend in financing cash flows.

The second objective of the study is ‘to determine the growth changes in operating cash flows, investing cash flows and financing cash flows.’ The study found out that operating cash flows has maximum growth change of 183% and investing cash flows has of 538% in the FY 2017-18 and financing cash flows has maximum growth change of 52% in the FY 2018-19.

The third objective of the study is ‘to compare performance of the company over the selected period.’ The analysis reveals the better performance with the maximum % contribution in net cash flows is of operating cash flows with 136.82% for the FY 2019-20.

6. Conclusions:

The major findings of the study concludes that- there exists three different inherent trend patterns for different cash flows activities and it has been concluded that the company has performed well in FY 2019-20 because the operating activities are the core activities of cash flow statements and in this year operating cash flows have maximum contribution in the net cash flows.

References:

[1]Samba, V., Siva, S. V., & Anand, M. P. G. (2021). A Comparative Study on Cash Flow Statements of HDFC and SBI Banks. Wutan Huatan Jisuan Jishu, 17(1), 1-6.

[2]Dhakal, L. (2019). Cash Flow Statement Analysis between Commercial Banks (With Reference to Himalayan Bank Ltd. And Global IME Bank Ltd.). American Journal of Industrial and Business Management, 9, 2025-2033.

[3]Sri, B. P. (2019). An assignment on A study on cash flow statement analysis with special reference to jet airways. International Journal of Management, IT and Engineering, 7(11), 127-143.

[4]Omag, A. (2016). Cash flows from financing activities. Evidence from the automotive industry. International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(1), 115-122.
[5]Singh, M. (2016). Cash flow statements of Meghmani Chemicals Ltd. and Clariant Chemicals Ltd.: A Comparative study.

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A Study Of An Immersion Of Bank Of India For Thedevelopment Of Priority Sector

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The Evolution of Rural Credit Delivery System

It has been understood for the first time in the year 1967-68 when National Credit Council was set up on 22nd December, 1967 that the financial aid to agriculture and small scale industries is essential and the advances of commercial banks are concentrated towards the large and medium scale industries and business houses. The report submitted on 24th July, 1968 by National Credit Council emphasized the advances from commercial banks should be channelized to Priority Sector Lending i.e. agriculture and small scale industries. The nationalization of 14 major commercial banks led to reorientation of bank lending to the priority sector.

Financial assistance to agriculture is an effective mean of economic transformation as India is an agricultural economy. The commercial banks, non banking financial institutions, self help groups, co-operative sectors are constantly contributing to Indian Agricultural sector. There are many milestones in the history of banking ballooned the development of priority sector lending in India. To specify, as mentioned above National Credit Council (1967), Nationalization of Commercial banks (1969), RRB’s establishment (1975), NABARD (1982), nationalization of Commercial banks (1980), Financial sector reforms (1991 onwards), down counting public sector banks from 27 to 12 (2017) and merger of banks (2019).Insertion of numerous welfare financial schemes by the Government of India even boosts the sector on a continuous basis.

The recommendation of Narsimha Committee led the establishment of Regional Rural Banks into India in the year 1975-76. The main objectives behind an establishment of Regional Rural Banks were to meet the rural needs. The major focus was to develop rural economy by providing funds for the development of agriculture, trade, commerce, industry and other allied activities in the rural areas specifically credit and other related facilities to small and marginal farmers.

A Regional Rural Bank plays a significant role in the development of agriculture and other allied activities in rural India. The huge network of RRB's have even reached majority remote area of rural India. The major responsibility of the developments lies on the shoulders of Regional Rural Banks. With a view to help the targeted groups, the Reserve Bank of India has fixed targets to the banks for lending and it has made it mandatory to banks to reach certain level of advances under priority sector lending.

Post reconstruction of banking sector, the Indian Banking Sector consists of 12 public sector banks, 22 private sector banks, 46 foreign banks, 56 regional rural banks 1485 urban co-operative banks and 96000 rural co-operative banks in addition to co-operative credit institutions as of November, 2020. The total assets of the entire banking sector including public, private sector and foreign banks has increased to US$ 2.52 trillion in FY20. According to the Reserve Bank of India, the bank credits and deposits stood at Rs.108.6 trillion (US$ 1.48 trillion) and Rs. 151.34 trillion (US$ 2.06 trillion) respectively as on 23rd April, 2021[21] The Non-Performing Assets of commercial banks has reached a recovery of Rs. 400,000 crore (US$ 57.23 billion) in FY19, which is highest in the last four years. The financial prosperous will always be advantageous to enhance the need for banking services in the rural area.

Targets of Priority Sector Lending as per RBI Guidelines:

The targets are set for priority sector lending and those are to be calculated on the basis of Adjusted Net Bank Credit (ANBC) or CEOBE (Credit Equivalent of Off-Balance Sheet Exposure).

Categories	**Domestic commercial banks (excl. RRBs & SFBs) & foreign banks with 20 branches and above**	**Foreign banks with less than 20 branches**	**Regional Rural Banks**	**Small Finance Banks**
Total Priority Sector	40 per cent of ANBC as computed in Para 6 below or CEOBE whichever is higher	40 per cent of ANBC as computed in Para 6 below or CEOBE whichever is	75 per cent of ANBC as computed in Para 6 below or CEOBE whichever is	75 per cent of ANBC as computed in Para 6 below or CEOBE whichever is

21(https://www.ibef.org/industry/banking-india.aspx)

		higher; out of which up to 32% can be in the form of lending to Exports and not less than 8% can be to any other priority sector	higher; However, lending to Medium Enterprises, Social Infrastructure and Renewable Energy shall be reckoned for priority sector achievement only up to 15 per cent of ANBC.	higher.
Agriculture	18 per cent of ANBC or CEOBE, whichever is higher; out of which a target of 10 percent# is prescribed for Small and Marginal Farmers (SMFs)	Not applicable	18 per cent ANBC or CEOBE, whichever is higher; out of which a target of 10 percent# is prescribed for SMFs	18 per cent of ANBC or CEOBE, whichever is higher; out of which a target of 10 percent# is prescribed for SMFs
Micro Enterprises	7.5 per cent of ANBC or CEOBE, whichever is higher	Not applicable	7.5 per cent of ANBC or CEOBE, whichever is higher	7.5 per cent of ANBC or CEOBE, whichever is higher
Advances to Weaker Sections	12 percent of ANBC or CEOBE, whichever is higher	Not applicable	15 per cent of ANBC or CEOBE, whichever is higher	12 percent of ANBC or CEOBE, whichever is higher

Source: Master Directions – Priority Sector Lending (PSL) – Targets and Classification (Updated as on June 11, 2021)

The Reserve Bank of India has explained the categories of priority sector. The classification of priority sector is as follows:

1. Agriculture :
    - Farm credit to individual farmers
    - Farm Credit - Corporate farmers, Farmer Producer Organizations (FPOs)/(FPC) Companies of Individual Farmers, Partnership firms and Co-operatives of farmers engaged in Agriculture and Allied Activities

- Agriculture Infrastructure
- Ancillary Services
- Small and Marginal Farmers (SMFs)
- Lending by banks to NBFCs and MFIs for on-lending in agriculture

2. Micro, Small and Medium Enterprises
    - Factoring Transactions (not applicable to RRBs and UCBs)
    - Khadi and Village Industries Sector (KVI)
    - Other Finance to MSMEs
3. Export Credit
4. Education
5. Housing
6. Social Infrastructure
7. Renewable Energy
8. Others
9. Weaker Sections:

1	Small and Marginal Farmers
2	Artisans, village and cottage industries where individual credit limits do not exceed ₹1 lakh
3	Beneficiaries under Government Sponsored Schemes such as National Rural Livelihood Mission (NRLM), National Urban Livelihood Mission (NULM) and Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS)
4	Scheduled Castes and Scheduled Tribes
5	Beneficiaries of Differential Rate of Interest (DRI) scheme
6	Self Help Groups
7	Distressed farmers indebted to non-institutional lenders
8	Distressed persons other than farmers, with loan amount not exceeding ₹1 lakh per borrower to prepay their debt to non-institutional lenders
9	Individual women beneficiaries up to ₹1 lakh per borrower (For UCBs, existing loans to women will continue to be classified under weaker sections till their maturity/repayment.)
10	Persons with disabilities
11	Minority communities as may be notified by Government of India from time to time.

Priority sector lending and Bank of India:

The foundation of Bank of India has taken place way back on 7th September, 1906. It is one of largest commercial bank of India headquartered in Mumbai. The ownership of Bank of India is with the Ministry of Finance, Government of India. With global presence in 18 countries spread over five continents. In the year 1969, it has been nationalized. With a huge network of 5430 branches all over India, it is one of the commendable banks contributing for the economic development of India.

Rural banking is even one of the services vertical where bank has its vigorous attention. There are products like Agri clinics, Composite Cash Credit, Farm Mechanization, Land Development, Poultry Development, Rural Godowns, Financing against pledge of warehouse receipt, Gold Loan, Crop Finance, Financing for draught animals & crafts, Minor Irrigation, purchase of land, Dairy Development, Solar Pump set, Tatkal loan, Term loan etc. Besides, bank provides Kishan Credit Card, BOI Kishan Satabdhi Krishi Vikas Card, Kishan Samadhan Card, and Star Bhumiheen Kishan Card to the farmers.

Research Methodology:

As per the guidelines of Reserve Bank of India is contributing for the upliftment of rural India. To support the study the secondary data related to financial performance of Bank of India was collected from its Annual Reports from last ten years from 2013 to 2022. To prove the arguments, an appropriate selection and practice of statistical tools plays an important role. The researcher here has utilized ANOVA (F- test) as a statistical tool to prove the observations true.

Objectives of the study:

The present study is based on the priority sector lending of Bank of India. The paper is intended towards creating an understanding of its contributions towards the development of rural India. To achieve the objective of the research, researcher has considered three parameters to analyze the contribution of Bank of India towards rural development.

1. Ratio of rural branches to total number of branches
2. Ratio of total priority sector lending to total deposits and total advances
3. Sector wise lending in priority sector lending by Bank of India

- **Branches of Bank of India:**

The number of branches and the increase in the number of branches at rural area is a significant measure of resulting to support the arguments that the Bank of India contributes significantly to the rural development.

Table 1: Ratio of rural branches to Total Branches of Bank of India

PARTICULARS	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
RURAL BRANCHES	1598	1766	1891	1958	2010	2011	1832	1828	1828	2000
TOTAL BRANCHES	4292	4646	4892	5077	5123	5127	5092	5083	5084	5430
% TO TATAL	37.23 %	38.01 %	38.65 %	39.03 %	39.23 %	39.22 %	35.98 %	36 %	36 %	36 %

From the above table 1 it is very clear that the bank has expanded its reach to rural area from 1598 branches in the year 2013 to 2000 branches in 2022, 31st March. The trend showed that in the year 2022 bank has made an addition of significant number to their existing rural branches set up which is a positive aspect towards the path of rural development.

- **Priority sector advances to total advances and deposits:**

Proportion contribution from the total advances of the bank to the priority sector advance is again a measure the efforts of Bank of India towards the development of rural sector. Following table presents the numerical data specifying the total deposits, total advances hold by Bank of India and the proportion out of that attributed to the priority sector to prove the argument true.

Priority Sector advances to Total advances = Priority Sector advances / Total advances * 100

Table 2: Percentage of Priority Sector advances to Total advances

(In ‘000)

PARTICULARS	TOTAL DEPOSITS	TOTAL ADVANCES	PRIORITY SECTOR	% TO TOTAL ADVANCES
2012-13	3,818,395,859	2,893,674,972	649,660,787	22.45
2013-14	4,769,740,518	3,707,335,364	773,955,592	20.88
2014-15	5,319,066,346	4,020,255,465	850,784,313	21.16
2015-16	5,130,045,218	3,591,889,592	918,603,215	25.57
2016-17	5,400,320,078	3,664,816,671	954,638,291	26.05
2017-18	5,208,543,783	3,413,801,866	1,015,893,551	29.76

2018-19	5,208,623,485	3,410,059,443	1,121,314,154	32.88
2019-20	5,555,049,786	3,688,833,041	1,125,757,202	30.52
2020-21	6,271,135,601	3,656,865,239	1,217,412,779	33.29
2021-22	6,278,959,591	4,208,417,907	1,326,166,340	31.51

"ANOVA" is used by the researcher to examine the relationship between the advances to priority sector and total deposits and the total advances of Bank of India during the tenure of last ten financial years from 2012-13 to 2021-22. The test is two-way ANOVA conducted to prove that the Bank of India is contributing significantly to the rural development by establishing the relationship between the advances to priority sector and total deposits and the total advances of Bank of India. The significance level set at 5%. Considering the area to be examined the hypothesis formed are as follows:

Ho: There is no significant difference in growth of priority sector lending against the total deposits and advances in last 10 years.

H1: There is significant difference in growth of priority sector lending against the total deposits and advances in last 10 years.

Testing of Hypothesis:

Following mentioned table 3 represents the ANOVA Two Factor without Replication. And table 4 shows the ANOVA Result for advances to Priority sector and total deposits and advances by the Bank of India.

Table 3: Anova Two-Factor without Replication

Anova: Two-Factor Without Replication				
SUMMARY	***Count***	***Sum***	***Average***	***Variance***
2012-13	3	7361731618	2453910539	2.65527E+18
2013-14	3	9251031474	3083677158	4.28329E+18
2014-15	3	10190106124	3396702041	5.283E+18
2015-16	3	9640538025	3213512675	4.54144E+18
2016-17	3	10019775040	3339925013	5.02019E+18
2017-18	3	9638239200	3212746400	4.4249E+18
2018-19	3	9739997082	3246665694	4.19655E+18
2019-20	3	10369640029	3456546676	4.94513E+18

2020-21	3	11145413619	3715137873	6.38758E+18
2021-22	3	11813543838	3937847946	6.18745E+18
TOTAL DEPOSITS	10	52959880265	5295988027	4.99856E+17
TOTAL ADVANCES	10	36255949560	3625594956	1.2631E+17
PRIORITY SECTOR	10	9954186224	995418622.4	4.32233E+16

Table 4: ANOVA Result for Priority Sector advances to Total advances and Total Deposits

ANOVA						
Source of Variation	***SS***	***df***	***MS***	***F***	***P-value***	***F crit***
Rows	4.18476E+18	9	4.64974E+17	4.549286835	0.003059	2.456281
Columns	9.40098E+19	2	4.70049E+19	459.8942763	3.54E-16	3.554557
Error	1.83974E+18	18	1.02208E+17			
Total	1.00034E+20	29				

Analysis of Results:

The ANOVA test resulted are depicted in table 3 and 4. According to the test of result conducted, F= 4.549286835 and 459.8942763 as compared to the tabulated value at 2.456281 and 3.554557 respectively. It is observed here that the calculated F value is greater than the F tabulated value; hence null hypothesis is rejected over here. It means it proved that the relationship among the priority sector advances and total deposits and loans seems positive. With an increase in income in the form of deposits and loans has shown proportionate increase in the priority sector lending even in last ten financial years. Bank of India has selected the positive walk in towards the growth in priority sector lending.

- **Sector wise lending in priority sector lending by Bank of India:**

Table 5 denotes the performance of the disbursement of loans to various components in Priority Sector by Bank of India. It is observed that the bank is progressive on the part of component wise lending in priority sector since last ten years. Above all the targets set by Reserve Bank of India even have been achieved successfully by Bank of India.

Table 5: Disbursement of Loans to various components in Priority Sector by Bank of India

(In Crore)

Particulars	Agriculture	SME	Education	Housing	Others	% of ANBC
2012-13	27,041	28,912	2,329	6,790	446	36.71%
2013-14	36,071	35,504	2,597	7,517	332	40.45%
2014-15	43,183	39,822	2,872	8,374	321	35.20%
2015-16	50,508	39,466	3,093	10,314	1275	38.97%
2016-17	54,302	42,768	3,188	11,584	1185	40.47%
2017-18	51,938	51,678	3,226	13,690	1159	40.80%
2018-19	57,302	51,866	3,140	17,038	1148	41.86%
2019-20	52,918	52,198	2,860	18,058	203	40.81%
2020-21	59,007	57,267	2,304	20,207	150	41.25%
2021-22	66,418	62,398	2,181	20,481	121	41.55%

"ANOVA" is used by the researcher to examine whether the component wise lending experienced growth in priority sector during the tenure of last ten financial years from 2012-13 to 2021-22. The test is two-way ANOVA wherein years and component wise lending are two different independent factors and the significance level set at 5%. Considering the area to be examined the hypothesis formed are as follows:

Ho: There is no significant growth experienced in component wise lending of priority sector in last 10 years.

H1: There is significant growth experienced in component wise lending of priority sector in last 10 years.

Testing of Hypothesis:

Following mentioned table 6 represents the ANOVA Two Factor without Replication. And table 7 shows the ANOVA Result for Loans to various components in Priority Sector by the Bank of India.

Table 6: ANOVA Two Factor without Replication

ANOVA: Two-Factor Without Replication				
SUMMARY	***Count***	***Sum***	***Average***	***Variance***
Agriculture	10	498688	49868.8	133607098.8
SME	10	461879	46187.9	110447099.7
Education	10	27790	2779	158896.6667
Housing	10	134053	13405.3	27541706.01
Others	10	6340	634	240222.8889
2012-13	5	65518	13103.6	190081254.3
2013-14	5	82021	16404.2	319880522.7
2014-15	5	94572	18914.4	435066459.3
2015-16	5	104656	20931.2	508904605.7
2016-17	5	113027	22605.4	592136276.8
2017-18	5	121691	24338.2	651399522.2
2018-19	5	130494	26098.8	717333825.2
2019-20	5	126237	25247.4	668025516.8
2020-21	5	138935	27787	828600564.5
2021-22	5	151599	30319.8	1033163133

Table 7: ANOVA Result for Loans to various components in Priority Sector by BOI

ANOVA						
Source of Variation	***SS***	***df***	***MS***	***F***	***P-value***	***F crit***
Rows	22598930599	4	5649732650	172.4471311	5.98018E-23	2.633532
Columns	1268519095	9	140946566.1	4.302120555	0.000748129	2.152607
Error	1179436121	36	32762114.48			
Total	25046885816	49				

Analysis of Results:

The ANOVA test resulted are depicted in table 6 and 7. According to the test of result conducted, F= 172.4471311 and 4.302120555 as compared to the tabulated value at 2.633532 and 2.152607 respectively. It is observed here that the calculated F value is greater than the F tabulated value; hence null hypothesis is rejected over here. It means it proved that the component wise lending experienced growth in priority sector during the tenure of last ten financial years from 2012-13 to 2021-22. It's an optimistic indication towards the kind of efforts put in by the Bank of India for the rural development.

To conclude:

The Government of India has given the scheme in the form of RBI guidelines for the priority sector lending to develop rural economy. Concentration of funds towards rural economy was the basic objective behind this policy. Bank of India as one of the leading commercial banks in India is performing efficiently for the immersion of funds into the rural economy. Granting 40% of the total advances to borrowers in the priority sector have been reached by the Bank of India since last ten years of period of time as per RBI guidelines. The relationship between the advances and deposits earned by the bank and the priority sector lending found progressive. The only thing that all banking institutions should keep in mind is NPA management. Advisable credit policies and complete and on time recovery of the loan amount from the customers will always been proved as the key of successful financial set up of any financial institution.

Bibliography:

1. Dave, D. K. A Study of Priority Sector Lending for Selected Public Sector 84 IJRAR-International Journal of Research and Analytical Reviews Research Paper. *International Journal of Research and Analytical Reviews , VOLUME 3* (ISSUE 3 JULY – SEPT. 2016).
2. Dr. (Mrs.) Prashanta Athma, A. B. (n.d.). Mergers in Banking Sector in India: An Analysis of Pre & Post Merger Performance of SBI & HDFC Bank. *IOSR Journal of Business and Management* , 07-16.
3. Dr. K.A. Goyal, V. J. (2011). MERGERS IN BANKING INDUSTRY OF INDIA: SOME EMERGING ISSUES. *Asian Journal of Business and Management Sciences , 1* (2), 157-165.
4. *https://www.bankofindia.co.in/history3*. (n.d.). Retrieved November 15, 2020, from https://www.bankofindia.co.in/history3: https://www.bankofindia.co.in/history3
5. *https://www.ibef.org/industry/banking-india.aspx*. (n.d.). Retrieved July 27, 2021, from IBEF: https://www.ibef.org/industry/banking-india.aspx
6. IBRAHIM, D. M. (2012). ROLE OF INDIAN REGIONAL RURAL BANKS (RRBs) IN THE PRIORITY SECTOR LENDING- AN ANALYSIS. *International Management Journal , Vol. 1 No. 1-2* ((January-December, 2012)), 25-32.
7. India, R. B. (n.d.). Retrieved from Reserve Bank of India: https://www.rbi.org.in/scripts/chro_1968.aspx
8. J, I. (2019, September 25). A Study on Mergers and Acquisition of Banks and a Case Study on SBI and its Associates. *International Journal of Trend in Research and Development* , 22-26.
9. K.V.Giridhar, S. &. (2019). A Study of Priority Sector Lending by State Bank of India. *Shanlax International Journal of Commerce, , vol. 7, no. 4*, 30-35.
10. KADIWALA, K. A. A Study on Priority Sector Lending by Public Sector Banks and Private Sector Banks in India. *International Journal of Research in all Subjects in Multi Languages , Vol. 5* (Sp. Issue: 2, February: 2017).

11. Kambar, P. S. (2019). A STUDY ON THE CONSOLIDATION AND MERGER OF PUBLIC SECTOR BANKS (PSB) IN INDIA: ISSUES AND CHALLENGES. *International Journal of Social Science and Economic Research , 4* (6), 4326-4334.
12. Khan, A. A. (2012). MERGER & ACQUISITIONS (M & As) IN THE INDIAN BANKING SECTOR IN POST LIBERALIZATION REGIME. *International Journal of Accounting and Financial Management Research , 2* (1), 1-18.
13. Kumar, S. (2013). Impact of Bank Mergers on the Efficiency of Banks: A study of merger of Bharat Overseas Bank with Indian Overseas Bank. *International Journal of Academic Research in Business and Social Sciences , 3* (12), 221-242.
14. Lahoti, D. J. (2016). An Experiential Study of Mergers And Acquisitions in Indian Banking Sector. *PARIPEX - INDIAN JOURNAL OF RESEARCH , 5* (4), 398-400.
15. Muneesh Kumar, N. B. DETERMINANTS OF PRIORITY SECTOR LENDING:EVIDENCE FROM BANK LENDING PATTERNS IN INDIA. *The International Journal of Business and Finance Research , Vol. 10, No. 2, ,* (2016), 55-80.
16. Narasagondar, M. (2016). Recent Mergers and Acquisition in Indian Banking sector- A Study. *Journal of Emerging Technologies and Innovative Research (JETIR) , 3* (10), 690-698.
17. (2004). *Report of the Advisory Committee on Flow of Credit to Agriculture.* Reserve Bank of India.
18. S.MANJUSHREE. PROBLEMS AND PROSPECTS OF PRIORITY SECTOR LENDING. *Shanlax International Journal of Commerce , Vol. 6 No. 2* (April 2018).
19. Santosh Kumar Panda, G. P. DETERMINANTS OF PRIORITY SECTOR LENDING OF INDIAN PUBLIC SECTOR BANKS: AN ECONOMETRIC ANALYSIS. *International Journal of Research - GRANTHAALAYAH , Vol.5 (Iss.7):* (July, 2017).
20. Sharma, N. B. (n.d.). Priority sector lending in India: Revisiting the issue under new guidelines of RBI. *International Journal of Applied Research* .
21. Silony. (n.d.). *Shodhganga.* Retrieved from http://hdl.handle.net/10603/3667

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An Analytical study on Financial Soundness of Selected Cement Companies in India: with the help of kida's Models

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Abstract

Financial Soundness or financial performance is very useful and broad sense of any kind of organisation or firm. Financial performance is described company's financial position or we can say that, companies strength or weakness. There are several measures are available to measure the company's financial performance like various profitability ratio, liquidity ratio and leverage ratio etc, with the help of this measures we can find out companies performance is strong or weak in near future. In this research paper researcher has used five cement companies which is selected on the basis of simple random sampling. In which researcher are selected top five cement companies on the basis of market capitalization. In this research, for the analysis and interpretation researcher used tools like Kida's model and one way Anova. This research is only based on secondary data. In this paper researcher used (2014-15 to 2017-18) four years' data as a period of the study.

Kew Words: Financial Soundness, kida's model, One way Anova

Introduction

Globalisation has caused to integrate the national economy with the world economy and it has created a new financial environment which brings new opportunities and challenges to the individual business concerns. This has led to total reformation of the finance function and its responsibilities in the organization.

Any kind of organization or firm has two common objectives, one is profit maximisation and other is wealth maximisation. If the any company cannot acquire or manage its profit, then companies cannot survive in the market in long run. For this purpose, find out companies performance in the future period, researcher used in this paper specific model. Through the model we can find out bankruptcy position of companies in future. Kida's model as under.

Kida's z - score model:

Kida's model is also called Kida's z score model. This model also represents five separate financial ratios for predicting bankruptcy; these are represented in the following formula.

$$Z = 1.042X1 + 0.42X2 + 0.461X3 + 0.463X4 + 0.271X5$$

Where,

X1 = Net profit after tax / total assets

X2 = EBIT / total assets

X3 = Accounts payable / total assets

X4 = Sales / total assets

X5 = Cash / total assets

Kida's model shows companies that have a z-score of > 0.38 are considered as a good sign for being successful compared to those which have a z-score of < 0.38 had potential serious problems and may not be able to continue.

Review of Literature:

(Md, 2016) This study is based on, "Financial soundness measurement and trend analysis of commercial banks in Bangladesh: An observation of selected banks". The objective of the study is to measure the financial soundness of private commercial banks of Bangladesh along with the specific objective, the report also finds out the factors behind success and failure of private commercial banks of Bangladesh because determinants of financial soundness is very useful of managers in improving organisational performance and it also help the policy making bodies.

(M.Selvaraj, 2021) This research work is on, "Financial performance of housing finance companies in India- A study of selected companies". The main objective of the study is to evaluate and compare the stability of housing finance companies in the current financial performance with future scenarios by using ratio analysis and this study is based on secondary data. In this study five housing finance companies were selected as a sample for the study. The period selected for the study form 2010 to 2020 periods.

(Nithya Ramachandran, 2019) This research is on, "A study on financial soundness using Altman's z-score models-a study on telecom companies in GCC". The study is covers the telecom service providers across GCC countries. To study the financial soundness of the telecom companies in GCC, the last 3 years from 2016 to 2018 was selected. The data for the study purpose has been collected from the secondary data, which are collected annual reports of the companies. Basically financial soundness of a company must be managed in a systematic manner.

1. Research Methodology:

1.1 Objective of the study

- ✓ To estimates the actual financial performance of the companies.
- ✓ To evaluates the financial soundness of the companies by using kida's model.

1.2 Hypothesis of the study

Hypothesis 1:

H0: There is no significant difference in actual financial performance of the companies.

H1: There is a significant difference in actual financial performance of the companies.

Hypothesis 2:

H0: There is no significant difference in financial soundness of the companies by using kida's model.

H1: There is a significant difference in financial soundness of the companies by using kida's model.

1.3 Sample of the study

In this research the four cement companies are listed on Bombay stock exchange are selected, on the basis of market capitalisation.

1. Ultra Tech Cements
2. Shree Cements
3. Ambuja Cements
4. ACC Cements

1.4 Tools and Techniques

- Ratio analysis
- Kida's model

1.5 Data analysis & Interpretation:

Ultra Tech Cement:

	Ratio	Year				Weights	Multiplications				Total
		2014	2015	2016	2017		2014	2015	2016	2017	
X1	**Net profit after tax**	2,144.47	2,014.73	2,370.16	2,627.72						
	Total Assets	29,754.01	35,214.95	38,290.57	39,281.09						
		0.072	**0.057**	**0.062**	**0.067**	**1.042**	**0.08**	**0.06**	**0.06**	**0.07**	**0.27**
X2	**EBIT**	2,775.51	2,886.25	3,298.56	3,789.64						
	Total Assets	29,754.01	35,214.95	38,290.57	39,281.09						
		0.093	**0.082**	**0.086**	**0.096**	**0.42**	**0.04**	**0.03**	**0.04**	**0.04**	**0.57**
X3	**Accounts Payable**	2,424.22	2,738.97	1,581.46	1,713.80						
	Total Assets	29,754.01	35,214.95	38,290.57	39,281.09						
		0.081	**0.077**	**0.041**	**0.044**	**0.461**	**0.04**	**0.04**	**0.02**	**0.02**	**0.12**
X4	**Sales**	20,077.88	22,656.48	23,708.79	23,891.43						
	Total Assets	29,754.01	35,214.95	38,290.57	39,281.09						
		0.674	**0.075**	**0.619**	**0.608**	**0.463**	**0.31**	**0.03**	**0.28**	**0.28**	**0.9**
X5	**Cash**	277.50	213.94	2,235.20	2,217.74						
	Total Assets	29,754.01	35,214.95	38,290.57	39,281.09						
		0.009	**0.006**	**0.006**	**0.005**	**0.271**	**0.00**	**0.00**	**0.00**	**0.00**	**00**
							0.47	**0.16**	**0.4**	**0.41**	**1.86**

Shree Cement:

Ratio		Year				Weights	Multiplications				Total
		2014	2015	2016	2017		2014	2015	2016	2017	
X1	**Net profit after tax**	691.31	409.68	1,143.13	1,339.11						
	Total Assets	7,328.71	7,997.85	9,463.28	11,166.11						
		0.094	**0.051**	**0.121**	**0.119**	**1.042**	**0.09**	**0.05**	**0.12**	**0.12**	**0.38**
X2	**EBIT**	895.66	436.29	1,176.25	1,530.81						
	Total Assets	7,328.71	7,997.85	9,463.28	11,166.11						
		0.122	**0.054**	**0.124**	**0.134**	**0.42**	**0.05**	**0.02**	**0.05**	**0.05**	**0.17**
X3	**Accounts Payable**	187.53	292.37	257.24	351.68						
	Total Assets	7,328.71	7,997.85	9,463.28	11,166.11						
		0.025	**0.036**	**0.027**	**0.031**	**0.461**	**0.01**	**0.02**	**0.01**	**0.01**	**0.05**
X4	**Sales**	5,875.88	6,439.88	8,429.16	8,429.16						
	Total Assets	7,328.71	7,997.85	9,463.28	11,166.11						
		0.801	**0.805**	**0.890**	**0.754**	**0.463**	**0.37**	**0.37**	**0.41**	**0.35**	**1.5**
X5	**Cash**	159.27	307.50	83.04	111.00						
	Total Assets	7,328.71	7,997.85	9,463.28	11.166.11						
		0.022	**0.034**	**0.008**	**0.009**	**0.271**	**0.00**	**0.00**	**0.00**	**0.00**	**00**
							0.52	**0.46**	**0.59**	**0.53**	**2.1**

Ambuja Cement:

Ratios		Year				Weights	Multiplications				Total
		2014	2015	2016	2017		2014	2015	2016	2017	
X1	**Net profit after tax**	1,496.36	807.56	932.24	1,249.57						
	Total assets	13,900.85	14,161.93	23,352.77	24,626.84						
		0.107	**0.057**	**0.040**	**0.050**	**1.042**	**0.11**	**0.06**	**0.04**	**0.05**	**0.26**
X2	**EBIT**	1,783.41	1,172.21	1,279.47	1,619.12						
	Total assets	13,900.85	14,161.93	23,352.77	24,626.84						
		0.128	**0.083**	**0.055**	**0.066**	**0.42**	**0.05**	**0.03**	**0.02**	**0.03**	**0.13**
X3	**Accounts Payable**	618.49	679.82	815.34	1,046.53						
	Total assets	13,900.85	14,161.93	23,352.77	24,626.84						
		0.044	**0.05**	**0.035**	**0.042**	**0.461**	**0.02**	**0.02**	**0.02**	**0.02**	**0.08**
X4	**Sales**	9,910.70	9,368.30	9,160.40	10,446.85						
	Total assets	13,900.85	14,161.93	23,352.77	24,626.84						
		0.713	**0.661**	**0.392**	**0.424**	**0.463**	**0.33**	**0.31**	**0.18**	**0.19**	**1.01**
X5	**Cash**	2,458.12	2,848.39	2,578.52	3,497.07						
	Total assets	13,900.85	14,161.93	23,352.77	24,626.84						
		0.177	**0.201**	**0.110**	**0.142**	**0.271**	**0.05**	**0.05**	**0.03**	**0.04**	**0.17**
							0.56	**0.47**	**0.29**	**0.33**	**1.65**

ACC Cement:

	Ratio	Year				Weight	Multiplication				Total
		2014	2015	2016	2017		2014	2015	2016	2017	
X1	**Net profit after tax**	1,168.29	591.57	602.40	915.45						
	Total assets	12,671.33	12,840.82	13,437.47	14,888.85						
		0.092	**0.056**	**0.045**	**0.061**	**1.042**	**0.09**	**0.06**	**0.05**	**0.06**	**0.26**
X2	**EBIT**	1,135.20	937.14	851.68	1,298.36						
	Total assets	12,671.33	12,840.82	13,437.47	14,888.85						
		0.090	**0.073**	**0.063**	**0.087**	**0.42**	**0.04**	**0.03**	**0.03**	**0.04**	**0.14**
X3	**Accounts payables**	750.23	874.11	1,256.93	1,810.49						
	Total assets	12,671.33	12,840.82	13,437.47	14,888.85						
		0.060	**0.068**	**0.094**	**0.122**	**0.461**	**0.03**	**0.03**	**0.04**	**0.05**	**0.15**
X4	**Sales**	11,484.05	11,432.76	10,936.41	12,930.95						
	Total assets	12,671.33	12,840.82	13,437.47	14,888.85						
		0.906	**0.890**	**0.813**	**0.868**	**0.463**	**0.42**	**0.41**	**0.37**	**0.40**	**1.6**
X5	**Cash**	304.30	91.60	275.58	2,695.40						
	Total assets	12,671.33	12,840.82	13,437.47	14,888.85						
		0.024	**0.007**	**0.020**	**0.181**	**0.271**	**0.00**	**0.00**	**0.00**	**0.05**	**0.05**
							0.58	**0.53**	**0.49**	**0.60**	**2.2**

Above all the tables shows that X1,X2, X3, X4 & X5 ratios of the Ultra tech cement, Shree cement, Ambuja cement and ACC cement respectively. All the companies ratios are multiply with weights after multiplication the all the figures are added and final figure are Ultra tech cement 0.47, 0.16, 0.40,& 0.41, when, Shree cement 0.52, 0.46, 0.59, and 0.53, Ambuja cement 0.56, 0.47, 0.29, and 0.33, ACC cement 0.58, 0.53, 0.49, and 0.60 are compared with the value of z-score 0.38 respectively. If the values of any cement company are more than 0.38, so, that company is on good position. But, in the case the value of Cement Company is less than 0.38, so, we can say that in future, that company can't survive in long time.

ANOVA:

Ratio	*Source of Variation*	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*	*H0*
X1	Between Groups	0.002725	3	0.000908	1.429485	0.282677	3.490295	Accepted
	Within Groups	0.007624	12	0.000635				
	Total	0.010349	15					
Ratio	Source of Variation	SS	df	MS	F	P-value	F crit	H0
X2	Between Groups	0.002876	3	0.000959	1.647497	0.230762	3.490295	Accepted
	Within Groups	0.006982	12	0.000582				
	Total	0.009857	15					
Ratio	Source of Variation	SS	df	MS	F	P-value	F crit	H0
X3	Between Groups	0.000277	3	9.24E-05	0.103243	0.956591	3.490295	Accepted
	Within Groups	0.010739	12	0.000895				
	Total	0.011016	15					
Ratio	Source of Variation	SS	df	MS	F	P-value	F crit	H0
X4	Between Groups	0.056937	3	0.018979	0.327222	0.80577	3.490295	Accepted
	Within Groups	0.696	12	0.058				
	Total	0.752936	15					
Ratio	Source of Variation	SS	df	MS	F	P-value	F crit	HO
X5	Between Groups	0.004688	3	0.001563	0.242488	0.865044	3.490295	Accepted
	Within Groups	0.077335	12	0.006445				
	Total	0.082023	15					

Conclusion:

From the above statistics, the researcher has found the significant value/P-value is greater than the significant value of 0.05. So, our Null hypothesis is accepted during the study period.

Company	Score	Condition
Ultra tech Cement	**1.86**	**Good**
Shree Cement	**2.1**	**Good**
Ambuja Cement	**1.65**	**Good**
ACC Cement	**2.2**	**Good**

All the companies have the value of more than 0.38. So, we can say that all the companies are in good condition or a safe zone.

Significance of the study:

With the help of this research study stakeholders can easily decided about investment of any company. And take the decision on the basis of the company's condition, which is good or bad.

Limitations of the study:

- This research study is limited to only four years.
- For the evaluation in this study used only four companies.

References:

M.Selvaraj, V. K. (2021). Financial performance of housing finance companies in india: A study of selected companies. *International Advanced research journal in science, engineering and technology*

Md, A. K. (2016). Financial soundness measurement and Trend analysis of commercial Banks in Bangladesh; An observation of selected Banks. *Europesn journal of Business and Social Science , 4*.

Nithya Ramachandran, M. J. (2019). A study on Financial soundness using Altman's Z-score model - A study on telecom companies in GCC. *International Journal of Latest Engineering and management Research , 04* (07), 01-08.

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શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાના ઉપયોગ અને તેની અસર

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સારાંશ

પ્રસ્તુત સંશોધનનો મુખ્ય હેતુ શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાના ઉપયોગનો આરોગ્ય, સામાજિક સંબંધ, શિક્ષણ અને મનોરંજન વિશે અસર જાણવાનો હતો. ઉપકરણ તરીકે સ્વ રચિત અભિપ્રાયાવલીનો ઉપયોગ કરી યાદૃચ્છિક નમૂના પસંદગી પદ્ધતિથી 119 શિક્ષક પ્રશિક્ષકોને પસંદ કરી માહિતી એકત્ર કરવામાં આવી હતી. માહિતીનું ટકાવારી અને કાઈવર્ગ મૂલ્ય દ્વારા માહિતીનું પૃથક્કરણ કરવામાં આવ્યુ હતું. સંશોધનના મુખ્ય તારણોમાં સોશિયલ મીડિયાના ઉપયોગનો વ્યક્તિ પર આરોગ્ય વિષયક નકારાત્મક, સામાજિક સંબંધ વિષયક હકારાત્મક તેમજ નકારાત્મક, તો શિક્ષણ અને મનોરંજન વિષયક હકારાત્મક અસર પડે છે.

ચાવીરૂપ શબ્દ : સોશિયલ મીડિયા અને શિક્ષક પ્રશિક્ષક

1. પ્રસ્તાવના

વર્તમાન યુગને જ્ઞાન અને માહિતીના યુગ તરીકે ઓળખવામાં આવે છે. સમૂહ માધ્યમો એ દરેક સમાજના લોકો પર એવી અસર પાડી છે. પરંપરાગત માધ્યમો કરતાં આધુનિક સમૂહ માધ્યમો એક વિશાળ વર્ગ સુધી વ્યાપી ગયા છે. ભારતીય સમાજમાં સ્માર્ટફોને ક્રાંતિકારી અસરો ઉપજાવી છે. વર્તમાન સમયમાં તેનું ચલણ દિન-પ્રતિદિન વધતું જાય છે. તેમાં પણ ખાસ કરીને યુવા -વર્ગ, વિદ્યાર્થી વર્ગ પર વધુ માત્રામાં થતો જોવા મળે છે. સોશિયલ મીડિયાનો વ્યાપ એટલો ઝડપથી વધ્યો છે કે બહુ ઓછા સમયમાં અનેક લોકોના સંપર્કમાં પહોંચી શકાય છે. ફેસબૂક, ટ્વિટર, વ્હોટ્સએપ, ઇન્સ્ટાગ્રામ, યુ-ટ્યુબ અને બીજી ઘણી-બધી વેબસાઇટ્સના માધ્યમથી લોકો પોતાની અભિવ્યક્તિને અનેક લોકો સુધી સરળતાથી પહોંચાડી શકે છે.

સોશિયલ મીડિયા એ એક ઓનલાઈન પ્લેટફોર્મ છે જે યુઝર્સને લોકો સાથે જોડાવા અને વૈશ્વિક સ્તરે વાસ્તવિક સમયમાં વિચારો શેર કરવામાં મદદ કરે છે. મહત્ત્વની વાત એ છે કે, ભારતીયો માટે સોશિયલ મીડિયા તમામ પ્રકારના વિચારોના મેલ્ટિંગ પોટ તરીકે સેવા આપે છે અને ઉપેક્ષિત લોકોને અવાજ આપ્યો છે. ભારતનું બંધારણ તમામ નાગરિકોને વાણી અને વિચારોની અભિવ્યક્તિની સ્વતંત્રતાની બાંયધરી આપે છે, સોશિયલ મીડિયા માહિતી એકત્ર કરવા અને તેમનો અભિપ્રાય વ્યક્ત કરવા માટે એક સશક્ત પ્લેટફોર્મ તરીકે કામ કરે છે.

ઇન્ટરનેટ વપરાશકર્તાઓ અન્ય કોઈપણ પ્રકારની સાઇટ કરતાં સોશિયલ મીડિયા સાથે વધુ સમય પસાર કરવાનું ચાલુ રાખે છે. નિલ્સન (2014). સોશિયલ નેટવર્ક સાઇટ્સ એ વેબ-આધારિત સેવાઓ છે જે વ્યક્તિઓને સીમિત પ્રણાલીમાં સાર્વજનિક અથવા અર્ધ-સાર્વજનિક પ્રોફાઇલ બનાવવાની મંજૂરી આપે છે, અન્ય વપરાશકર્તાઓની યાદીને સ્પષ્ટ કરે છે કે જેમની સાથે તેઓ કનેક્શન શેર કરે છે, અને તેમના જોડાણોની અન્ય લોકો દ્વારા બનાવેલા જોડાણોની યાદીને જોવા અને પસાર કરવાની મંજૂરી આપે છે. બોય્ડ અને એલીસન (2007). તરૂણો એ સોશિયલ નેટવર્કિંગ સાઇટ્સના ઉપયોગ માટેના મુખ્ય વય જૂથોમાંનું એક છે. કેલેન્સી અને અન્ય (2017).

આમ, વિવિધ સંશોધનોમાં સોશિયલ મીડિયાના વિવિધ માધ્યમોની અસરકારકતા જાણવા મળી હતી, વિદ્યાર્થીઓ સોશિયલ મીડિયા દ્વારા ઘણું નવું જાણી શકે છે તો આ માધ્યમોની વિદ્યાર્થીઓ પર કેટલીક અસરો થતી પણ જોવા મળે છે. આ અસરો હકારાત્મક અને નકારાત્મક પણ હોય શકે. આ અસરો માત્ર વ્યક્તિગત ધોરણે જ નહિ પરંતું સામૂહિક સ્તરે પણ થતી જોવા મળે છે. તેથી પ્રસ્તુત સંશોધન હાથ ધરવામાં આવ્યું હતું.

2 સમસ્યા કથન

શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાના ઉપયોગ અને તેની અસર

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પ્રસ્તુત સંશોધન અંતર્ગત શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાનો ઉપયોગ અને તેની અસર જાણવા અભિપ્રાયાવલીના ઉપયોગ દ્વારા માહિતી એકત્ર કરી ટકાવારી અને કાઈવર્ગ મૂલ્ય દ્વારા માહિતીનું પૃથક્કરણ કરવામાં આવ્યુ હતું.

3. સંશોધનના હેતુઓ

1. શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાનો ઉપયોગનો અભ્યાસ કરવો.
2. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના આરોગ્ય પરની અસર તપાસવી.
3. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના સામાજિક સંબંધો પરની અસર તપાસવી.
4. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના શિક્ષણ પરની અસર તપાસવી.
5. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના મનોરંજન પરની અસર તપાસવી.

4. સંશોધન પ્રશ્નો

1. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના આરોગ્ય પરની અસર કેવી હશે?
2. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના સામાજિક સંબંધોઅ પરની અસર કેવી હશે?
3. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના શિક્ષણ પરની અસર કેવી હશે?
4. સોશિયલ મીડિયાના ઉપયોગની શિક્ષક પ્રશિક્ષકોના મનોરંજન પરની અસર કેવી હશે?

5. સંશોધનનું ક્ષેત્ર, પ્રકાર અને પદ્ધતિ

પ્રસ્તુત સંશોધન એમ.એડ. ના વિદ્યાર્થીઓ પર કરવાનું હોવાથી સંશોધન ઉચ્ચ શિક્ષણને સ્પર્શે છે અને સોશિયલ મીડિયાનો ઉપયોગ અને તે પરત્વેના અભિપ્રાયો જાણવાના હોવાથી ટેકનૉલોજી પણ સ્પર્શતુ હતુ.

સંશોધનમાં માહિતી આંકડા સ્વરૂપે મળતી હોવાથી પ્રસ્તુત સંશોધન સંખ્યાત્મક પ્રકારનું છે, તથા વિધાર્થીઓ પર સર્વે કરવાનો હોવાથી પ્રસ્તુત સંશોધન સર્વેક્ષણ પદ્ધતિ પ્રકારનું રહેશે.

6. સંશોધનનું મહત્ત્વ

પ્રસ્તુત સંશોધનનું મહત્વ નીચે મુજબ હતું:

- સંશોધન દ્વારા એમ.એડ. ના વિદ્યાર્થીઓ દ્વારા વિવિધ પ્રકારના સોશિયલ મીડિયાના ઉપયોગનું પ્રમાણ જાણી શકાશે.
- વિસ્તાર, વર્ગ, જ્ઞાતિના સંદર્ભે ભાવિ શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાના ઉપયોગ જાણી શકાશે.

- કોલેજ કક્ષાએ પણ સોશિયલ મીડિયાનો ઉપયોગ જાણવા માટે ઉપયોગી થશે.
- સોશિયલ મીડિયાનો શૈક્ષણિક ઉપયોગ માટે માર્ગદર્શન આપી શકાશે.
- આ સંશોધન શિક્ષકો તેમજ ભાવિ સંશોધકોને ઉપયોગી થશે.

7. સંશોધનની ક્ષેત્ર મર્યાદા

પ્રસ્તુત સંશોધનની ક્ષેત્ર મર્યાદાઓ આ મુજબ હતી:

- શિક્ષક પ્રશિક્ષકો તરીકે સૌરાષ્ટ્ર યુનિવર્સિટી સલંગ્ન એમ.એડ. કોલેજોમાં અભ્યાસ કરતા વિધાર્થીઓનો સમાવેશ કરેલ છે.
- સોશિયલ મીડિયા તરીકે ફેસબૂક, વ્હોટ્સએપ, ઇન્સ્ટાગ્રામ અને યુટ્યુબનો સમાવેશ કરેલ છે.
- સંશોધક રચિત ઉપકરણ દ્વારા નમૂના પસંદગી કરેલ છે.

8. વ્યાપવિશ્વ અને નમૂના પસંદગી

પ્રસ્તુત સંશોધનમાં સૌરાષ્ટ્ર યુનિવર્સિટી સંલગ્ન એમ.એડ. કોલેજોમાં અભ્યાસ કરતા વ્યાપવિશ્વમાંથી યાદૃચ્છિક નમૂના પસંદગી પદ્ધતિ દ્વારા 2 કોલેજો અને 119 વિધાર્થીઓની પસંદગી કરવામાં આવી હતી. નમૂનામાં શિક્ષણશાસ્ત્ર ભવન, સૌરાષ્ટ્ર યુનિવર્સિટી-રાજકોટ અને આર.ડી. ગાર્ડી એમ.એડ. કોલેજ-રાજકોટનો સમાવેશ કરવામાં આવ્યો હતો.

9. ઉપકરણ

સંશોધન પ્રક્રિયા દરમિયાન સંશોધનના હેતુઓ અનુસાર આવશ્યક માહિતી મેળવવા માટેના સાધનને ઉપકરણ કહેવાય. પ્રસ્તુત સંશોધન માટે સ્વરચિત અભિપ્રાયાવલીનો ઉપયોગ કર્યો હતો.

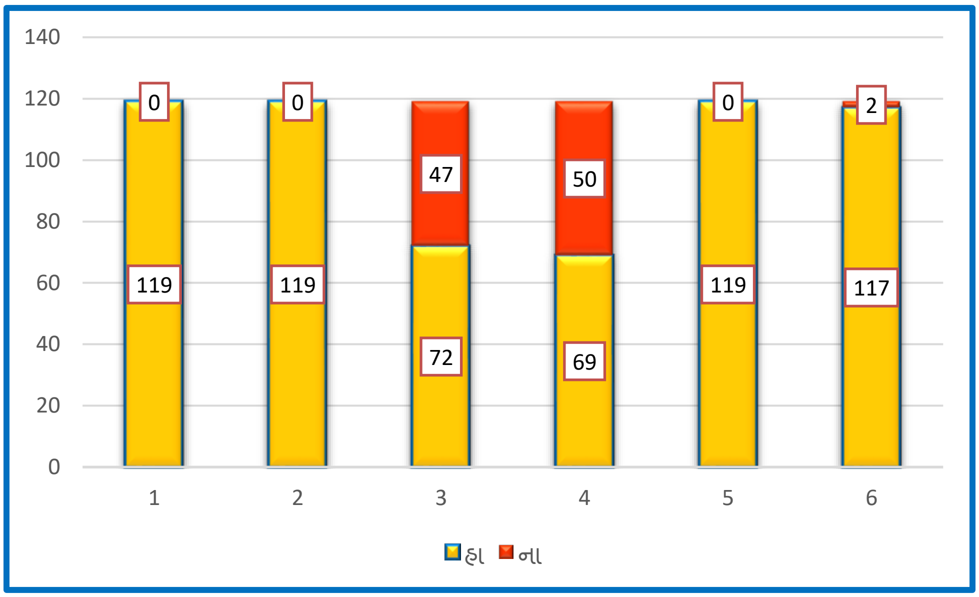
10. માહિતી એકત્રીકરણ અને પૃથક્કરણ

પ્રસ્તુત સંશોધનમાં સંશોધકે નમૂનાના પાત્રો પાસેથી ગુગલ ફ઼ોર્મ દ્વારા માહિતી મેળવી હતી. વિધાનમાં પ્રતિચાર આપવા માટે ત્રણ કક્ષાઓ સહમત- 3, તટસ્થ- 2 અને અસહમતને- 1 ગુણ આપી કોડીંગ કરી ટકાવારી અને કાઈવર્ગ મૂલ્યનો ઉપયોગ કરી માહિતીનું પૃથક્કરણ કરવામાં આવ્યું હતું. માહિતીના અંકશાસ્ત્રીય પૃથક્કરણ માટે Excel પ્રોગ્રામનો ઉપયોગ કરવામાં આવ્યો હતો.

અભિપ્રાયાવલીમાં કુલ 30 વિધાન હતા જેમાં 6 વિધાન 'હા' અને ‘ના’ વાળા હતા. કુલ પાત્રોના પ્રતિચારના આધારે કાઢેલ ટકાવરી સારણી 1 માં આપેલ છે.

સારણી- 1 : શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાનો ઉપયોગની ટકાવારી

ક્રમ	વિધાન	'હા' N (%)	'ના' N (%)
1	તમે સ્માર્ટ મોબાઈલનો ઉપયોગ કરો છો.	119 (100)	00 (00)
2	તમે ઈન્ટરનેટનો ઉપયોગ કરો છો.	119 (100)	00 (00)
3	તમે ફેસબૂકનો ઉપયોગ કરો છો.	72 (60.50)	47 (39.49)
4	તમે ઈન્સટાગ્રામનો ઉપયોગ કરો છો.	69 (57.98)	50 (42.01)
5	તમે વ્હોટ્સએપનો ઉપયોગ કરો છો.	119 (100)	00 (00)
6	તમે યુ - ટ્યુબનો ઉપયોગ કરો છો.	117 (98.31)	02 (1.68)



આલેખ -1 : શિક્ષક પ્રશિક્ષકો દ્વારા સોશિયલ મીડિયાના ઉપયોગ

આલેખ -1 અને સારણી-1નું અવલોકન કરતા જણાય છે કે સ્માર્ટફ઼ોન, ઈન્ટરનેટ અને વ્હોટ્સેપનો ઉપયોગ 100% શિક્ષક પ્રશિક્ષકો કરે છે. જ્યારે યુટ્યુબનો 98.31%, ફ઼ેસબુક 60.50% અને ઈન્સ્ટાગ્રામનો 57.98% શિક્ષક પ્રશિક્ષકો ઉપયોગ કરે છે.

સારણી- 2 : સોશિયલ મીડિયા પર પાત્રોના પ્રતિચારોનું કાઈવર્ગ મૂલ્ય

કલમ ક્રમ	પ્રતિચાર			કુલ N (%)	કાઈવર્ગ χ^2 મૂલ્ય	સાર્થકતા કક્ષા
	હા N (%)	ના N (%)	તટસ્થ N (%)			
7	70 (58.8)	27 (22.7)	22 (18.5)	119 (100)	35.1092	0.001
8	87 (73.1)	8 (6.7)	24 (20.2)	119 (100)	87.9496	0.001
9	30 (25.2)	48 (40.3)	41 (34.5)	119 (100)	4.1513	
10	77 (65.8)	8 (6.8)	32 (27.4)	117 (100)	62.9231	0.001
11	43 (36.1)	39 (32.8)	37 (31.1)	119 (100)	0.4706	
12	116 (97.5)	1 (0.8)	2 (1.7)	119 (100)	220.3529	0.001
13	64 (53.8)	26 (21.8)	29 (24.4)	119 (100)	22.5042	0.001
14	64 (53.8)	19 (16.0)	36 (30.3)	119 (100)	26.0336	0.001
15	75 (63.6)	21 (17.8)	22 (18.6)	118 (100)	48.5254	0.001
16	72 (60.5)	25 (21.0)	22 (18.5)	119 (100)	39.6471	0.001
17	63 (53.4)	33 (28.0)	22 (18.6)	118 (100)	22.8983	0.001
18	29 (24.4)	26 (21.8)	64 (53.8)	119 (100)	22.5042	0.001
19	102 (86.4)	8 (6.8)	8 (6.8)	118 (100)	149.7627	0.001
20	96 (80.7)	8 (6.7)	15 (12.6)	119 (100)	120.6218	0.001
21	104 (87.4)	4 (3.4)	11 (9.2)	119 (100)	157.1261	0.001
22	113 (95.0)	1 (0.8)	5 (4.2)	119 (100)	203.5630	0.001
23	114 (97.4)	0 (0.0)	3 (2.6)	117 (100)	216.4615	0.001
24	102 (85.7)	6 (5.0)	11 (9.2)	119 (100)	147.2437	0.001
25	73 (61.3)	20 (16.8)	26 (21.8)	119 (100)	42.4706	0.001
26	96 (80.7)	14 (11.8)	9 (7.6)	119 (100)	120.3193	0.001
27	92 (77.3)	9 (7.6)	18 (15.1)	119 (100)	104.5882	0.001
28	20 (16.9)	81 (68.6)	17 (14.4)	118 (100)	66.3220	0.001
29	34 (28.8)	52 (44.1)	32 (27.1)	118 (100)	6.1695	0.005
30	100 (85.5)	4 (3.4)	13 (11.1)	117 (100)	144.1538	0.001

11. પરિણામ અને અર્થઘટન

પ્રસ્તુત સંશોધનમાં વિધાન 7 થી 13 આરોગ્ય સંબંધિત હતાં. વિધાન 7, 8, 10, 12 અને 13 એ 0.001 કક્ષાએ સાર્થક છે. જ્યારે વિધાન 9 અને 11 એકપણ કક્ષાએ સાર્થક નથી. વિધાન 14 થી 19 સામાજિક સંબંધો સંબંધિત હતાં. જે તમામ વિધાન 0.001 કક્ષાએ સાર્થક છે. વિધાન 21 થી 27 શિક્ષણ સંબંધિત હતાં. જે તમામ વિધાન 0.001 કક્ષાએ સાર્થક છે. વિધાન 28 થી 30 મનોરંજન સંબંધિત હતાં. વિધાન 28

અને 30 એ 0.001 કક્ષાએ તો વિધાન 29 એ 0.005 કક્ષાએ સાર્થક છે. વિધાનોના પ્રતિચારની વિગત સારણી-2 માં આપેલ છે.

ઉપર્યુક્ત સારણી-2 ના પરિણામોના આધારે નીચેના તારણો તારવી શકાય:

1. સોશિયલ મીડિયાના ઉપયોગની આરોગ્ય વિષયક નકારાત્મક અસરો

- સોશિયલ મીડિયાના ઉપયોગથી દિનચર્મામાં ફેરફાર થાય છે.
- આરોગ્ય જોખમાય છે.
- સોશિયલ મીડિયાનો ઉપયોગ વધારે કરવાથી બૌદ્ધિક વિકાસ થતો નથી.
- વ્યક્તિ આળસુ બને છે.
- હાથની આંગળીઓની સંવેદના નિષ્ક્રિય બને છે.
- આંખોને નુકશાન થાય છે.
- યાદ શક્તિ નબળી પડે છે.

2. સોશિયલ મીડિયાના ઉપયોગની સામાજિક સંબંધો વિષયક નકારાત્મક અસરો

- સોશિયલ મીડિયાના ઉપયોગથી વર્તન અસામાન્ય થાય છે.
- લાગણીના સંબંધો ઓછા થાય છે.
- છોકરાઓ અને છોકરીઓ લગભગ સમાન ઉપયોગ કરે છે.
- કોરોના જેવી મહામારીમાં ઉપયોગી થાય છે.

હકારાત્મક અસરો

- મિત્રોથી નજીક રહી શકાય છે.
- એકલતા દૂર થાય છે.

3. સોશિયલ મીડિયાના ઉપયોગની શિક્ષણ વિષયક હકારાત્મક અસરો

- સોશિયલ મીડિયાના ઉપયોગ દ્વારા શિક્ષણ સંબંધિત વિડીયો જુએ છે.
- નવું જ્ઞાન મેળવે છે.
- વર્તમાન પ્રવાહોથી પરિચિત રહે છે.
- માહિતી સરળતાપૂર્વક એકબીજા સુધી પહોંચાડે છે.
- વિષયના અનુરૂપ માહિતી મેળવે છે.
- શિક્ષણનું સ્તર ઉંચુ લાવી શકાય છે.
- સોશિયલ મીડિયાથી શિક્ષણ લેવાનું સરળ બન્યું છે.
- વર્તમાનમાં સોશિયલ મીડિયા જરુરી બન્યું છે.

4. સોશિયલ મીડિયાના ઉપયોગની મનોરંજન વિષયક હકારાત્મક અસરો

- વર્તમાનમાં સોશિયલ મીડિયાનો ઉપયોગ ફક્ત મનોરંજન માટે જ નથી કરતા.
- સમય પસાર કરવા માટે જ નથી કરતા.
- સોશિયલ મીડીયાનો ઉપયોગ આનંદ પ્રાપ્ત કરવા કરે છે.

12. નિષ્કર્ષ

સોશિયલ મીડિયા પ્રાથમિક રીતે પ્રત્યાયન અને પારસ્પરિક ક્રિયા માટે વિકસાવવામાં આવ્યું છે. અસંખ્ય સક્રિય વપરાશકર્તાઓને મદદ કરવા માટે સોશિયલ મીડિયા એ આધુનિક યુગનું મહત્ત્વનું માધ્યમ છે તેમાં કોઈ શંકા નથી. સોશિયલ મીડિયાની ભૂમિકા અત્યંત મહત્વની છે. પ્રસ્તુત સંશોધનમાં સોશિયલ મીડિયાની હકારાત્મક અસરો તેની નકારાત્મક અસરો કરતા વધુ જોવા મળી હતી. સોસોશિયલ મીડિયાના ઉપયોગ આરોગ્ય વિષયક નકારાત્મક અસર પડે છે તો શિક્ષણ અને મનોરંજન વિષયક હકારાત્મક અસર પડે છે જ્યારે સામાજિક સંબંધ વિશે હકારાત્મક તેમજ નકારાત્મક અસર પડે છે.

સંદર્ભસૂચી

- પરમાર, એન.એસ. (2009). સૌરાષ્ટ્ર યુનિવર્સિટીમાં અભ્યાસ કરતા અનુસ્નાતક વિધાર્થીઓની કમ્પ્યુટર પ્રત્યેની જાગૃતતાનો અભ્યાસ. (અપ્રકાશિત લઘુ શોધ નિબંધ), સૌરાષ્ટ્ર યુનિવર્સિટી, રાજકોટ.
- તરૈયા, વી.એમ. (2009). અમરેલી જીલ્લાની શાળાઓમાં માધ્યમિક કક્ષાએ કમ્પ્યુટર શિક્ષણની સુવિધાઓ અને સમસ્યાઓ. (અપ્રકાશિત લઘુ શોધ નિબંધ), સૌરાષ્ટ્ર યુનિવર્સિટી, રાજકોટ.
- ભારતી, સી.બી. (2010). માધ્યમિક શિક્ષક પ્રશિક્ષણ કોલેજોના પ્રશિક્ષણાર્થીઓનું કમ્પ્યુટર પ્રત્યેનું મનોવલણ અને અધ્યાપકોની કમ્પ્યુટર પ્રત્યેની જાગૃતતાનો અભ્યાસ. (અપ્રકાશિત લઘુ શોધ નિબંધ), સૌરાષ્ટ્ર યુનિવર્સિટી, રાજકોટ.
- Nielson (2012).Social media report 2012: Social Media Comes of Age. Retrieved from: http://www.nielsen.com/in/en/insights/ne 55 ws/2012/social-media-report-2012-socialmedia-comes-of-age.html
- Boyd, D. M. and Ellison, N. B. (2007). "Social network sites: definition, history, and scholarship," *Journal of Computer-Mediated Communication*, vol. 13, no. 1, pp. 210–230.. Retrieved from : https://www.hindawi.com/journals/tswj/2020/8576023/
- Calancie, O., Ewing, L., Narducci, L. D., Horgan, S. and Khan, S. K. (2017). "Exploring how social networking sites impact youth with anxiety: a qualitative study of Facebook stressors among adolescents with an anxiety disorder diagnosis," *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, vol. 11, no. 4.

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Bioprospecting of Natural Resources: Creating a value for Biodiversity

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Abstract

The plant species provide many products that are used worldwide. These products are obtained from wild or cultivated plants. Inspite of richest biodiversity, still today remained poorly understood, under exploited & poorly documented. These plants should be exploited through proper bioprospecting methods. There is growing demand for new bioactive compounds for the pharmaceutical, agriculture and food industries. The microbes associated with plants having attractive and promising source, but they are nearly unexploited. Therefore, bioprospecting of plant microbes is gaining more and more attention. This article highlights the biochemical resources from plants & Scope of Bioprospecting.

Keywords: Bioprospecting, Biodiversity, climate change; conservation; resources

Introduction

Bioprospecting means the 'Search for the useful biological materials in microorganisms, plants, fungi, animals & humans". (Polski,2005). Bioprospecting involves characterization of bio resources through different methods, their mapping & conservation of endangered plant species & bio prospective molecules. bioprospecting of plants is the exploration of wild plants for commercially valuable genetic & biochemical resources". The world microbes are almost remained unidentified, under exploited & unexplored. The Bioprospecting of such microbes in pharmaceutical industry, antibiotic industry, enzymes, toxins, hormones, alkaloids & vaccines is very promising & challenging task for life science researchers.

Bioprospecting can be defined as the "systematic search for and development of new sources of chemical compounds, genes, micro-organisms, macro-organisms, and other valuable products from nature". It is the search for valuable genetic and biochemical resources from nature. So, in brief, bioprospecting means looking for ways to commercialize biodiversity. Lately, exploration and research on indigenous knowledge related to the utilization and management of biological resources has also been included into the concept of bioprospecting. Thus, bioprospecting touches upon the conservation and sustainable use of biological resources and the rights of local and indigenous communities.

The bioprospecting of microbes in agriculture is a vast scope because microbes have been used for bio mining, biogas production, bioremediation, biosorption, biogas production etc.

The Bioprospecting for plants contribute greatly to environmentally sound development & returns benefit to indigenous people or local people, who are the custodians of these resources. India with 65 crores acres of land, surrounded by water & Himalayas with plenty of flora & fauna, provide us great opportunity for Bioprospecting.

Scope:

There is vast scope for Bioprospecting in India because we have rich biodiversity. *Saccharum* plant is useful for sugar production; sugar is used for various purposes. On this single genus variety of industries have been setup such as alcohol industries, distilleries etc. similarly in case of medicinal plants used by tribals, villagers. In India Neem was used as ecofriendly pesticide, since long time by the farmers through indigenous knowledge of bioprospecting.

The anticancer drug Taxol from Gymnospermic plant *Taxus* had also made million-dollar history in the world. Bio resources obtained from plants are high valued. The increased interest in bioprospecting is mainly because the uniqueness & innovativeness in such plants, which is not seen in synthetic chemicals. Due to advance research in biotechnology, genetics, proteomics the progress in bioprospecting is possible.

Biopiracy

Biopiracy means any activity by biodiversity prospectors to steal the plants or their products & traditional knowledge about biodiversity & use that to earn money without reimbursement to the owner. Various organizations such as NGOs (Non-Government Organizations) will help largely to protect Bioresources from Biopiracy. The laws & regulations help to protect property knowledge etc.

Biochemical Resources from plants

The plants of earth full of biochemical's including amino acids, carbohydrates, starch, polysaccharides like cellulose, gum, resins, lignins, cutins, waxes, suberins etc. The plant consists of various secondary metabolites like alkaloids, tannins, phenols, flavanoids, glycosides, anthocyanins etc.

Some plants are the sources of oils, fats, fatty acids, lipids, membrane lipids, structural lipids, essential oils, perfumes & aromatic compounds. The plants like tea, coffe had served us as beverages through their tannins & coffins. The pigments & dyes are also obtained from plants. Dyes are ecofriendly in nature which are used to dye our cloths, foods, drinks, ice-creams etc. the rubber & other plants are the base of our expanding rubber industry through the chemicals present in their latex i.e. hydrocarbons.

Allelochemicals

Plants released specific type of stimulatory or inhibitory chemicals into environment known as allelochemicals. These chemicals inhibit the growth of surrounding plant species. Many grasses are rich in such allelochemicals. Some crops like *Sorghum,* Wheat, and Sunflower also release some chemicals in environment through root exudates. The residue of weeds & crops after decomposition release variety of allelochemicals like alkaloids, terpanoids, phenols, flavanoids etc.

Biochemical Resources from Fungi

The fungal species are useful as they produce many chemicals, medicines, antibiotics, organic acids, amino acids. They also produce some enzymes; secrete many chemicals attacking the host plants. Some fungi produce phenols, other defense compounds, vitamins phytoharmones like gibberellins etc.

Some fungi like yeast produce vitamins, *Claviceps* produces ergot alkaloids *and Penicillium* produces antibiotics like penicillin. Edible mushrooms like *Agaricus, Pleurotus* are the best source of soluble proteins.

Medicinal Plants

WHO (world Health Organization) has listed over 21,000 plant species worldwide, which are having medicinal value. More than 2500 species of plants are used in Ayurveda, Sidha, Unani & other traditional health care systems. Earth has rich biodiversity, but most of the plants remained untapped. So lot of scope is there to find the untapped medicinal plants, especially for cancer, obesity, diabetes, HIV & other dreadful diseases. Researchers have to work on this line because thousands of medicinal plants remained untapped.

The knowledge of tribal's, indigenous & traditional knowledge of villagers must be explored to bring new medicinal plants under use. Taxol obtained from *Taxus* had made miracle in cancer cure. Aloe it is effective for treat minor burns and some skin problems. Also used in various cosmetics.

Wild Ornamental plants

Many wild plants have very attractive & beautiful flowers, with better vase life. The flora of western ghat can be exploited as untapped resources of wild ornamentals e.g. species of *Ixora, Iris*, Orchids like *Vanda*, *Jasminum* are ornamental plants. The wild *Curcuma* species having very attractive & colorful flowers may be exploited as new ornamentals. The wild fern species will serve the purpose of ornamental foliage.

Forest Resources

Trees are the most important plants in forests. Most of the other organisms in the forest depend on the tree's ability to turn the sun's energy into sugars using photosynthesis. There are big trees and small trees e.g. *Eucalyptus, Ficus, Bamboo* etc. Many timber yielding plant species are fast growing forest plants, producing huge biomass has remained untapped. There are many plant species which can substitute Teak e.g *Gmelina arborea*, it should be exploited for timber.

Conclusion

We have the highest & massive genetic resources. India should take lead to form bio-partnership & being senior partner in man power & genetic resources amongst all the third world countries. Indeed, this is the need of time. The bioprospecting depends on successful exploration

& utilization of our plant & biochemical resources. Biodiversity-rich countries often face serious problems with regard to the prevention of unauthorized bioprospecting, due to weak law enforcement, we can avoid biopiracy by developing an integrated comprehensive national policy.

References

- Gemmell, B. (2001) Managing Agricultural Resources for Biodiversity Conservation: A guide to best practices. Draft version. UNEP/UNDP GEF Biodiversity Planning Support Program.
- A Text Book Plant Diversity & Plant Resources (2008)- K.N.Dhumal, T.N.More, H.S.Patil, S.S. Gadekar Nirali Prakashan
- Leakey, R.R.B. (1999) Agroforestry for biodiversity in farming systems. Pp127-145 in Collins, W.W. and Qualset, C.O.eds). Biodiversity in Agroecosystems. CRC Press, Washington.
- M. P. Singh, B. S. Singh (2002) Plant Biodiversity and Taxonomy
- http://news.nationalgeographic.com

60 Study of Consumer Behavior on E-Commerce vs Traditional Retail

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Abstract

This work provides a study on consumer behavior on E-commerce vs traditional retail. The increasing importance to research on online purchasing arises as E-tailing enterprise has won momentum in past few years and attracted large bite of teenagers closer to the platform. As e-tailing enterprise is still evolving, fundamental studies had been regarding demographic components of clients or troubles referring to protection, website functions. But minimum studies turned into carried out on customer orientation and on line advertising and marketing factors combine. Electronic commerce has grown to be one of the critical traits of internet Era. With the increasing net penetration India's E-trade and E-tailing marketplace has foreseen a huge growth and is expected to advantage a paradigm shift from offline retail. Ecommerce industry is registering annual growth rate of 50% in India. This work provides a study on E-commerce vs. traditional business with their benefits and challenges. This work strongly focus on influence of behavior towards Ecommerce management. This work uses questionnaire based survey and take response from 261 people. After this, it gets analyzed by Chi test and provided useful results.

Index Terms Traditional Retail Business, Brick and Mortar, E-commerce, Online Retailing, Customer Behaviour etc.

1. INTRODUCTION

Internet generation has created a networked financial system which is popularly referred to as ecommerce. E-trade constitutes the procedure of trade for services and products between groups, groups and people. It is one of the vital sports of a commercial enterprise which generates sales. E-trade could as a consequence be taken to be a part of e-business. Formally, e-trade is described as statistics technology based totally mediation for change of products or offerings between people or groups and intra or inter organizational sports that facilitate such exchanges electronically.

E-commerce is categorized in several methods. Firstly it represents digitized communication among two entities coordinating and exchanging records about products or services, their snap shots, charges, the phrases of shipping via electronic transmission of orders. Secondly it represents era decreasing and/or replacing human interface for business which include payments. Businesses which managed transactions via human interface now have the choice to use generation. Thirdly it goes past generation permitting to era mediating. The concept of virtual market vicinity is taking the location of traditional bodily market location in which suppliers and clients come collectively to trade. Support one of these digital market. In different phrases it relates to how commercial enterprise companies carry out inner control of outside members of the family through procedure and structures supported by means of digital electronics.

A. E-Marketing

E-marketing or electronic marketing refers to advertising and marketing using the electronic media and the Internet. The techniques of pull & push extensively utilized in conventional advertising and marketing also are legitimate for e-advertising. Push e-advertising and marketing allows e-entrepreneurs to provide their product/carrier statistics to web site visitors or buyers with out their requesting it.

B. E-Tailing

E-tailing is electronic retailing that is to sell retail goods online over the internet. Entailing pertains to transactions of orders on the internet leading to exchange of consumer goods and services to customers. E-tailing changed into first started out by way of Dell Computers once they provided their private computers immediately to customers thru their internet site.

C. Types of E-Commerce Transactions

The transaction that take area between commercial enterprise and consumer is called B2C; among a business and some other commercial enterprise is called B2B, among a business and the Government is called B2G and among a patron and another client is known as C2C. In B2C e-trade, customers everywhere who have get right of entry to to net or mobile app can visit a dealer net-based digital keep, browse the e-catalog of services or products available, make picks, in reality load selections on a e-cart, get to the checkout page at the internet site and conform to phrases which include shipping, mode of payment, shipping time table, quantity of billing and so forth. And while the transaction through making the agreed payment digitally or conform to pay cash on shipping. B2C e-commerce in India has grown with the aid of 44% according to cent year-on-year in the last three years.

2. E-COMMERCE BUSINESS MODELS

In the Inventory-led model the inventory of goods is with the business enterprise, as own, bought out or consignment inventory. As physical ownership of products is with the organization the availability, price and delivery is confident. In the case of services the Inventory-led of resources to offer the carrier is with the corporation. The Inventory-led model is commonly an exceptional manufacturer, dealer or proprietor of products or services. Developed markets like US, Japan and Europe are characterized via Inventory-led model. Large producers and retailers in those markets like Dell, Guess, Wall Mart, Gap and Target and so on. The benefits and drawbacks of thee-trade commercial enterprise fashions can be examined using lean commercial enterprise version framework. For the contrast let us take the fashions wherein on line transactions can be achieved. This will leave out e-mails and static websites.

A. Omni Channel E-Commerce

It is a hybrid of Inventory-led internet site and offline retail. Well-recognized manufacturers and outlets inn to this version in which their merchandise which might be available in an specific branded (EBO) or multi branded (MBO) brick & mortar retail stores are also available inside the on-line websites managed by using the employer. Customer dating and value proposition for consumer time is given significance on this version. Customers can purchase the product on-line and feature it delivered or pick out it up from a close-by retail place. Customers can also browse the internet site to realize what is to be had at unique locations at what charge after which use the conventional distribution channel facility to go throughout and buy it from the nearest offline retail save.

B. BTO or MTO E-Commerce

Several customized “Build to Order” or “Made to Order” web sites have arisen recently. The version is a aggregate of Inventory led internet site model and market-vicinity kind e-portal. Here the targeted customer segments are those with unique needs which differ from the same old merchandise available in the mass market. Existing client relationships are evolved in addition with the price proposition of e-trade in providing the facility of choice and ordering a customized product from everywhere and get it introduced to the place of desire. The manufacturers or providers provide the client the manner of choosing inputs from a given list of suppliers stating specs, make and value personally which are then assembled by the manufacturer and shipped to the purchaser.

C. Subscription Based Sub - Model

Subscription is some other sub-version of e-commerce business which mixes capabilities of Inventory-led internet site and market-vicinity kind e-portal. It first started as an easy manner to rent books, song & films Tapes/CD/Blu-ray from offline libraries who might rent, bodily deliver the titles and arrange to take them lower back. When the digitalization of books, song and films befell this business commenced dropping clients as sizeable piracy of the authentic titles started out proliferating on line.

D. Ticketing Sub-Model

Ticketing is the oldest and maximum successful kind of ecommerce commercial enterprise. Ticketing also is available in both kinds of e-trade business models. Ticketing is viable on market-place e-portals wherein reserving can be accomplished for exceptional carriers of travel or resorts or suggests. Ticketing is likewise viable on unique websites of particular vendors of travel, lodges or show venues. Here portal targets mass customer segments with a huge variety of needs.

E. Aggregator Sub-Model

This model is precise as it's miles hybrid of both the e-portal model and internet site model. In terms of the patron it is Inventory-led or resource primarily based website so the customer is assured of shipping of the carrier. On the service resource facet it is like a market-location portal because it does now not definitely personal the assets. The proprietors of the resources are on agreement with the platform and feature the independence to accept the order. Customer dating is maintained with the aid of the aggregator portal with unique offers and quick reaction to clients.

F. Retail E-Commerce Sales Growth in India

The above discern surely suggests the boom sample and the way Indian E-trade Industry (includes products or services ordered using the net thru any device, irrespective of the method of payment or success; excludes tour & Event Tickets) is expected to grow with the aid of forty.10% with the aid of 2018 & 23.9% by means of 2019, via Taking E-tailing income to a new peak from USD 39.Forty five Billion in year 2017 to USD 55.26 Billion in year 2018. Each year enterprise is registering a minimum increase of 29% when you consider that 2009.The four important category of E-trade are B2B, C2B, C2C and B2C.

- B2B (enterprise to commercial enterprise) involves agencies doing enterprise with every other, such as manufacturers, wholesalers, distributors, shops. Example of B2B E-commerce is Alibaba.
- C2B (purchaser to business) consumer posts a undertaking on line with necessities and business technique the customer and purchaser pick business consistent with the necessities met.

3. NEED & SIGNIFICANCE OF STUDY

Electronic commerce has grown to be one of the critical traits of internet Era. With the increasing net penetration India’s E-trade and E-tailing marketplace has foreseen a huge growth and is expected to advantage a paradigm shift from offline retail. Ecommerce industry is registering annual growth rate of 50% in India. Consumer Buying Behavior refers to the shopping for conduct of the final customer. Consumer behavior can be defined because the choice-making procedure and bodily hobby concerned in obtaining, evaluating, the use of and disposing of goods and services. The customer journey has grown greater complicated. Before making an internet purchase choice, a purchaser engages with a logo thru many one-of-a-kind media channels which includes e mail, paid search, social media, referrals and many others.

They have a look at makes a specialty of finding motives for the increasing patron orientation towards online buying, and to benefit attitude in on line marketing factors affecting online purchaser buying behavior of each experimental and purpose orientated customers and patron Satisfaction & loyalty. E-tailing industry has undergone this variation due to marketplace area version followed through essential gamers; research would cover these fundamental E-tailing web sites.

4. RESEARCH METHODLOGY

Research design is the framework of research methods and techniques chosen by a researcher to design a method for research methodology. Our design shows that the type of research it is (experimental, survey, correlational, semi-experimental, review) and also its sub-type (experimental design, research problem, descriptive case-study). The main focus is to study on the performance of consumer behavior on Ecommerce vs retail. The main objective of the research design is the discovery of ideas and insights. Another main objective of using such a research design is to formulate a research problem for an in-depth or more precise investigation, or for developing a working hypothesis from an operational aspect. The purpose of a research design is to provide a plan of study which give researcher an accurate assessment of the research and researcher also analyze the cause-and-effect relationships between independent and dependent variables.

Descriptive research method is used when research objectives is emphasizes describing and measuring marketing issues at a particular point of time. It is guided by initial hypothesis. Descriptive research or studies require a clear specification of who, when, where, why and how of the research. They are used when the research is intended to describe the characteristics of certain group.

Questionnaires need to appeal to respondents, cannot be too long, too intrusive or too difficult to understand. They also need to measure accurately the issue under investigation. For these reasons it is also advisable, when possible, to use questionnaires that are available on the market and have already been thoroughly validated. In this work, it used mainly primary data to analyze the research in a systematic way and produce some good results. It must keep in mind the data they are getting is coming from most genuine and reliable sources. Primary data is the data which is collected by the researcher for the first time is called primary data. It is original and used by the researcher for specific research. Primary data is collected in different ways include Surveys, observations, experiments, questionnaires, focus groups, interviews, etc. The population required for this study concentrated on common public.

5. RESULTS ANALYSIS

We collect the sample from population and do our research on those people that bunch of people which we select for our research is called sample people and the technique which we used for sample collection is called sampling technique. For data collection we prepare questionnaire, in this research for Impact of consumer behavior on Ecommerce, questionnaire made and take response from the respondents. In these questionnaires it covered all the data which is required for the research based on given objectives. It uses Chi test for further analysis. 261 persons have participated in this questionnaire survey. The Chi-Square test is a statistical procedure used by researchers to examine the differences between categorical variables in the same population. The Chi-Square test is most useful when analyzing cross tabulations of survey response data. Because cross tabulations reveal the frequency and percentage of responses to questions by various segments or categories of respondents (gender, age etc.). The results are shown below.

Table 1: Observed and Expected Counts to Indicate the mode of your Purchases

Category	Observed	Test Proportion	Expected	Contribution to Chi-Square
I do both Offline & Online Shop	232	0.333333	87	241.667
I do only Offline Shopping (Physical)	23	0.333333	87	47.080
I do only Online Shopping	6	0.333333	87	75.414

Table 2: Chi-Square Test to Indicate the mode of your Purchases

N	N*	DF	Chi-Sq	P-Value
261	0	2	364.161	0.000

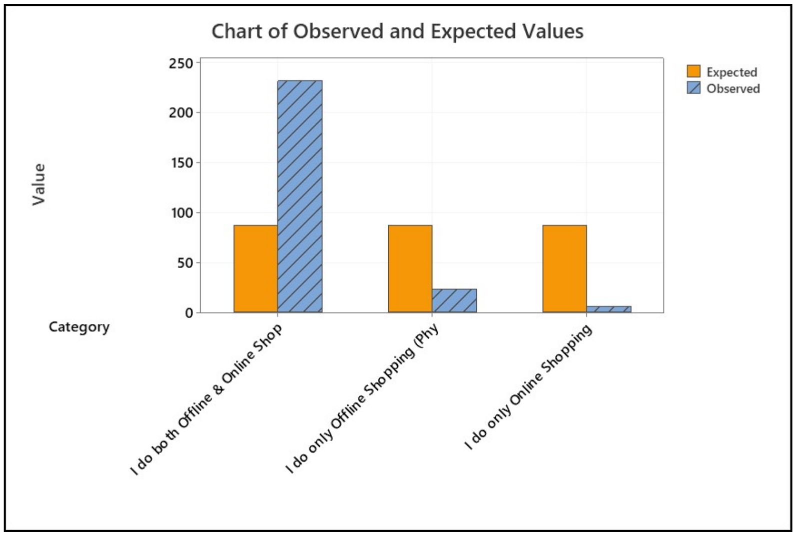

Fig 1: Observed and Expected Counts to Indicate the mode of your Purchases

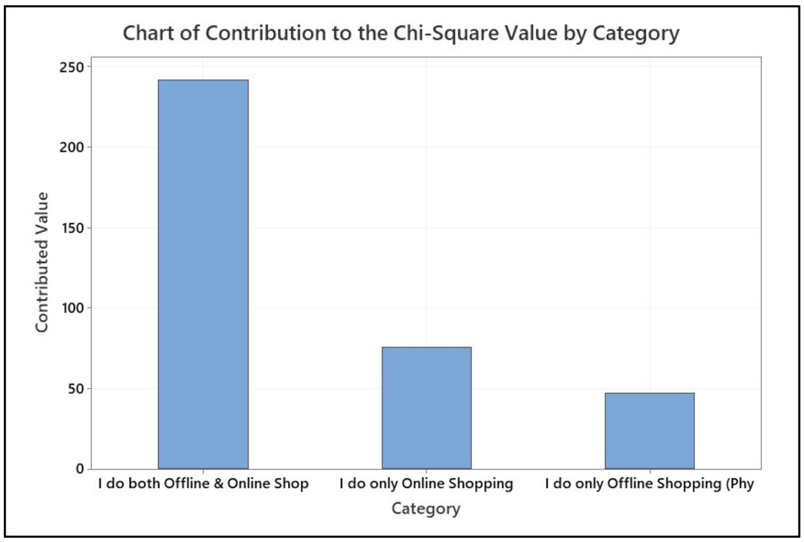

Fig 2: Chi-Square Value by Category to Indicate the mode of your Purchases

Table 3: Observed and Expected Counts to Indicate the percentage of your Income spent on your routine monthly Shopping

Category	Observed	Test Proportion	Expected	Contribution to Chi-Square
10 to 20%	111	0.25	65.25	32.0776
20% to 50%	84	0.25	65.25	5.3879
Less than 10%	57	0.25	65.25	1.0431
More than 50%	9	0.25	65.25	48.4914

Table 4: Chi-Square Test to Indicate the percentage of your Income spent on your routine monthly Shopping

N	N*	DF	Chi-Sq	P-Value
261	0	3	87	0.000

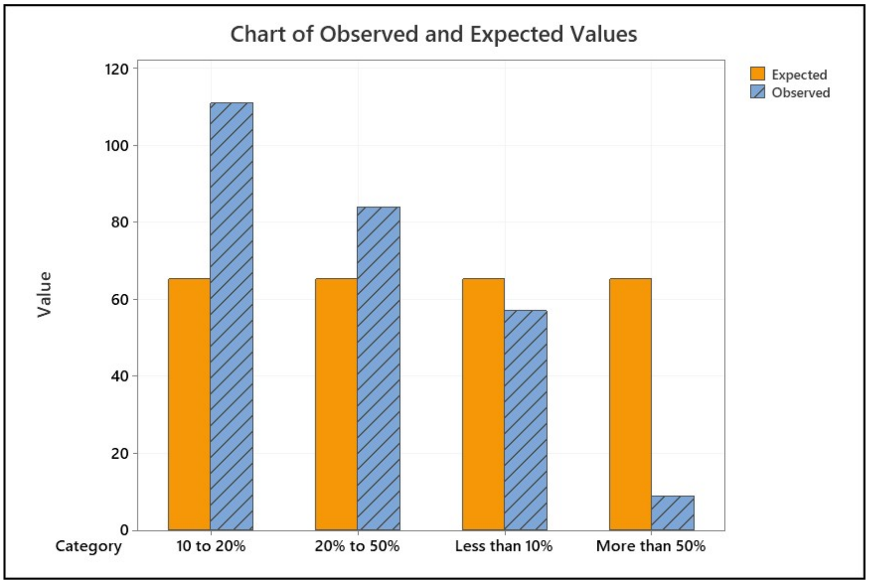

Fig 3: Observed and Expected Counts to Indicate the percentage of your Income spent on your routine monthly Shopping

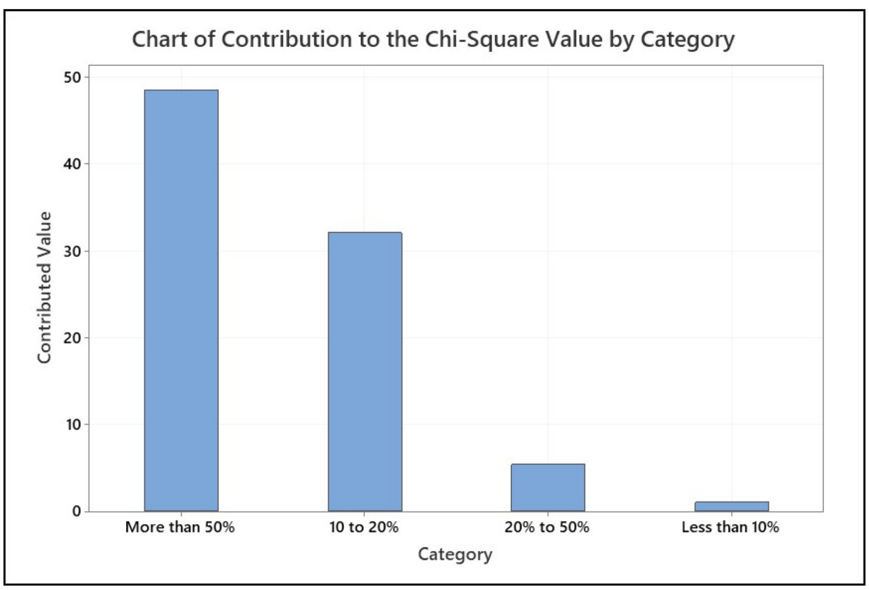

Fig 4: Chi-Square Value by Category to Indicate the percentage of your Income spent on your routine monthly Shopping

Table 5: Observed and Expected Counts to Indicate the approximate Percent of your Total Shopping that is spent on Online Shopping

Category	Observed	Test Proportion	Expected	Contribution to Chi-Square
10 to 20%	83	0.2	52.2	18.1732
21% to 50%	40	0.2	52.2	2.8513
I Don't use online Shopping	14	0.2	52.2	27.9548
Less than 10%	101	0.2	52.2	45.6215
More than 50%	23	0.2	52.2	16.3341

Table 6: Chi-Square Test to Indicate the approximate Percent of your Total Shopping that is spent on Online Shopping

N	N*	DF	Chi-Sq	P-Value
261	0	4	110.935	0.000

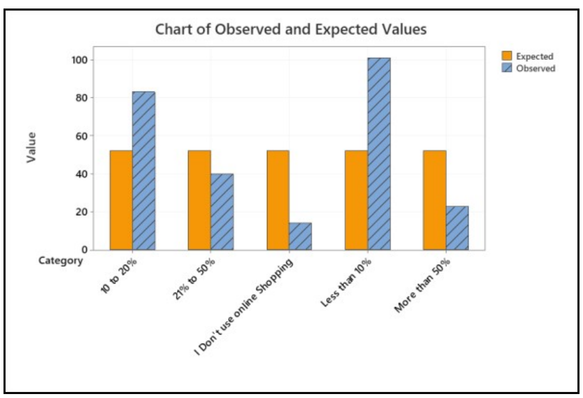

Fig 5: Observed and Expected Counts to Indicate the approximate Percent of your Total Shopping that is spent on Online Shopping

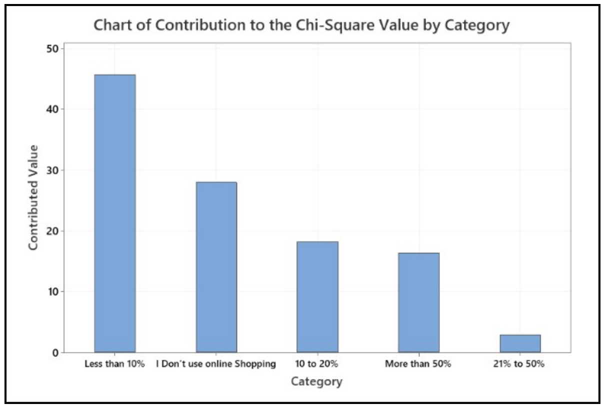

Fig 6: Chi-Square Value by Category to Indicate the approximate Percent of your Total Shopping that is spent on Online Shopping

Table 7: Observed and Expected Counts to Indicate for how long you have been doing Online Shopping

Category	Observed	Test Proportion	Expected	Contribution to Chi-Square
I Don't use Online Shopping	11	0.166667	43.5	24.282
Last 2 years	33	0.166667	43.5	2.534
Last 3 years	46	0.166667	43.5	0.144
Last 4 years	31	0.166667	43.5	3.592
Last one year	15	0.166667	43.5	18.672
More than 4 years	125	0.166667	43.5	152.695

Table 8: Chi-Square Test to Indicate for how long you have been doing Online Shopping

N	N*	DF	Chi-Sq	P-Value
261	0	5	201.920	0.000

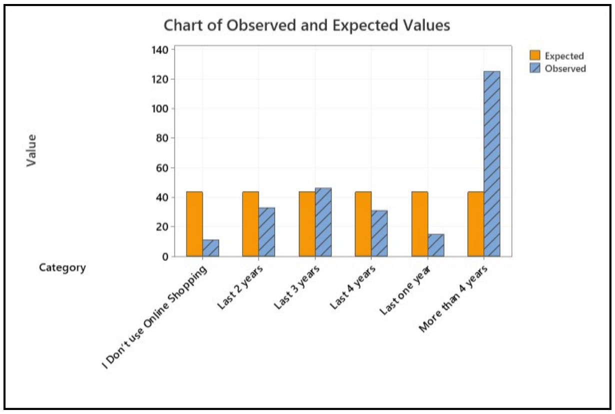

Fig 7: Observed and Expected Counts to Indicate for how long you have been doing Online Shopping

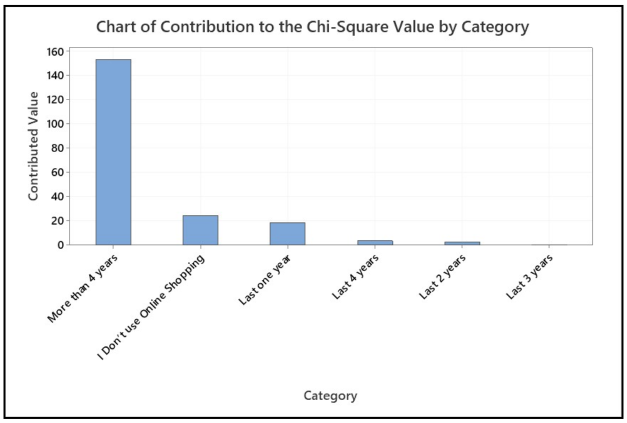

Fig 8: Chi-Square Value by Category to Indicate for how long you have been doing Online Shopping

All results are provided using Chi Test with Observed and Expected Counts. It considered the cases of Indicating the mode of your Purchases. It also Indicates for how long you have been doing Online Shopping and also the approximate Percent of your Total Shopping that is spent on Online Shopping. All figures shows the expected as well observed values because this model has equal proportions for all aspects.

6. CONCLUSION

This work provides a study on E-commerce vs. traditional business with their benefits and challenges. This work strongly focus on influence of behavior towards Ecommerce management. Electronic commerce has grown to be one of the critical traits of internet Era. Ecommerce industry is registering annual growth rate of 50% in India. Consumer Buying Behavior refers to the shopping for conduct of the final customer. Consumer behavior can be defined because the choice-making procedure and bodily hobby concerned in obtaining, evaluating, the use of and disposing of goods and services. This studies will assist the businesses worried in E-trade interest to recognize their target organization. This work uses questionnaire based survey and take response from 261 people. After this, it gets analyzed by Chi test and provided useful results.

REFERENCES

[1]. F.Jin&Z.Niu, "A Pattern Based Anti-Fraud Method in C2C Ecommerce Environment", International Conference on E-Business and E-Government, 2010, pp. 242-244.
[2]. Eric K. Clemons&F.Jin, "The Special Challenges of Ecommerce in China: A Preliminary Investigation of Sufficient Conditions for Generating Adequate Consumer Trust For Initial Launch, Hawaii International Conference on System Sciences, 2012, pp. 4562-4571.
[3]. X.Yu&L.Pan," Electronic Commerce Applications Based on Virtual Reality Technology, International Conference on Management of e-Commerce and e-Government, 2012, pp. 7-9.
[4]. F.Zhang&G.Song," Can Delivery Speed Affect Sale In Ecommerce, 2016.
[5]. J.Wilson& C. Matt," Online Trust: An International Study Of Subjects' Willingness to Shop at Online Merchants, Including The Effects of Promises and of Third Party Guarantees, Hawaii International Conference on System Sciences,2016, pp. 5220-5229.
[6]. Hendra&P.Ginting," Impact Of eCommerce Service Quality, Recovery Service Quality, And Satisfaction In Indonesia, International Conference on Sustainable Information Engineering and Technology (SIET), 2017, pp. 35-40.
[7]. F.Mao& R. Jain," Small Boxes Big Data: A Deep Learning Approach to Optimize Variable Sized Bin Packing, IEEE Third International Conference on Big Data Computing Service and Applications, 2017, pp. 80-89.
[8]. M. Jalaldeen& S. Sarabdeen," Influencing Factors of Social Commerce Behavior in Saudi Arabia, 2019.
[9]. Kavitha H.M& P. Ravikumar," Online Shopping Customer Behavior Analysis using centrality measures, International Conference on Advances in Information Technology, 2019, pp. 223-227.
[10]. S.Sanyala&W. Hisamb," Factors Affecting Customer Satisfaction with Ecommerce Websites – An Omani Perspective, 2019, pp. 232-236.
[11]. D.jimenez& S. Valdes," Popularity Comparison between E-Commerce and Traditional Retail Business, International Journal of Technology for Business (IJTB), 2019, pp. 10-16.
[12]. X.Dou," Online Purchase Behavior Prediction and Analysis Using Ensemble Learning, IEEE 5th International Conference on Cloud Computing and Big Data Analytics, 2020, pp. 532-536.
[13]. T.Olangunju& O. Oyebode," Exploring Key Issues Affecting African Mobile eCommerce Applications Using Sentiment and Thematic Analysis, IEEE Access, 2020.

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OM Shanti Influence for providing Mental Silence & Ethics Management in Community

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Abstract

This work mainly focus on Om shanti influence on ethics development and management in community. BK members have a spirituality in which they use meditation to connect relationship between soul & God. Meditation is a vast term that consists of large diversified practices. It is often accepted by mediators for mental training as well as improving state of consciousness. This meditation is strongly followed by Brahma Kumaris (BK). Its Raj Yoga technique is a technique that has usefulness for proving mental peace. It is an ancient technique that helps for inner harmonic system better. This spiritual community follows a Raj Yoga as a spiritual practice to establish a connection between God & Soul. This work strongly focus on influence of Om shanti for ethics management and spirituality. This work uses questionnaire based survey and take response from 199 people. After this, it gets analyzed by Chi test and provided useful results. The error found to be less than 1%.

Index Terms- Om Shanti, Ethics Management, Mental Silence, Meditation, Followers & Non Followers etc.

1. INTRODUCTION

Though many realize sound as merely something to be heard, its mechanism is a bit extra complicated. Sound is made from vibrations. These vibrations are produced from a supply, travel through the air, and then are picked up through the ear before being interpreted by way of the brain, which assigns them some cost. The variety of vibrations per second is known as frequency. Because all count number consists of atomic cloth, that is in constant movement, everything and each person vibrates on some frequency. The top notch inventor and scientist Nikola Tesla as soon as stated, “If you want to find the secrets of the universe, assume in phrases of energy, frequency, and vibration.” The word Om is described by Hindu scripture as being the primordial sound of introduction. It is the authentic vibration of the universe.

There are a number of meanings and interpretations of Om. But first issue's first: Om, or Aum, is a Vedic Sanskrit word with three sounds (or syllables): "A", "U", and "M", says Maya Breuer, vice chairman of cross-cultural advancement at Yoga Alliance. "In Sanskrit, the vowels 'A' and 'U' turn out to be 'O'," she explains. "Aum or Om is one of the most effective mantras of all time. Originally from Hindu and Buddhist teachings, mantra refers to a word, sound, or word that is repeated and used to guide a meditation practice. A mantra is given to a pupil by a guru

OM: A Universal Access

Like an object depicted in numerous ways by using numerous painters, Om’s essence is uniquely manifested and accessed through unique types of humans everywhere in the world. As yogis normally conclude their meditations with the chanting of Om, the Judeo-Christian utterance of “Amen,” and the Islamic version “Amin,” are utilized by followers to evoke the strength of the Divine at the cease of a prayer. Even inside Hinduism, the which means and connotations of Om is perceived in a variety of methods. Though heard and frequently written as “om,” due to the way it sounds whilst it is repeatedly chanted, the sacred syllable is at first and greater accurately spelled as “aum.”

Broken down, the 3 letters of A – U – M constitute a number of sacred trinities:

- The special conditions of focus - the waking kingdom, the dreaming kingdom, and the deep sleep nation.
- The deities in charge of the creation, preservation, and destruction of the universe- Brahma, Vishnu, and Shiva.

The three authentic Vedic scriptures - Rg, Yajur, and Sāma.

- The three worlds - earth, atmosphere, and ether.
- The 3 factors of time - beyond, gift, and destiny.
- In the Bhakti tradition (yoga of devotion)- Krishna (seen with the aid of his devotees because the God of Creation), Rādhārāni (Krishna’s everlasting consort, or God’s lady counterpart), and the everyday residing beings. Om encompasses all of creation, and its merciful electricity can be attained through any who are trying to find it, irrespective of who they may be, where they come from, or whichever religion they follow.

BK members identify themselves as students and informally refer to each other as ‘Brahmins' or ‘BKs’. BKs form a spiritual community with a lifestyle centered on the practice of Raja Yoga.

Raja Yoga, the most exalted or 'kingly' form of yoga, is a spiritual practice in which, through meditation, the practitioner seeks to establish and sustain a connection and relationship with the Supreme Soul or God. A BK is considered to be someone who has accepted the Raja Yoga philosophy and lives by the principles. BK philosophy comprises understandings of the self, God, time, rebirth, karma(the law of cause and effect), the world and social behaviour. Those in the Om Mandli had experiences of being separate and distinct from the body, and this experience of 'soul consciousness' was central to their life. This awareness of being a soul, that is, a point of conscious and eternal light energy, still forms the foundation of BKs' meditation practice. All the disciplines and rituals they follow are in support of this relationship they experience with the Supreme Soul.

Aim of Om Shanti

- To offer learning in principles, values, & spiritual & moral understanding to those who are interested; to reaffirm spiritual identity, inherent goodness, dignity, & worth of human being; & to foster spirit of universal brotherhood;
- To encourage transformation in individual awareness, attitude, & behavior as foundation of overall advancement of human condition throughout world;
- To teach BK Raja Yoga meditation & related methods of personal development & positive thinking;
- To promote better understanding of & within global human family through insight into spiritual connections among world's religions; environmental & human well-being & promotion of equality.
- To enhance skills, arts, & talents & higher levels of attainment & quality in personal, professional, & public life.

Context of OM Shanti

- Peace at the level of the body , mind and consciousness (spirit).
- Peace in all three aspects of time: past, present and future
- Peace at three levels of our bodies: the physical, subtle and causal.
- Peace at the three planes of existence: earthly , astral and in-between.
- Peace in all three states of the mind: awake , sleep and dreaming.

- Peace in three main factors that cause sorrow in life: firstly natural unknown forces of nature we have no control over , like storms or earthquakes; secondly , known factors such as our relationships , pollution, crime and; thirdly sorrow causes by our own mind, actions and emotions .
- Asking for blessing for oneself , for immediate family and friends and for the world at large. The Shanti mantra is therefore considered to be a chant for universal peace.

2. WHAT DOES OM ACTUALLY MEAN IN MEDITATION & ETHICS MANAGEMENT?

As yoga and meditation have won recognition over the years, many human beings have grown comfy the usage of the terminology accompanying these practices. For example, perhaps you understand that "Namaste" way "the mild in me bows to the mild in you," and that "asana" refers to "sitting posture." But what exactly is the that means of Om, the soothing, vibrational sound frequently chanted at some point of yoga and meditation?

Before diving into all matters Om, a brief reminder: Yoga and meditation, in widespread, are notion to have originated nearly five,000 years ago [5], with roots across Asia, the Middle East, Northern Africa, and South America, before locating their "fullest expression" as Vedic Sanskrit (an ancient Indo-European language) practices and Buddhist teachings in India. In other phrases, yoga has a very rich history, which include the which means of terms consisting of Om. By taking the time to research this records, you may higher recognize the which means, importance, and power of Om and, ultimately, learn how to use Om appropriately and respectfully in your very own yoga or meditation practice. Here's a peek on the history at the back of Om, the that means of Om, and how Om can be used in yoga and meditation.

Chanting meditation approach retaining a not-moving mind and perceiving the sound of your very own OM. Perceiving your voice method perceiving your proper self or nature. Then you and the sound are never separate, this means that which you and the complete universe are in no way separate. Thus, to understand our real nature is to understand general substance. With normal chanting, our sense of being centered receives more potent and stronger. However, while we do chanting meditation correctly, perceiving the sound of our personal voice, we learn that chanting meditation is not for our private satisfaction, to provide us suitable feeling, however to make our route clean. At the instant of genuine perceiving, there's no thought, no separation, most effective perceiving sound [6].

Traditionally, many human beings open or close a meditation or yoga exercise with Om, says Jade. Sometimes Om is likewise followed with the aid of the chant "shanti, shanti, shanti" (extra on that translation in a piece) to assist connect you to your exercise on a better level, she explains. "The Om sound is top notch for tapping into the heart chakra," adds Jade. "It is likewise recognized to be related to the crown [associated with enlightenment and wisdom] and 1/3 eye [associated with intuition] chakras. Many also chant Om with the assist of a mala or sun salutation, to hold their consciousness of their exercise."

3. STATE OF ART RELATED TO OM SHANTI & MEDITATION MANAGEMENT

Shown theory might want to consider and isolate key inspirational parts which urges people to join Raj Yoga assessment at Brahma Kumaris International work space, Mount Abu, Rajasthan. Recalling finished objective to fathom these ordinary persuasive makes, it is fundamental to recognize and affirmation with Brahma Kumaris and Raj Yoga reflection. With these objections, around there of demonstrated idea, brief trades of Raj Yoga reflection and Brahma Kumaris association have been showed up [1]. At regardless, Brahma Kumaris important partnership has been inspected with its down to earth talk, which has been followed by Raj Yoga reflection and its meanings in human existence. Moreover, key considered motivation has other than been inspected in this part.

Brahma Kumaris is millenarian new strict change (NRM) arrangement in Northwest India in 1930s and in 2009 is organized in excess of 120 countries. It portrays people (BKs) of Brahma Kumaris as friendly restriction. BKs live of vigilant uprightness, based around their central everyday practice of thought. requesting of these social request are depended upon to free person, through command over body, ending up at ground zero in self - power. while a few BKs live in ashrams in inconspicuously sequestered parties, most have home with their families and conduct standard lives as displayed by their environmental elements, society and conditions. Subsequently, BKs proceed and organize fascinating loads as they authority driving life that is out and out foremost while keeping up true blue affiliations and fulfilling their normal responsibilities. amazing overwhelming piece of Brahma Kumaris administrators generally through collusion are women [2].

Brahma Kumaris show that male controlled society is one of most obvious indicators that our quality has tumbled from it flawlessness of Golden Age. They show that spirits have no sex and thusly every single individual is correspondingly heavenly. Male centric customs degenerate this reality by encouraging men to anticipate more noticeable worth for themselves than women, and for women to perceive themselves to be less gifted than men. Brahma Kumaris expect return of rapidly moving closer Golden Age wherein men and women are absolutely same. In mean time, in order to help its kinfolk in their undertakings to change their spirits and finish flawless flawlessness prior to coming world change, affiliation lifts women to most raised work environments so they might understand how to hone their drive confines thusly men might learn lowliness.

Totally, word "Kumaris" in affiliation's name, "Brahma Kumaris," signifies "Kids" in Hindi, and Brahma Kumaris handle themselves as relatives of God, making all of them family to one another. One of association's three urgent frameworks for joint effort is familial, and it is in most certainly this supposition sisterhood (and connection) that Brahma Kumaris see family, with God as genuine gatekeeper [3].

Brahma Kumaris win their level in different evened out relationship by making flawlessness of their great accomplishments, especially reasonableness of their moral conduct, their capacity for adjustment and appreciation. Improvement inside affiliation is familial, enormous, and administrative. Every one of these three modalities for accomplishment of power take interest to give checks and changes against others Brahma Kumaris is world's first and most unmistakable exceptional progress drove by women. It is driving relationship in world obliging basic requirements of women Eighty years back creator of this excellent school while concerning women conferred, "Women power opens passage of heaven" and credited them tremendous position. From this time forward name given to this Vishwa Vidyalaya, "Brahma Kumari" is amazing status and adjustment to women. This was one of component adventures in history of Brahma Kumaris and in whole of world Brahma Kumaris has as its superb inspiration driving spreading message of harmony, love, fortitude and reasonableness all over world. To complete this attempt, it has set up around 9200 wonderful concentrations in 142 countries of world. While talking in Brahma Kumaris All-India meeting on Universal Values in Higher Education held from Oct.14 to 16, 2001 at Mount Abu, Honorable Justice RanganathMisra, Former Chief Justice, Supreme Court of India said: "This association should recognize control responsibility of touchingoff light into instructors, into students and into get-together. In occasion that there is any place in present reality where most vital opinion being is deals; I think it is this foundation. In this manner relationship of this keep in touch with, this level, this air, is perhaps most talented foundation to enthuse into get-together right reasoning and right technique for activity."

Brahma Kumaris world excellent school is all over resolved to change of related gigantic learning and human characteristics through rational frameworks in world [4]. It has made its own specific formed work actually taking a look at lone experience and mindful assessment covering wide show up of unprecedented data and characteristics. Brahma Kumaris world basic school has trust in us at first essential for progress in self. Brahma Kumaris world fit school, Mount Abu known for its quietness, most basic opinion being and silent accepted, is in like way warmly called "Madhuban" which implies 'Backwoods of Honey'. There is basic gold mine inside us, from which we can oust all that we need to live broadly, elatedly and limitlessly.

4. RESEARCH METHODLOGY

Research design is the framework of research methods and techniques chosen by a researcher to design a method for research methodology. Our design shows that the type of research it is (experimental, survey, correlational, semi-experimental, review) and also its sub-type (experimental design, research problem, descriptive case-study). The main focus is to study on the performance of OM SHANTI Mantra in Community. The main objective of the research design is the discovery of ideas and insights. Another main objective of using such a research design is to formulate a research problem for an in-depth or more precise investigation, or for developing a working hypothesis from an operational aspect. The purpose of a research design is to provide a plan of study which give researcher an accurate assessment of the research and researcher also analyse the cause-and-effect relationships between independent and dependent variables.

Descriptive research method is used when research objectives is emphasizes describing and measuring marketing issues at a particular point of time. It is guided by initial hypothesis. Descriptive research or studies require a clear specification of who, when, where, why and how of the research. They are used when the research is intended to describe the characteristics of certain group.

Fig 1: Methodology for Implementation of Work

Questionnaires need to appeal to respondents, cannot be too long, too intrusive or too difficult to understand. They also need to measure accurately the issue under investigation. For these reasons it is also advisable, when possible, to use questionnaires that are available on the market and have already been thoroughly validated. In this work, it used mainly primary data to analyze the research in a systematic way and produce some good results. It must keep in mind the data they are getting is coming from most genuine and reliable sources. Primary data is the data which is collected by the researcher for the first time is called primary data. It is original and used by the researcher for specific research. Primary data is collected in different ways include Surveys, observations, experiments, questionnaires, focus groups, interviews, etc. The population required for this study concentrated on followers and non-followers of Om Shanti, common public and members of Om shanti. So, in Rohtak and Delhi, there are several people related to this and now a day's a lot of online platform as well where we get the population for our research purpose.

5. RESULTS ANALYSIS

We collect the sample from population and do our research on those people that bunch of people which we select for our research is called sample people and the technique which we used for sample collection is called sampling technique. For data collection we prepare questionnaire, in this research for Impact of Om Shanti in Community, questionnaire made and take response from the respondents. In these questionnaires it covered all the data which is required for the research based on given objectives. It uses Chi test for further analysis. 199 followers have participated in this questionnaire survey. The Chi-Square test is a statistical procedure used by researchers to examine the differences between categorical variables in the same population. The Chi-Square test is most useful when analyzing cross tabulations of survey response data. Because cross tabulations reveal the frequency and percentage of responses to questions by various segments or categories of respondents (gender, age etc.). The results are shown below in Table 1 to Table 5.

Table 1: Case Analysis

Case Processing Summary						
	Cases					
	Valid		**Missing**		**Total**	
	N	**Percent**	**N**	**Percent**	**N**	**Percent**
Age Q.6 Performance of OM SHANTI in Community: 1) Useful in Physical Health Optimization	199	64.2%	111	35.8%	310	100.0%
Gender Q.6 Performance of OM SHANTI in Community: 1) Useful in Physical Health Optimization	199	64.2%	111	35.8%	310	100.0%
Marital Status	199	64.2%	111	35.8%	310	100.0%

Q.6 Performance of OM SHANTI in Community: 1) Useful in Physical Health Optimization						
Educational Qualification Q.6 Performance of OM SHANTI in Community: 1) Useful in Physical Health Optimization	199	64.2%	111	35.8%	310	100.0%

Table 2: Survey analysis using Chi Test (Cross Tab)

Cross-tabulation							
		Performance of OM SHANTI in Community: 1) Useful in Physical Health Optimization					**Total**
		1 (Strongly Disagree)	**2 (Disagree)**	**3 (Neutral)**	**4 (Agree)**	**5 (Strongly Agree)**	
Age	31-40	4	4	4	8	14	34
	41-50	2	7	0	3	21	33
	above 50Y	1	7	5	6	17	36
	Below 30	8	12	7	19	50	96
Total		15	30	16	36	102	199

Table 3: Symmetric Measures using Chi Test (Cross Tab)

Symmetric Measures								
		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance	Monte Carlo Significance		
						Significance	99% Confidence Interval	
							Lower Bound	Upper Bound
Ordinal by Ordinal	Gamma	.047	.089	.525	.600	.596[c]	.583	.609
N of Valid Cases		199						

Table 4: Cross Tabulation based on Gender

Crosstab

		Performance of OM SHANTI in Community: 1) Useful in Physical Health Optimization					Total
		1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	
Gender	Female	7	17	8	13	42	87
	Male	8	13	8	23	60	111
Total		15	30	16	36	102	199

Table 5: Chi Square Test based on Gender

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	99% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	7.778[a]	8	.455	.437[b]	.424	.450
Likelihood Ratio	6.662	8	.574	.457[b]	.444	.470
Fisher's Exact Test	8.732			.442[b]	.429	.455
N of Valid Cases	199					

a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .08.

6. CONCLUSION

This work mainly focus on Om shanti influence on ethics development and management in community. BK members have a spirituality in which they use meditation to connect relationship between soul & God. They called themselves as the true followers of God and used OM word in their prayers along with meditation. They prefer to take Raj Yoga to understand the concept of Karma, God and self. It helps to achieve purity of mind. BK- Rajyoga is an effective and mindfulness technique that helps to achieve self-determination and confidence. For analysis, it uses questionnaire based survey and take response from 199 people. After this, it gets analyzed by Chi test and provided useful results. The error found to be less than 1%.

In Future, there is an urgent need to add this spiritual medicine in undergraduate and graduate courses for students.

REFERENCES

[1]. E. Kozasa, J. Sato, (2012), " Meditation training increases brain efficiency in an attention task", Elsevier, pp. 745-749.

[2]. Laurie Hollis-Walker, Kenneth Colosimo, (2011), " Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination", Personality and Individual Differences, pp. 222-227.

[3]. Adam Hanley• Alia Warner, (2014), "Associations Between Mindfulness, Psychological Well-Being, and Subjective Well-Being with Respect to Contemplative Practice", Journal of happiness Studies, pp. 01-14.

[4]. Barbara L. Fredrickson, Michael A. Cohn, (2008), " Open Hearts Build Lives: Positive Emotions, Induced Through Loving-Kindness Meditation, Build Consequential Personal Resources", Journal of Personality and Social Psychology, pp. 1045-1062.

[5]. Michaël Dambrun, Matthieu Ricard, (2012), " Measuring happiness: from fluctuating happiness to authentic–durable happiness", Journal of Personality and Social Psychology, pp. 01-11.

[6]. Michae¨l Dambrun, Matthieu Ricard, (2011), " Self-Centeredness and Selflessness: A Theory of Self-Based Psychological Functioning and Its Consequences for Happiness", Review of General Psychology, pp. 138-157.

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Role and Impact of Rabindranath Tagore Education Philosophy in Contemporary Indian Education

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Abstract:

Rabindranath Tagore was the first Nobel Prize winner from the Asia as well as from India, He was born into a famous Calcutta family noted for its 19th century Bengal renaissance. social religious and cultural breakthroughs. the main objective of this paper is to examine Tagore's ideals in education, particularly fundamental understanding of how education works. This paper is primarily based on secondary sources suggest books, journals, and articles. The method used as historic analytic method.

He felt that education should aid a person in becoming full manhood allowing them to fully utilise all his inner capabilities for their own personal development and development of human society in which they were born. He believed that education was not only important for an individual development but also important for physical and social development in which day lied. Tagore wished that all the boys and girls were to be fearless, self-critical, self-sufficient, open minded. Tagore followed the concept of ideal education with sincere students, peaceful environment, ideal teachers with quality education in trustworthy institution. Tagore wanted to create an environment where children do not suffer from any child of stress and teachers inculcate all the moral values in them by bringing out their inner skills, he actually wants to create a close relationship between education and society. This paper explores the importance and impact of Rabindranath Tagore education philosophy in education.

Introduction:

Rabindranath Tagore was the first Nobel prize winner from Asia as well as from India. He was born into a famous Calcutta family noted for its 19th century Bengal renaissance, social religious and cultural breakthroughs. Debendranath Tagore and Sarada Devi had Fifteen Children total, with Rabindranath being the fourteenth. On May 7,1861, he was born at the sizable ancestral home in Jorasanko, Calcutta. The Thakur Family, which was frequently involved in Music, Literature, Dramatics, and patriotic matters, raised Tagore as any other typical youngster would have. Rabindranath, the fourteenth child, was not well received by his extended family at their massive house. Although Sarada Devi, Rabindranath Tagore's Mother, was a gentle parent with her children and the other family members, His mother was a religious woman. Tagore's mother was died in childhood due to this he was nurtured by the servants of his family. His father was great Brahmo Samaj leader. His grandfather Dwarka Nath worked to promote hospitals, schools and the arts. He also battled for social and religious reform as well as the formation of free society. Young Rabindranath Tagore was able to absorb and learn subliminally at his own pace because of the intense excitement and diversity of his extended family. This gave him a dynamic open model of education, which he later attempted to replicate in his school in Shanti Niketan. Unsurprisingly, he thought his informal education outside of school was substandard and boring. After visiting a few schools briefly, he decided not to go to school. He only ever obtained honorary degrees that were awarded toward the end of his life. He developed a strong belief in the value of educational independence as a result of his experiences at Jorasanko. He also profoundly understood the value of the arts in cultivating empathy and sensitivity, as well as the need for a close connection to one's cultural heritage.

He viewed education as a means of valuing the best features of cultures while preserving one's own cultural distinctiveness. As he stated: I was raised in an environment where aspiration, particularly for a growth in human spirit. In our home, we desired for power freedom. Imagination freedom in our language; soul freedom in our literature both our religious beliefs and in the way we think in our social settings. Such I have gained confidence in the potential of education is the highest grant of true freedom.

Objectives of the study: -

1. To Analyse the educational thoughts of Rabindranath Tagore and his basic conception of education.
2. To evaluate the impact of philosophy on contemporary Indian Education.

Research Methodology

Usually, the study takes the form of a descriptive study using secondary data about the educational system. We have read a lot of reports in papers to comprehend draw conclusions about the introduction of innovative tools and strategies in the Indian education system in order to make it world class. This has the benefits of giving detailed information on preventing outside influences on anyone persons opinion. To understand the nature of tagore’s educational thought and practise and its influence on Indian education, this study was conducted. The writer gathered data for the study through variety of investigations, and his understanding of Tagore’s educational philosophy helped him to successfully extract important information from his extensive writings on education. A survey of Tagore’s philosophy, or review of the major educational issues that occurred during the British rule in India is offered along with his early educational experiences. The basic forms of Tagore’s educational philosophy are the full, harmonious development of each person's personality.

Role and impact of Rabindranath Tagore Education Philosophy on Indian Education

According to Tagore’s educational theory, DS 13 development of the senses is just as important as cerebral development, if not more so, das music commentator art dance and theatre are given a lot of attention in schools everyday activities. Biswas especially true following schools first 10 years. Rabindra Nath attempted to establish an environment in which the arts would become spontaneous while drawing on his upbringing add jorasanko. Music was one of the first things to receive attention. A “Cascade of musical feeling” flowed forth at Jorasanko everyday during Rabindra Nath adolescence, according to the poet, “We thought we would try to test everything” he adds,” and no achievements Seemed an unattainable.” we threw ourselves into everything we did-writing Kumar Singh acting and more. My recollections, 1917:141; Rabindra Nath Tagore never spoke to or road down to students in accordance with his philosophy of subconscious learning; Instead, he engaged them in whatever he was writing or composing full stop students were encouraged to recite their own works aloud at special literary evenings and were given access to the space where he read his most recent works to teachers and reviewers. He was a firm believer in challenging kids with material that they might not fully understand but that nonetheless stimulated them. Periodical writing and publication had always played a significant role in Jorasanko life, and shanti Niketan students were encouraged to produce their own publications including a number of illustrated journals.

Rabindranath Recognised that the British had imposed an educational system on India with the sole purpose of preparing individuals to serve as clerks in their offices and if possible, of instilling in the so-called educated men a sense of inferiority toward their own culture and philosophy. For this reason, Tagore argued in favour of an Indian educational system free from colonial British rule. Rabindranath concept resulted in the creation of “Shanti Niketan”, an Ashrama-style educational facility where he offered instruction based on the principles of freedom, natural trust, cooperation, and joy. According to him, it would be better for children’s education if instructors and students lived and worked in rural areas, away from the hustle and bustle of the city, just as instructors and students in the past. He claims that teaching should be an integral part of living a worshipful liofe, making this social both a home and a temple. Tagore observed, “The fact that education is something crucial makes the instructors obligations and responsibilities deserving of serious consideration,” putting teachers above the technique of instruction. The teachers should be aware that it is their responsibility to ignite the flame of knowledge in the pupils via their own knowledge and to inspire life in them through their own living.

Rabindranath approach to education was not a system in international meaning of the word. A framework developed by contemporary pedagogy's dad contains guidelines on pre made methodologies and instructs teachers on how to teach specific subjects and produce courses and textbooks according to pre-determined paradigms. Textbooks are rejected by Rabindra Nath. he charged the teacher duty on importing a moral education student. According to him, there should be a companionable relationship between the people and guru. The teacher, he observed, “continually gives himself completely because it hurts continues to every minute of his life.” in the act of giving and satisfaction he experiences as a result he discovers evidence of his sincerity and honesty when brains come together in a sound spirit joy naturally arises. that happiness is the force of creativity, and knowledge transfers what it produces people who are aware of their obligations but do not feel joy go a different route. I think the best way to pass on information is through a direct interaction between a guru and a shishya. as a naturalist, Tagore was aware of young children sensitivity and had a strong belief in the educational potential of natural things in occurrences. the highest education in his opinion, is one that transforms this into people who live in peace with all of existence rather than only providing us with facts. like a tree, a Childs active subconscious mind has the capacity to gather food from the environment.

The first significant piece in this manner is “Tapovan” by forest (Jan. 1910). The concept of the education of emotion (Bodhersadana) was proposed by Tagore for the first time in this piece, and he distinguished it from the education of the senses in the education of the intellect. The Goal of this education in feeling is to help people understand how closely connected there are to the cosmos on a spiritual, psychological and emotional level India should make an effort to learn in achieve the global truth- which is not primarily capitalism, imperialism or nationalism - that are prophets, thinkers saints throughout history through the nations educational system (Tagore 1351 B.S., p. 100) . This is a really important distinction because Tagore is still defending the principles of ancient India and speaking in terms of nationalism, but he is interpreting the highest of these ideas in terms of internationalism. The issue of the philosophy of educational method in some of the fundamental elements as well as in the context of the current socio political and educational conditions in India is addressed in a letter titled **“Sikshavidhi”- the Method of education**. According to him, education can only be delivered by a teacher and never by a method because of the stereotypical and mechanical educational environment that exists in India. “Only another guy can teach a man. Life can only be inspired by life, just as a water tank can only be filled with water in a fire can only be lit with fire. The mere pill of a, method on the other hand shall bring us no salvation” 1351 B.S., p. 128(Tagore). In in his essay” Strisiksha” (August, 1915) titled “The Education of Woman,” Tagore discusses the educational philosophy and states that “whatever is worth knowing is knowledge men and women should both be aware of it not out of necessity, but simply out of curiosity”. He makes it very evident the knowledge transcends the bounds of simple use. He disproves the widely held belief that women would lose their femininity if they studied specific topics alongside men.

He expresses his point explicitly later in the article. “There are 2 branches of knowledge: pure knowledge in utilitarian knowledge women need learn pure knowledge and utilitarian information in order to develop in jobs authentic women since there is no difference between men and women in the field of pure knowledge; nevertheless, there is a distinction in the sector of practical utility”. There's a ton more pertinent work that demonstrates his social and value-based education perspective available.

The following list outlines the function and effects of Tagore’s educational philosophy as it is applied to modern Indian educational institutions:

i. **Intellectual Development:** Tagore placed a strong emphasis on a Childs intellectual growth. He defines intellectual development as the growth of the imagination, creative free thinking, constrained curiosity and mental attentiveness. A child should be allowed to choose his or her own method of learning because this would promote all-around development.

ii. **Natural development under Natural Circumstances**: According to Tagore , “nature is the best teacher for a student”. The pupil will be given the circumstances they need in nature to acquire information the student should not be under any pressure to learn anything. The natural world will serve as a student's primary teacher, inspiring him or her to seek the knowledge he or she desires. It will mould his personality and the behaviour of learners.

iii. **Right to Freedom:** Tagore had fought for freedom he wished to apply the same principle to the realm of education. He had used that item to enter Sri Niketan, Brahmachari Ashram, and Shanti Niketan. As a result, he allowed pupils the freedom to pursue any field that pick their interest. For him, a man's education should come first in his priorities. He categorized freedom into three categories: freedom of the mind, and freedom of the will. These three freedoms will be realized through education that is delivered naturally. One may pursue a career in education, intellectual education, or education in any area of the arts.

iv. **Self-Awareness**: The core of humanism is spiritualism. Self-realization is a prerequisite for personality manifestation. And individual spiritual wisdom.

v. **Love of Humanity:** According to Tagore, Education may help people understand how interconnected the world is. Another is promoting global championships and understanding through education. His approach to schooling has a key Goal.

vi. **Physical Growth:** The physical development of the child is a goal of Tagore’s educational philosophy. He places great value and having a fit and healthy body. In Shanti Niketan, sports, games, and yoga are encouraged as essential components of the school system.

vii. **Teaching Practical and Real:** Tagore believed that education shouldn’t be artificial or theoretical, but rather practical and real. As a naturalist, Tagore placed a premium on the usefulness of education. That will undoubtedly help learners become more imaginative. The student will become a master in his field rather than a slave to just theoretical information as a result of that creativity,

viii. **Co-Correlation of objects**: God man and nature all correlate there can only be peace in the globe when there is a correlation the relationship between man and the natural world.

ix. **Place for fine art (dance drama music poetry**): All these have a significant place in Tagore's educational program game dance music theatre end Indian education should include lessons in drawing and other arts .

x. **Mother Tongue is the instructional medium**: the actual means of self-expression are words. in his speech, a man is free to express himself mother is stressed by Tagore. The language will serve as the Child's primary teaching tool in school.

xi. **Moral and spiritual growth**: in his educational philosophy Tagore placed a strong emphasis on moral and spiritual development education in morals and religion is more crucial for the whole development of the human psyche than Academic knowledge there must be sufficient support for the growth of selfless actions cooperation love for others and sharing among the educational institution students.

xii. **Social Development**: According to takeover men and other animals are vehicles through which Brahma the supreme soul presents himself all creatures in humans are equal because he is the source of all life therefore according to Rabindranath Tagore, " **serving man is serving God."** Everyone should start their lives off to form social corrections in a sense of community education attempts to develop both social and personal traits in students it makes it possible for him.

xiii. Goodbye to Book-Centred Education: Tagore created a new milestone in the field of education for the first time. He Vehemently and firmly rejected student-centred books, centred education to him a cross beyond simply restricting children's minds to textbooks. it will destroy the students' natural inclinations and turn them into a bookworm. it will destroy his ability to be innovative. Thus, children should be liberated from a focus on books in the classroom and should be given more opportunities to study.

xiv. The need for education to aid in rural reconstruction: Tagore was aware of the rural poverty in our country in the need for education to aid in rural reconstruction in order to radiate it he intended to educate others the practical instruction provided in various providing pupils with crafts would help them become excellent craftspeople in their field taking you several methods to alleviate the rural majority's poverty their studies aiding not recruitment process reconstruction for

Conclusion

In terms of schooling, Tagore may be described as a spiritualist naturalism, in general, rejects transcendental encounters despite being a naturalist, Tagore's naturalism wasn't a specific movement it served as a form of spiritualism tool which he wanted the lads to cultivate Tagore was a fantastic fighter of international understanding through education he cherished his country in aspire to change its circumstances but in this regard, his nationalism was not a limited one as seen by his nationalism and patriotism.

References:

1. Dutta, Hirendranath., "*Rabindranath as a Vedantist",* Vishva Bharati Quaterly, May-oct 1941.
2. Rabindranath, *Personality*, Kessinger publishing, U.K pp.25-26.
3. V.P.Verma, *Modern Indian Political thought*, Lakshmi Narayan Agarwal, Agra, 1987,p.76.
4. Prasad, Devi*., Rabindranath Tagore*, *philosophy of education and painting*. P.1.
5. Tagore, Rabindranath (1929) "*Ideals of Education*", The Visva Bharati Quarterly (April-July), 73-74.

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Capital Structure Analysis: A Study Of Selected Cement Companies In India

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ABSTRACT:

The Cement industry are among the eight core industries of India (crude oil, natural gas, petroleum refinery products, coal, electricity, cement and finished steel, fertilizers) and has an important role to make for the growth of all other industry segments in India. The main objective of the study is to analyse capital structure of selected cement companies in India. For that researcher have been selected three cement companies like Ultra tech cement, Shree cement and J.K. cement. The study is based on secondary data collected from annual reports from 2017-18 to 2021-22. For testing the hypothesis one way ANOVA have been used. The major findings of ANOVA indicated that there is a significant difference in debt-to-equity ratio and Interest coverage ratio of selected cement companies during the study period.

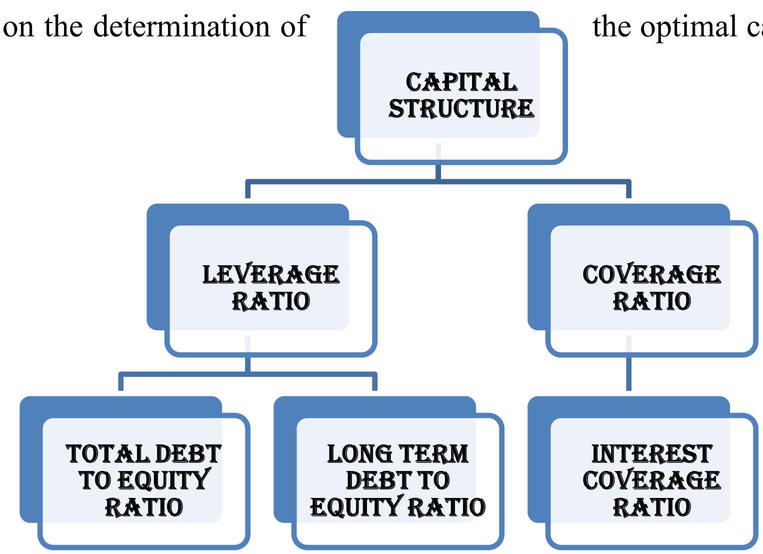
Key Words: Cement companies, capital structure, Debt to equity ratio, Interest Coverage ratio

INTRODUCTION

India is the second largest manufacturer of cement in the world. It accounts for more than 7% of the global installed capacity. India has a lot of potential for development in the infrastructure and construction sector and the cement sector is expected to largely benefit from it. Some of the recent initiatives, such as development of 98 smart cities, is expected to provide a major boost to the sector. Indian cement companies are amongst the world greenest cement manufacturers. In October 2021, Prime Minister, Mr. Narendra Modi, launched the 'PM Gati Shakti - National Master Plan (NMP)' for multimodal connectivity. Gati Shakti will bring synergy to create a world-class, seamless multimodal transport network in India. This will boost the demand for cement in the future. With high allocation under the Union Budget 2022-23 for infrastructure, affordable housing schemes and road projects to fuel the economy, the domestic cement industry is poised for a volume surge.

CAPITAL STRUCTURE

Financing decision is one the most significant decision of each firm as it has its direct inference on the profitability of the firm. Every firm seeks to plan a perfect capital structure with an ideal ratio of debt and equity source of finance, which can minimize the overall cost of financing although maximizing the value of the firm. The word capital structure is the combination of different securities issued by firms for raising funds. Funds used for companies' operations created through internally as well as externally. When raising funds externally, firms select between equity and debt. Determining factor of capital structure are primarily short-term debt to capital ratio, long term debt to capital ratio and total debt to capital ratio. Generally, capital structure policy depends upon the firm’s size, ownership, profitability, several costs, earning progress and liquidity of a company’s assets. Most of the effort of financial decision-making process is centred on the determination of the optimal capital structure of a firm.



REVIEW OF LITERATURE

(Bhatia, 2014) have studied the “Capital Structure Analysis A Case Study of Indian Tobacco Company (ITC)” The main objective of the study is to figure out the determinants that affect the capital structure decision of the company and to study the impact of capital structure decision on profitability. The study was based on secondary data for the period of thirteen years from 2001 to 2013. Ratio analysis, Bar Chart and Pie chart have been used by the researcher as a tool of analysis of data. After analysis the researcher founded that company has enough profit to bear the burden of cost of debt. The net worth of ITC is increasing from 2001-13. This is a good sign for the company. Debt capital of the company is at decreasing trend. The value of the company increased over years because of the fruitful investment decisions of the company that are reflected from the increasing trend of EBIT.

(Mazumder, 2017) have done research article on "The Impact of Capital Structure on Profitability of Listed Indian Infrastructure Companies" The main objective of the paper was to study capital structure and its impact on company's overall value. The study was based on secondary data. The study covers 9 major infrastructural companies as a sample. The analysis was done on the basis of Ratio Analysis and Correlation Matrix for the period 2007-2017. The researcher concluded that there is a positive correlation between debt equity and return on capital employed so, company should emphasis on improving their existing capital structure so that companies can enjoy the benefits of leverage.

(Atif Ghayas, 2018) has analysed "Impact of Capital Structure on Profitability: An empirical analysis of listed firms in India" The main aim of the study was to empirically examine and analyse the impact of capital structure decision on the firm's profitability by using a sample of 35 Indian pharmaceutical companies listed on Bombay Stock Exchange during the period of 5 years from 2012 to 2016. Regression analysis have been used by researcher to know the impact of capital structure on profitability. The result revealed that a positive effect of short-term debt to total assets (SDA) and total debt to total assets (DA) on return on equity (ROE), while a weak-to-no effect was found of long-term debt to total assets (LDA) on return on equity.

(Ms. Shireen Rosario, 2019) has conducted research on the title "Capital Structure and its Impact on Profitability – A Study of Indian Hotel Industry." The main purpose of the study is to analyzed capital structure and its impact on profitability. This study has used secondary data for the study. Data was collected from the financial statements comprising Profit &Loss account and Balance Sheet of 22 companies in the hotel industry in India. Data was collected for 2006-2017. Correlation analysis was used to establish the relationship between Capital structure and profitability. It was observed that nearly 58% of the assets of the industry are funded by debt, indicating that the industry was not highly geared. The correlation analysis indicated that positive relationship between debt variable and profit but slightly negative correlation among other variables.

RESEARCH METHODOLOGY:

Research Methodology is well-defined as a systematic mode of solving a research problem, it states about methods to be followed during the research process starting from investigation to conclusion.

OBJECTIVES OF THE STUDY

This research paper analyzed the following objectives:

- To analyze capital structure position of selected cement companies in India.
- To compare selected ratios of capital structure among companies.

HYPOTHESES FOR THE STUDY

H_0 = There is no significant difference in total debt to equity ratio of selected cement companies in India during the study period.

H_0 = There is no significant difference in long term debt to equity ratio of selected cement companies in India during the study period.

H_0 = There is no significant difference in interest coverage ratio of selected cement companies in India during the study period.

PERIOD OF THE STUDY:

The period of the study has been considered as 2017-18 to 2021-22 which consist of 5 years' time period.

SCOPE OF THE STUDY:

For the study scope have been divided in to two parts first one is functional scope and second one is geographical scope.

FUNCTIONAL SCOPE

Functional scope of the study has been considered as capital structure analysis for selected cement companies. For the analysis of capital structure researcher divided into two segment like leverage ratios and coverage ratios based on its respective ratios have been selected.

GEOGRAPHICAL SCOPE

The study has been specified Indian origin selected companies so primarily geographic area is Indian territory and it's also included those area in which companies providing their goods and services.

SELECTION OF SAMPLES:

This study included three cement companies like Ultra Tech Cement, Shree Cement and J.K. Cement based on market capitalisation as on (1st July 2022). The sampling technique is non probability in which convenience sample method has been selected. These samples provide overall picture of population of cement sector in India.

DATA COLLECTION:

Data is most significant instrument for reaching to the objective of the study, for this study secondary source of data have collected from annual report of the company as well as respective websites of the companies.

DATA ANALYSIS AND INTERPRETATION:

TOTAL DEBT TO EQUITY RATIO

YEARS	ULTRA TECH CEMENT	SHREE CEMENT	J.K. CEMENT
2017-18	0.64	0.38	1.02
2018-19	0.70	0.29	0.73
2019-20	0.47	0.18	0.77
2020-21	0.34	0.12	0.75
2021-22	0.20	0.12	0.76
AVERAGE	0.47	0.218	0.806
MAXIMUM	0.70	0.38	1.02
MINIMUM	0.20	0.12	0.73

(Source: www.moneycontrol.com)

Above table showed total debt to equity ratio of selected cement companies for the period of 2017-18 to 2021-22. It expresses the relationship between borrowed fund and owner's fund. Here, total debt includes long term as well as short term debt in form of mortgage, creditors, bills and debenture etc. On the other hand, owners fund includes share capital, reserve and surplus etc. In above all the companies the portion of the debt is lower than equity so all the company have a low risk of paying fixed interest. On the other hand, companies not getting the benefit of leverage. In Ultra Tech Cement maximum debt to equity ratio is 0.70 in the year 2018-19 and minimum is 0.20 in the year 2021-22. In Shree cement company the debt to equity showed continuous decreasing trend. In J.K. cement in the year 2017-18 ratio is highest and then showed fluctuate trend. In J.K. cement the average debt to equity ratio is 0.806 is highest so it showed company using more debt compare to all other companies and in Shree cement is 0.218 is lowest it showed that company is more depend on equity than debt fund.

LONG TERM DEBT TO EQUITY RATIO

YEARS	ULTRA TECH CEMENT	SHREE CEMENT	J.K. CEMENT
2017-18	0.54	0.25	0.96
2018-19	0.58	0.24	0.68
2019-20	0.37	0.13	0.73
2020-21	0.25	0.09	0.72
2021-22	0.11	0.08	0.58
AVERAGE	0.37	0.158	0.734
MAXIMUM	0.58	0.25	0.96
MINIMUM	0.11	0.08	0.58

(Source: www.moneycontrol.com)

Above table showed long term debt to equity ratio of selected cement companies for the period of 2017-18 to 2021-22. Long term debt to equity ratio is a leverage ratio comparing the total amount of long-term debt against the shareholders' equity of a company. In above all three companies the average long-term debt to equity ratio of J.K. cement is 0.734 which is higher compared to other companies it indicated that this company is used more long-term debt fund compare to other companies. In Ultra tech cement long term debt to equity ratio in the year 2017-18 is 0.54 and in the year 2018-19 it become maximum and then started to decrease and become minimum in the year 2021-22. In Shree cement ratio showed continuous decreasing trend. In J.K. cement also the long-term debt to equity ratio is showed decreasing trend but average is highest compared to other two companies so it is indicated that J.K. cement have the benefit of leverage.

INTEREST COVERAGE RATIO

YEARS	ULTRA TECH CEMENT	SHREE CEMENT	J.K. CEMENT
2017-18	3.97	14.51	2.86
2018-19	3.19	6.10	3.13
2019-20	4.06	7.84	4.72
2020-21	7.40	13.24	6.20
2021-22	11.39	14.46	5.39
AVERAGE	6.002	11.23	4.46
MAXIMUM	11.39	14.51	6.20
MINIMUM	3.19	6.10	2.86

(Source: www.moneycontrol.com)

Above table showed Interest coverage ratio during the period of 2017-18 to 2021-22 of selected cement companies. The interest coverage ratio is the ratio used to determine how many times can a company pay its interest with the current earnings before interest and taxes of the company and is helpful in determining liquidity position of the company by calculating how easily the company can pay interest on its outstanding debt. In Ultra tech cement the ratio showed continuously increasing trend from the year 2018-19 it is good sign for company. In Shree cement Interest coverage ratio shows fluctuating trend. In J.K. cement trend of ratio is increasing up to 2020-21 and then started to decrease it is not good for company. Average Interest coverage ratio of Shree cement is 11.23 which is highest compared to other company. It is indicated that Shree cement have more capacity to pay interest.

ONE-WAY ANOVA AS STATISTICAL TOOL:

For the testing of hypotheses researcher used One-ANOVA Test at 5% level of significant and test result as follows.

Ratio	F- Value	F- Crit	P-Value	H_0 Accept / Reject
Total Debt to Equity Ratio	18.52889	3.885294	0.000214	H_0 Rejected
Long term Debt to Equity Ratio	19.61541	3.885294	0.000165	H_0 Rejected
Interest Coverage Ratio	6.395303	3.885294	0.012864	H_0 Rejected

(Source: Calculated from MS Excel)

Above table shows the results of one-way ANOVA test for all capital structure ratio. In all the ratio's calculated value is higher than table value it is indicated that null hypothesis is rejected at 5% level of significance that means that there are significant differences in Total Debt to Equity Ratio, Long term Debt to Equity Ratio and Interest Coverage Ratio of selected cement companies in India during the study period.

FINDINGS

- The key findings of ANOVA test shows that there are significant differences in Total Debt to equity ratio, long term debt to equity ratio and Interest coverage ratio of selected cement companies in India during the study period.
- In Ultra tech cement company total debt to equity ratio and long-term debt to equity ratio shows continuous decreasing trend. It indicated that the firm use more equity compared to debt fund. In Interest coverage ratio shows continuous increasing trend it is good sign for company it is indicated that the company is more able to pay interest form its earning.
- In Shree cement debt to equity shows continuous decreasing trend. It indicated that the company not getting the benefit of leverage. In Interest coverage shows fluctuation but it is higher compared to other two companies.
- In J.K. cement company average performance of debt-to-equity ratio is higher compared to all other company. In Interest coverage ratio of the company also increase up to year 2020-21 and then start to decrease.

BIBLIOGRAPHY:

Books, Research Papers and Websites:

Atif Ghayas, J. A. (2018). Impact of Capital Structure on Profitability:An empirical analysis of listed firms in India. *Asian Journal of Managerial Science, 7*(2), 1-6.

Bhatia, R. M. (2014). Capital Structure Analysis A Case Study of Indian Tobacco Company (ITC). *International Journal in Management and Social Science, 2*(02), 226-243.

Mazumder, D. B. (2017). The Impact of Capital Structure on Profitability on Listed Indian Infrastructure Companies. *Journal of Business and MAnagement*, 6-11.

Ms. Shireen Rosario, D. K. (2019, March). Capital Structure and its impact on profitability Astudy of Indian Hotel Industry. *International Journal of Business and Administration Research Review, 6*(1), 67--72.

Ahmad Mahdi Abdulkareem, P. D. (2020, June). The Impact of Leverage on Earning Per Share: A Study of Selected Petroleum Companies in India. *Journal La Bisecoman, 01*(02), 25-36. doi:10.37899/journallabisecoman.vLi2.112

Chakrawal, P. M. (2021, December). Impact of Financial Leverage on Profitability of Reliance Industries Ltd. *Journal La Bisecoman, 02*(05), 15-22. doi:10.37899/journallabisecoman.v2i5.493

Md. Musfiqur RAHMAN, F. N. (2020, April 5th). The Impact of Financial Leverage on Firm's Profitability: An Empirical Evidence from Listed Textile Firms of Bangladesh. *Journal of Business, Economics and Environmental Studies*(10). doi:10.13106/jbees.2020

Narware, P. (2016). "Levearage'- An anlaysis and its impact on profitability with reference to selected fertilizer companies in India. *Eueopean Journal of Commerce and Management Research (EJCMR) , 5*(1), 1-13.

Nor Farizal Mohammed, S. A. (2020, September 29th). LEVERAGE, LIQUIDITY AND PROFITABILITY RATIOS:ACCOUNTABILITY OF MALAYSIAN LISTED OIL AND GAS FIRMS. *Humanities & Social Sciences Review, 8*(2), 941-947.

Majhi, D. P. (2017). *RESEARCH METHODOLOGY.* NEW DELHI: HIMALAYA PUBLISHING HOUSE

S.S VINOD CHANDRA, S. A. (2017). *Research Methodology.* (P. K. Bhattacharjee, Ed.) Noida, Utter Pradesh, India: Pearson India Education Services Pvt. Ltd.

SONDHI, D. C. (2018). *RESEARCH METHODOLOGY.* NEW DELHI: VIKAS PUBLISHING HOUSE PVT LTD.

Dolald R. Copper, P. S. (2003). *Business Research Methods* . New York : Mc-Graw Hill Publication.

J.K., S. (2014). *Business Statistic* . UP (India): Vikas Publishing House Pvt. Ltd. .

Madaan, K. V. (2019). *Teaching And Research Aptitude.* Noida: Pearson Publications.

Dr.Tulsian P. C "Financial Management", New Delhi, S. Chand & Company Ltd.,2009 2nd Adition.

M.Y. Khan and P.K. Jain: - *Financial Management* (Tata McGraw Hill, Publishers) 4thEdition.

Sanjeev Kumar, *"Financial Management*" Thakur publisher pvt. 1st edition 6th March 2013.

I.M pandey, "*Financial Managemen*t",Vikas publishing house pvt. Ltd 9th edition 2013.

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An Analysis Of The Fast Fashion Industry With Special Reference To Sustainability, Marketing, And Technology

Sakshi Bachhav

ABSTRACT

Fashion, Fashion, and Fashion, we've always been told that if we dress well, we'll look good, and if we look good, we'll feel good. It's a medium through which we express ourselves and choose how to go with it. Most people think of fashion as a global industry dedicated to anticipating what we wear and how we choose to appear to others. But when we talk about the fashion industry, in reality, it is not glamorous as it should be. The fashion industry is one of the critical industries out there and what makes it critical is the second largest polluter of clean water globally after agriculture. The importance of communication in contributing to the fashion industry's sustainability is the subject of this study. Moreover, the paper talks about the growing demand of fast-fashion retailers in contrast to increasing environmental concerns over the world. It necessitates a grasp of the two main players: customers and fashion brands. It highlights the role of digital technology, websites, social media, and the metaverse in the growing velocity of fashion.

According to the survey conducted, consumers are not exposed to alternatives of fast fashion brands hence, this research study will also provide suggestions on alternatives such as slow fashion brands, the concept of second-hand purchases, donation drives, etc. In addition to this, the research study also helps to understand the consumer’s perception towards purchasing from fast fashion brands and also aims at the buying decisions of the consumers in India.

INTRODUCTION

Fast fashion is defined by the use of low-cost, toxic textile dyes, and unethical working conditions that result in the production of low-cost, trendy clothing that draws inspiration from the catwalk, luxury brands, or celebrity culture and transforms it into garments in high-street stores at a breakneck pace to meet consumer demand. Because of the drive to decrease costs and shorten manufacturing times, environmental compromises are more likely to be made. The importance of communication in contributing to the fashion industry's sustainability is the subject of this study.

All elements involved in fast fashion have a detrimental impact on the planet as the end goal is to get the newest trends on the market as quickly as possible so that buyers may buy them while they are popular and then discard them after a few wears. Looking from the basic structure of a fast-fashion retailer in the 90s to today's brands dropping new collections in the time frame of two weeks which equates to 24 per year. The fast-fashion market can be described as trendy, inexpensive, disposable, volatile, high impulsive purchasing, and product variability to transform the world's second-largest polluter and ensure that appearance and sustainability can be reached at the same time, a common ground between technologies, fashion, and the environment must be found. Several studies have examined various aspects of the industry, however, this particular paper will focus on primarily three aspects: marketing, sustainability, and technology.

The Economic Impact of Consumer Purchase Towards Fast Fashion:

Over the last two decades, the fast fashion business model has exploded. It responds to the growing desire for fashionable and cheap clothing among consumers. It employs 300 million people worldwide, many of whom live in the world's poorest countries. The majority of fast fashion production takes place in places where labour is extremely inexpensive, such as Bangladesh, Indonesia, China, Turkey, and Vietnam. Workers barely earn their minimum wage and are forced to sit for 11 hours a day without using the lavatory. Many cases of workers being fired for falling sick or pregnant have emerged lately.

Countries lack effective labour laws, and those that do exist aren't consistently implemented, and governments' attempts to enforce existing laws are sometimes hampered by government collusion and corruption. Altogether, the fashion companies create several job opportunities resulting in greater revenue, but at a cost of greatly impacting the society and environment. Moreover since, COVID-19, brands have become more consumer-oriented. Many brands launched the 'Work from Home' apparel category in their brand to align with consumer preferences. Not only do brands now understand consumer preferences, but they also monitor shopping behaviour and produce products that meet consumer needs, overall resulting in enhanced customer relations. Consumers also wanted brands to be more environmentally friendly, in fact, the shopping for pre-owned items is also on the rise. The secondhand market for items is most likely to hit $64 billion by 2024.

Marketing in the Fast-Fashion Industry:

Fast-Fashion retailers have a clever marketing plan that allows them to stand out and gain more attention and loyalty. Taking the case of Zara, they have effectively positioned themselves as a fashion brand for the younger generation that is fashionable, inexpensive, and fast-changing. Its unique selling point is that it is a vertically integrated retailer and pricing strategy is catered to price-sensitive buyers as it works on a fast fashion model.

Sustainability Issues around Fast Fashion:

Fast fashion relies on the rapid creation of low-cost apparel to keep up with the high turnover of clothing trends. The outfits are frequently composed of synthetic materials, many of which include poisonous dyes and chemicals. It is popular because it has democratized high fashion by mass-producing knockoffs of designer labels and, not to forget, is responsible for 8-10% of greenhouse gas emissions. Not only the manufacturers, but consumers play a role equally as nearly 92 million tonnes of fashion solid waste in landfills each year, these garments in landfills thus release methane, further affecting the environment.

Another term known as 'Greenwashing' has emerged with the rise of fast fashion. Greenwashing is defined as a form of marketing spin in which green PR and green marketing are deceptively used to persuade the public that an organization's products, aims, and policies are environmentally friendly. For years, sustainability and eco-friendly products are on the rise and taking advantage of the same medium, greenwashing is a growing concern nowadays. Most fashion brands are "addicted to greenwashing", taking the example of brands like H&M, Zara, Uniqlo, Shein, etc.

Nonetheless taking the other side of the coin is Slow Fashion, which also came in the picture. In slow or sustainable fashion, the majority of garments are created from eco-friendly materials or even recycled textiles and usually are more long-lasting and of higher quality. However, slow fashion is expensive, and what makes it expensive is:

- Ethical sourcing of raw materials
- Small patch production
- Encouraging craftsmanship and artisans
- Providing fair wages to workers

How Technology is Transforming the Fashion Industry:

Technology is being used by fashion firms of all sizes and specialities to better understand their clients than ever before. Right from placing the order to timely delivery of the product, supply chain management plays a vital role in the process. It's the engine that propels a successful fashion season and a brand's capacity to quickly adapt to new trends. Consumers, as well as brands, gain from technological advancements as fashion accessories have gotten more widely available. Dressing Room, for example, is a technological app that helps with the fitting procedure. Customers can try on clothing on an avatar before paying for them with this type of software. This in return saves the cost and trouble of trying out clothes and results in saving up resources.

Other advancements in technology test consumer interest, with several firms, such as Tommy Hilfiger and Gucci, creating digital showrooms. Virtual fashion proponents underline that the technology is more than just dazzling marketing gimmicks as they optimize physical garment production by decreasing unnecessary waste during the design and fitting phases. The number of samples created for merchandisers and promotional purposes can be reduced using digital prototypes. The digital design also brings up new ways to experiment with fashion, ranging from employing textiles like rubber that would be uncomfortable in real life to experimenting with exotic skins or even physics-defying fantasy. Creating clothes in the digital world saves time, making it possible to consume fewer materials, not produce more than what is required and not transport all the clothing to different parts of the world. Digital fashion redefines business models, building a sustainable progressive future as a digital garment produces 97 per cent less CO_2 and saves an average of 3,300 litres of water each garment.

AI is being used by fashion brands all around the world in their design process, to predict fashion trends and offer shops the upper hand by recommending particular products to be brought out for display. Customers' data is also collected to determine what best suits them. Customers are given clothing recommendations based on their height, weight, form, and current size via artificially intelligent digital assistants.

In the end, Artificial Intelligence is changing the future of fashion, for the better and it is proof of moving towards a more sustainable, cost-effective, and user-friendly experience.

OBJECTIVES OF THE STUDY

- To understand the attitudes and perceptions of respondents towards fast fashion.
- To study the respondent's awareness of unethical practices used by brands. .
- To study the marketing tactics of brands and their facilitation in increasing demand.
- To shed light on the environmental concerns of the fast fashion industry.
- To analyze the effects of metaverse and technology on the industry.

LIMITATIONS OF THE STUDY

- An underlying assumption for the entire research is that the details and the feedback received from the population is true.
- The findings are based on the opinion of only 160 respondents.
- There might be a probability of biased responses while collecting primary data.

RESEARCH METHODOLOGY

Research Design - The research project is purely descriptive. The descriptive study entails looking into a certain phenomenon that already exists.

Data Collection - Both primary and secondary sources of data were utilized for the study. The Primary data will be collected from the consumers of fast fashion and the collection of original data as surveys and case studies. The secondary research data includes formally published items by search engines, newspapers, books, magazines, journals, websites, and other relevant information.

Sample Design - The data were collected and studied from 160 samples.

DATA ANALYSIS

1. What is your gender?

Table 1:

Options	Frequency	Percentage
Male	70	43.8%
Female	90	56.3%
Other	-	-
Prefer not to say	-	-

It is seen from Table 1 that the majority, 88% respondents are males and 12% of the respondents are females.

2. How old are you?

Table 2:

Options	Frequency	Percentage
Less than 18	8	5%
Between 18 - 25	116	72.5%
Between 25 - 30	15	9.4%
Between 30 - 40	4	2.5%
Above 40	17	10.6%

It is evident from Table 2 that 72.5% of the respondents belong to the age group 18-25, 10.6% are aged above 40 year old while 9.4% of the respondents belong to the age group 25-30. While 5% and 2.5% of the respondents aged less than 18 and between the ages 30-40 years old respectively.

3. What factors influence your choice when buying clothes? (Multiple choice)

Table 3:

Options	Frequency	Percentage
Every other day	2	1.3%
Once a week	11	6.9%
Once a month	66	41.3%
Once every few months	49	30.6%
Only when it is necessary	32	20%

Table 3 shows us that 41.3% of the respondents buy clothes once a month, 30.6% purchase one every few months, 20% of the respondents buy only when it is necessary and 6.9% engage in buying clothes once a week. While only 1.3% buy clothes every other day.

4. What do you do with clothes you no longer want? (Multiple choice)

Table 4:

Options	Frequency	Percentage
Donate	136	85%
Throw away	15	9.4%
Sell them	5	3.1%
Keep in storage	58	36.3%
Other	5	3%

Table 4 shows that 85% of the respondents donate their clothes after they no longer require them. 36.3% keep them in storage, 9.4% throw the clothes away whereas 3.1% sell them. The least number of people, that is, 3% opted for others.

5. How often do you shop from thrift, second-hand, or vintage clothing stores?

Table 5:

Options (Never-All the time)	Frequency	Percentage
1	86	53.8%
2	39	24.4%
3	20	12.5%
4	11	6.9%
5	4	2.5%

Table 5 clearly depicts 53.8% of the respondents have never considered shopping from thrift, second-hand, or vintage clothing stores, similarly the frequency of people shopping from the above mentioned gateways increased from 24.4%, to 12.5%, to 6.9% and finally to 2.5%

6. Are you aware of the environmental impacts of 'fast fashion'?

Table 6:

Options	Frequency	Percentage
Yes	90	56.3%
No	43	26.9%
Maybe	27	16.9%

From the above Table 6, 56.3% of the total respondents knew about the environmental impact of fashion, 43% of them were clueless while 16.9% were uncertain regarding their knowledge of fast fashion.

7. The 'fast fashion' industry is the second largest cause of water pollution. The use of toxic chemicals and the shedding of microfibres is adding to the increasing levels of pollution and plastic in our oceans. Which statement matches your reaction to this fact?

Table 7:

Options	Frequency	Percentage
'Fast fashion' should continue. Its impacts are not important. Changes should not be made.	39	24.4%
'Fast fashion' should stop. It is having a detrimental effect on the environment.	7	4.4%
Even though 'fast fashion' causes water pollution, it is still necessary. The 'fast fashion' industry should make the appropriate changes to protect the environment from harm.	114	71.3%

In the above Table 7, it shows the majority, that is, 71.3% of the respondents believe that the fast fashion industry should make changes in their functioning to protect the environment. Few people that is 24.4%, believe fast fashion should continue while 4.4% suggest it should stop.

8. Do you look forward to Fast Fashion brands (such as Zara, Forever 21, GAP) joining the Metaverse platforms?

Table 8:

Options	Frequency	Percentage
Yes	59	36.9%
No	36	22.5%
Maybe	65	40.6%

Table 8 shows that 40.5% of the respondents are uncertain with their reaction to fast fashion brands joining the metaverse, 36.9% whereas highly anticipate such collaborations while 22.5% are disinterested.

9. Rate the statements according to you: (Agree-Neutral-Disagree)

Table 9:

Options	Agree	Neutral	Disagree
I will purchase from a fast fashion brand after watching an advertisement	27 (16.9%)	74 (46.2%)	59 (36.9%)
I will purchase from an influencer promoting a brand on social media.	18 (11.2%)	57 (35.6%)	85 (53.2%)
Technology can put an end to fashion's poor sustainability	87 (54.4%)	55 (34.4%)	18 (11.%2)
Fast fashion brands should be more transparent about their manufacturing process	133 (83.1%)	19 (11.9%)	8 (5%)

The above Table 9 depicts that 83.1% of the respondents think that fast fashion brands should be more transparent about their manufacturing process, 11.2% disagree with technology being an solution to fashion’s poor choice of sustainability, 53.2% do not associate in purchase decision based on influencer promotion and 36.% of the respondents will purchase from a fast fashion after watching an advertisement.

FINDINGS

- It is evident from the data that most respondents of the survey were females.
- Most of the respondents belonged to the age group between 18 - 25 years.
- Style and quality of the apparel are important factors that influence a consumer before purchasing any clothing item.
- Majority of the people donate their old clothes rather than throwing them away.
- People are yet to fully adapt to the concept of pre-loved clothes.
- There still are consumers who are not aware of the environmental impact of the fast fashion industry.

- The fast fashion industry should make the appropriate changes to protect the environment from harm.
- It is found that a vast number of respondents do not anticipate fast fashion brands joining the metaverse.
- Influencer marketing has very little impact on the viewers.
- Advertisements play a good role in driving people to purchase a product.
- Majority of the people believe that technology can put an end to poor sustainable choices of fast fashion brands.
- It is clearly derived that consumers want fast-fashion retailers to be more transparent about their manufacturing process.

CONCLUSION

For years, the commercialization of fashion has preyed on people's vulnerabilities by warning them that if they don't keep up with the latest trends, they would be left behind. There are five barriers to being green, according to one study (Joy et al. 2010; 289): "lack of awareness, unfavorable attitudes, distrust, high prices, and low availability." When fast fashion customers gain a better understanding of how their clothes are created, they may decide that they don't need as many clothes, particularly those made of plastics. We've noticed that many of these customers are environmentally concerned and avoid drinking from disposable water bottles. If fast fashion consumers' preferences change, it looks that fast fashion merchants will adjust their output, as H&M has already begun to do.

Each year, 80 billion new articles of apparel are purchased around the world, totaling $1.2 trillion for the global fashion business. In the two decades since the fast fashion business model became the norm for big name fashion businesses, consumers must recognise fashion as an utilitarian commodity rather than a form of enjoyment, and be willing to pay higher costs to account for the impact of fashion on the environment. Slow fashion is the way things are going to be in the future. However, a new system-wide understanding of how to transition to such a model is required, which will necessitate creativity and collaboration among designers and manufacturers, as well as numerous stakeholders and end users. To transform the world's second-largest polluter and ensure that appearance and sustainability can be reached at the same time, a common ground between technologies, fashion, and the environment must be found. However, both the fashion industry and consumers share responsibilities for revolutionizing the way clothing and fabrics are made and used.

REFERENCES

Joy, A., Sherry Jr, J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast fashion, sustainability, and the ethical appeal of luxury brands.

Barnes, L., & Lea-Greenwood, G. (2006). Fast fashioning the supply chain: shaping the research agenda. Journal of Fashion Marketing and Management: An International Journal, 10(3), 259-271

Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: response to changes in the fashion industry.

McKinsey Apparel CPO Survey 2019, Fashion's New Musthave: Sustainable Sourcing at Scale." McKinsey&Company, Oct. 2019

Ellen MacArthur Foundation, A new textiles economy: Redesigning fashion's future, (2017, http://www.ellenmacarthurfoundation.org/publications)

Fletcher, K. (2010). Slow fashion: An invitation for systems change. Fashion Practice, 2(2),

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બજતા જાયે એકતારામાં વર્ણવાયેલ જીવન ઈમારતની કથા

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વિઠ્ઠલરાય શ્રીમાળી પોતાની આત્મકથા 'બજતા જાયે એકતારા'માં પોતાના ગામ, ત્યાંનું ઘર, કુટુંબની ગરીબ સ્થિતિ, કંગાલ ગામડાની સ્થિતિ, વર્ણવ્યવસ્થા જેવી અનેક બાબતો આલેખે છે. પોતાના મોટાભાઈ ત્રિકમલાલ વિશે લેખક ખાસ નોંધે છે. જે તેમના માટે જીવન ઈમારતના સ્તંભ સમાન હતા. લેખકના મતે કોઈવાર સામાન્ય માણસના જીવનમાં બનતા અસામાન્ય બનાવો જીવનને રોચક બનાવી દેતા હોય છે. વિઠ્ઠલરાય શ્રીમાળીએ પોતાની આત્મકથાને ચાર વિભાગોમાં વહેંચી છેઃ અરુણોદય, પ્રભાત, મધ્યાહ્ન, સમીસાંજ વગેરે.

યજમાનવૃત્તિ કરીને આજીવિકા ચલાવતા અંત્યજ ગોર નથુરામ અને ખેમીબાના છઠ્ઠા સંતાન તરીકે લેખક વિઠ્ઠલરાયનો જન્મ મહેસાણાના મોટીદાઉ ગામમાં 28 ડિસેમ્બર,1933ના રોજ થયો હતો. લેખકથી મોટા બંન્ને ભાઈઓને ગામની અંત્યજ શાળામાં ભણવા મુક્યા હતા. લેખકને પણ 1939માં તે શાળામાં મુક્યા હતા. ગાયકવાડી રાજ્યમાં બાળકને છ વર્ષે શાળામાં મુકવામાં ન આવે તો તે બાળકના મા-બાપને દંડ થતો હતો. શાળાની પ્રવેશ તારીખને જ જન્મતારીખ ગણાતી. વણકર, ચમાર, સેનમા, ગરો બ્રાહ્મણ બધાંના છોકરાઓ અંત્યજની શાળામાં જ ભણવા જતા હતા. ત્યાંના શિક્ષકો પણ અંત્યજ હતા. તેઓ બાળકોને ભણવાનું પ્રોત્સાહન આપતા હતા. વણકરવાસના બારણા વગરનાં બિનવારસી અને અંધારિયા મકાનમાં તે શાળા ચાલતી હતી. લેખકને દિનપ્રતિદિન ભણવાની ધગશ વધવા લાગી હતી. લેખકના પિતા બીજું ધોરણ અને માતા ચોથું ધોરણ ભણેલાં હતા. તે શૈક્ષણિક કજોડું સંપીને રહેતું અને કુટુંબનું જતન કરતું હતું. લેખકના પિતા દેશાવર રહેતા અને મોટાભાઈ બહાર ગામ નોકરી કરતા આથી સઘળી જવાબદારી લેખકના માને જ સંભાળવી પડતી હતી. એક દિવસ લેખક તેમના પિતા સાથે બારમા નિમિત્તે શીરો ખાવા ગયા હતા. એકવાર પિતા દેશાવર હતા ત્યારે લેખક ગયા હતા અને અડધા ભૂખ્યા ખાલી વાસણ લઈને આવ્યા તેવું જાણી મોટાભાઈએ લેખકને એક તમાચો માર્યો હતો. તેઓ લેખકને સ્વમાની બનવા માટે પ્રેરતા હતા. લેખકના મોટાભાઈ શાળામાંથી છૂટ્યા પછી પણ લેખકના

ભણતરનું ધ્યાન રાખતા. તે ઉપરાંત રોજ રાત્રે તેમની પ્રગતિની ચકાસણી કરતા હતા. તેમજ ભણીને આગળ વધવાની સલાહ પણ આપતા હતા. લેખકનું પાયાનું શિક્ષણ પાકું હતું. એકવાર પરીક્ષામાં નાપાસ થવાની શક્યતામાં પણ તેઓ પાસ થઈ ગયા હતા. ભણવા સિવાય બધી જ બાબતમાં તેઓ પાછળ હતા. તેમના ગામમાં ચોથા ધોરણ સુધીની જ શાળા હોવાને કારણે લેખકે પાંચમુ ધોરણ ભાન્ડુ ગામની અંત્યજની શાળામાં પાસ કર્યું હતું.

લેખકના મોટાભાઈ સ્વમાનથી જીવવામાં માનતા હતા. આથી તેઓ કોઈના ઘરે માંગવા જવાની ના પાડતા. જન્મ્યાં ત્યારથી જ લેખકને નિતાંત પ્રેમ મળેલો આથી પ્રેમમાં ઘણી શક્તિ છે એવું સમજીને તેઓ બધાંને પ્રેમભરી નજરે જોતાં હતાં. પરિણામે તેઓ કોઈ સાથે ઝઘડો કરતા નહી. વિકટ પરિસ્થિતિનો સામનો લેખક આત્મશક્તિના પ્રભાવ અને હિંમતથી કરતા. મોટાભાઈએ લેખકને બાર વર્ષની ઉંમરમાં છઠ્ઠા ધોરણ માટે પાટણની અંત્યજ શાળામાં દાખલ કર્યા હતા. પાટણના બોર્ડિંગ હાઉસમાં રહીને જીવન ઘડતરની સારી તક મળી હતી. લેખકના મોટાભાઈ ત્રિકમલાલની બુદ્ધિ બહુ તેજ હતી જ અને તેમાં પણ વડોદરાના વસવાટ પછી તેઓ વધુ તેજસ્વી થયા હતા. તેઓ હંમેશા સ્વચ્છ અને સુઘડ રહેતા હતા અને કામ વગર ગામમાં પણ જતા નહી. તેઓ આર્યસમાજની વિચારસરણીમાં માનતા હતા તેમજ પ્રભાવશાળી તથા સુધારક વિચારસરણી ધરાવતા હતા. તેમનુ લગ્નનું કજોડું હતું. એક વાર તેમની પત્નીએ ગરમ ચીપિયો પકડી લીધો અને બૂમ પાડી હતી. હરિજનવાસના બધા એકઠાં થઈ બબડવા લાગ્યા, 'માસ્તરે બિચારી બાયડીને ફરીવાર મારી.'આમ, બધાને એમ કે મોટાભાઈએ તેમની પત્નીને માર્યા. ગામ લોકોએ લેખકના ઘરના લોકોને ખૂબ માર્યા હતા. સવર્ણોના આ પ્રકારના આતંક અને વડીલોના આક્રંદથી સમગ્ર ગામ અને હરિજનવાસમાં સન્નાટો છવાઈ ગયો હતો. ગામમાંથી કોઈ પણ તેમને છોડાવવા પણ આવ્યુ ન હતું. લેખકના મોટાભાઈએ તેમના મિત્ર સાથે મહેસાણા જઈ ઓઝા વકીલને મળીને કોર્ટમાં સવર્ણોની વિરુદ્ધ કેસ દાખલ કરાવ્યો હતો. બીજા જ દિવસે મહેસાણાથી મુસલમાન ફોજદારે પેલા લોકોને ધમકી આપી હતી.

મોટાભાઈ ત્રિકમલાલની બદલી વિસનગર થઈ હતી એટલે આખું કુટુંબ ત્યાં રહેવા જતું રહ્યું હતું. થોડા દિવસો બાદ ઘરના બધા પાછા ગામમાં રહેવા આવી ગયા હતા. આમ, એકબીજાની હૂંફ અને હિંમતથી તે મકાન ઘર બન્યું હતું. કોર્ટના કેસની તપાસ કરવા માટે વડોદરાથી અધિકારીઓ આવતા હતા. લેખકને

મહેસાણાની કર્વે હાઈસ્કૂલમાં મુક્યા હતા. મહેસાણા શહેર ગાયકવાડી જિલ્લાનું વડુમથક હોવાને કારણે ત્યાં જિલ્લા કક્ષાની બધી કચેરીઓ હતી. લેખકે ત્યાં એક વર્ષમાં 5, 6 અને 7 ત્રણ ધોરણ પાસ કરવાના હતા. કોઈ કારણસર લેખક ભણવામાં કાચા પડતા જતા હતા કારણ કે તેમને ત્રણેય ધોરણ પાસ કરવાનો સતત તનાવ રહ્યા કરતો હતો. વાર્ષિક પરીક્ષાના પરિણામ સ્વરૂપ તે ગણિતમાં નાપાસ થયા હતા. કર્વે સાહેબને વિનંતિઓ કરી લેખકને ઉપલા ધોરણમાં ચડાવ્યા હતા.

લેખકમાં તેમના પિતા અને મોટાભાઈના સંસ્કારો હોવાથી તેમણે ભણીને આગળ વધવાનો મનમાં સંકલ્પ કર્યો હતો. ઝઘડાના બનાવના એક વર્ષ પછી ત્રિકમલાલે ગામમાં પગ મુક્યો હતો. આથી મહોલ્લાવાળા તેમને અચરજથી જોઈ રહ્યા હતા. તેઓ બેઠા હતા એવામાં ફોજદારે બોલાવ્યા હતા. તેમણે મોટાભાઈને સમાધાન કરી લેવા કહ્યું હતું. ત્યાં મોટાભાઈ સિંહ જેવું વર્તન કરીને ઘેર આવ્યા હતા. વસ્તીના લોકોએ તેમનું સન્માન કર્યું હતું કારણ કે તેમણે ખાલી પોતાનું જ નહી પરંતુ સમગ્ર અંત્યજ સમાજનું ભલું કર્યું હતું તેમજ તેમની સલામતી અને સ્વમાનનું પણ રક્ષણ કર્યું હતું. આથી તેમનું માન પણ વધી ગયું હતું. સૌથી મોટા પુત્ર તરીકે ત્રિકમલાલે પિતાજીને તેમની જવાબદારીમાંથી મુક્ત કરી ઘરનો વહીવટ પણ સંભાળી લીધો હતો. તેઓ શિસ્તના આગ્રહી હતા પરંતુ તેમના પત્ની ઘરના શાંત વાતાવરણને ડહોળી કાઢતા હતા. મોટાભાઈ આમ તો છઠ્ઠું ધોરણ જ ભણેલાં હતા પણ વડોદરામાં બે વર્ષ દરમિયાન અનેક મોટા માણસોને મળ્યા હતા. ત્રિકમલાલ શિક્ષક અને કુટુંબની જવાબદારી સાથે અન્ય પ્રવૃત્તિઓ પણ કરતા હતા. તેઓ કવિ જીવ પણ હતા. તેમ છતાં તેમને સંસાર સુખ કદી મળ્યુ જ ન હતું. મોટાભાઈના મતે જીવનનું સાચું સુખ જીવનની જવાબદારીઓ પૂરી કરવામાં છે. એનાથી મળતો આત્મસંતોષ જ સાચું સુખ કહેવાય. મોટાભાઈની આવી વાતોએ જ લેખકમાં ચેતના જગાવી હતી.

1947-48માં લેખકને વિસનગર ભણવા જવાનું હતું. ઉતાવળમાં તેઓ ટિકિટ વગર અમદાવાદ જતી ગાડીમાં બેસી ગયા હતા. તે જીવનનો એક અદભૂત અનુભવ બની ગયો હતો. લેખક મોટાભાઈ સાથે વિસનગર ભણતા અને રહેતા. ત્યાંની 'નૂતન સર્વ હાઈસ્કૂલ'માં આઠમા ધોરણમાં ભણવાનું ચાલુ કર્યું હતું. એક શિક્ષક હોવાને નાતે મોટાભાઈને લેખકનાં વ્યક્તિત્વનું ઘડતર થતુ દેખાઈ રહ્યું હતુ. આમ, ત્યાં એક નવા લેખકનું ઘડતર થઈ રહ્યું હતું. આઠમા-નવમા ધોરણમાં ઉત્તીર્ણ થયા બાદ તેમનામાં નવી ચેતનાનો સંચાર થયો હતો. આથી નાપાસ થવાનો ડર અને નિરાશા બંન્ને દૂર થયા હતા. મોટાભાઈના

જીવન અને આચરણથી લેખકને સીધું શિક્ષણ મળતું. હાઈસ્કૂલ અને પછાત સમાજમાં લેખકને સારુ માન મળતું હોવાથી તેમનો ઉત્સાહ દિનપ્રતિદિન વધતો જતો હતો. પ્રત્યક્ષ અનુભવોથી લેખકને જીવનનું ઘડતર કરવાની પ્રેરણા મળતી. અનેક પ્રવૃત્તિઓમાં વ્યસ્ત હોવા છતાં મોટાભાઈ લેખકના જીવનવિકાસમાં ખૂબ રસ લેતાં હતા. લેખકના મોટાભાઇ સ્વમાન સાચવીને જીવવામાં માનતા હતા. વિસનગરના બજાર વચ્ચે આવેલા હિન્દુ મંદિરમાં મોટાભાઈએ મંદિર પ્રવેશનો કાર્યક્રમ કર્યો હતો. જેના લીધે બધા હરિજનોએ મંદિરમાં જઈને પહેલીવાર ભગવાનની મૂર્તિના દર્શન કર્યા હતા. આ રીતે વિસનગરમાંથી આભડછેટના ભૂતને ભગાડી દીધું હતું. **(1)** લેખક મેટ્રિકમાં બીજા વર્ગથી પાસ થયા હતા. એ વખતે મેટ્રિક થવું મોટી વાત હતી. આથી ગામમાં અને વાસમાં તેમને ખૂબ માન મળ્યું હતું. પાંચ હજારની વસ્તીવાળા ગામમાં લોકો લેખકની ઈજ્જત કરવા લાગ્યા હતા. લેખકનું સન્માન પણ થયુ હતું જેનાથી તેમને શિક્ષણનું મહત્વ સમજાયું હતું. મેટ્રિક થયાનો આનંદ તેમના મોટાભાઈ અને માતાપિતાને વિશેષ થયો હતો. લેખકે આર્ટ્સમાં એડમિશન લીધું તે સમયે મોટાભાઈની બદલી બીજા ગામમાં થતા તેમને આંચકો લાગ્યો હતો કારણ કે મોટાભાઈની છત્રછાયામાં બાળપણ ઘડાતું હોવાથી લેખકને તેમની ગેરહાજરી સાલતી હતી, વિસનગર પણ સૂનું લાગતું હતું. કૉલેજ જીવન અને સ્કોલરશીપ મળવાને કારણે લેખકનો ઢંગ બદલાઈ ગયો હતો. એવામાં લેખકને મોટાભાઈની વાત યાદ આવતા ભણતર ન બગડે તેની કાળજી રાખવા લાગ્યા. ઘરેથી મોટાભાઈના પુનર્લગ્નના આમંત્રણનો પત્ર આવ્યો હતો. પરીક્ષા હોવાથી લેખક ત્યાં જઈ શક્યા ન હતા. વિસનગરમાં કોલેજના છેલ્લાં બે વર્ષમાં લેખકને મોજમજા કરવાની ટેવ પડી ગઈ હોવાથી તેમની પાસે થોડાં જ પૈસા બચતા હતા. વડોદરાની કોલેજમાં એડમિશન માટે ભાઈ-ભાભી બંન્નેએ પૈસાની વ્યવસ્થા કરી હતી. તેમના ભાભી પોતાનું સોનાનું કડું વેચવા માટે પણ તૈયાર થઈ ગયા હતા. આમ, આદર્શો અને સિદ્ધિઓને સાકાર કરતી લેખકની યાત્રાનો આરંભ થઈ ગયો હતો. જીવનના વિકાસ માટે અનેક ગામ-નગરની શાળા-કોલેજો બદલીને આખરે પ્રગતિશીલ રાજવીની રાજધાની વડોદરામાં લેખક ભણવા ગયા હતા. તેમના જીવનઘડતરમાં વિસનગરનો ફાળો અનન્ય હતો. એક ગ્રામ્ય વાતાવરણની કૉલેજ છોડી લેખકે મોટા-વિકસિત શહેરની કૉલેજમાં જવાનું હતું. ત્યાં આવેલ કારેલીબાગના આર્યકુમાર આશ્રમમાં લેખકને દાખલ કર્યા હતા. જ્યાં બધા જ પ્રકારની તાલીમ આપવામાં આવતી હતી. કૉલેજના જીવનને લેખકે તેની રીતે વહેવા દીધું હતું. આથી તેઓ એક વણિક કન્યા સાથે પરિચયમાં આવ્યા હતા. મોટાભાઈની જેમ લેખક પણ દિવ્યપ્રેમ

અને મર્યાદામાં માનતા હતા. સંસ્થાવાળાને તેની જાણ થતા તે છોકરીને વણિક વેપારી સાથે બળજબરી પરણાવીને વિદાય કરી દીધી હતી. લેખકના મોટાભાઈને દેવેન્દ્રભાઈ દ્વારા લેખકની હકીકત ખબર પડી હતી. સિદ્ધપુર પાસેના ગામડાની એક કન્યા સાથે લેખકની સગાઈ કરી નાખી હતી. વીતેલી ક્ષણોને ભૂલવા લેખકે ઘણાં પ્રયત્નો કર્યા હતા.

વેકેશનના થોડા દિવસ પછી લેખક માટે ડભોઈની એક સુંદર, સુશીલ કન્યા સાથે લગ્ન કરવાની દરખાસ્ત ધરાવતો દેવેન્દ્રભાઈનો પત્ર આવ્યો હતો. ઘરમાં માંગલિક પ્રસંગ આવવાનો હતો. લેખકે જીવનમાં આગળ વધવાનું હોવાથી તેઓ બધી રીતે તૈયાર હતા. આખરે લેખકે ગાડી પકડી જાન લઈ જવા તરફ પ્રયાણ કર્યું હતું. આમ, લેખકે પત્ની સરસ્વતી સાથે સ્થિર, મધુર અને ઉજ્જવળ જીવનનો માર્ગ પકડી લીધો હતો. બંન્ને કુટુંબ સમૃદ્ધ હતા. તેમના ભણતર અને સંસારનું ચણતર સાથે સાથે ચાલતું હતું. લેખકને સુખી સંસારના ફળ રૂપે એક પુત્રી અને ત્રણ પુત્ર થયા. જેમને તેમણે ગ્રેજ્યુએટ બનાવ્યા હતા. લેખકના મોટાભાઈ સુધારક વિચારના અને પરિવર્તનને આવકારનાર હતા. લગ્ન બાદ લેખકે ભણવામાં પોતાનું મન પરોવ્યું હતું. લેખકે 1956માં બી.એ.ની 'ડિગ્રી' અને 'દીકરી' એક જ વર્ષે મેળવ્યા હતા. બી.એ.ની પદવી એનાયત થવાની હતી ત્યારે તેમની જિંદગીની તે યાદગાર પળોમાં કોઈ હાજર રહી શક્યુ નહોતુ. એક ઊગતા વાર્તાકાર એવા લેખક પત્ની, બાળકો અને નોકરીને કારણે કાલ્પનિક વાર્તાઓને બદલે જીવંત વાર્તાઓમાં ઓતપ્રોત થઈ ગયા હતા. લેખક કુટુંબને લઈને વેકેશનમાં વતન ગયા હતા. ત્યાંથી પાછા ફરતી વખતે મોટાભાઈ અને ભાભીએ ભારે હૈયે વિદાય આપી હતી અને લેખકના બાળકને છેલ્લીવાર રમાડ્યુ હતુ. લેખક અમદાવાદ રોકાઈને પછી વડોદરા-ડભોઈ જવાના હતા. ગામમાં બનેલી કરુણ ઘટનાની લેખકને કોઈ જાણ ન હતી. એક દિવસ લેખકના મોટાભાઈ લક્ષ્મણે ગંભીર ચહેરે મોટાભાઈ ત્રિકમલાલને કોલેરા થયો હોવાનાં સમાચાર આપ્યા. લેખક તે રાત્રે જ વતનમાં જતા રહ્યા હતા. તે દરમિયાન રસ્તામાં ગામના લોકોને વાત કરતાં સાંભળ્યા હતા કે, ત્રિકમલાલ અને તેમની પત્નીને એક સાથે સ્મશાનમાં લઈ ગયા હતા. આ સાંભળી લેખક નીચે પડી ગયા હતા. ઘરે ગયા બાદ બધા આશ્વાસન આપતા હતા તેમ છતાં લેખકના મનમાં અને બહાર બધે જ સન્નાટો હતો, કારણ કે તેમણે ફક્ત મોટાભાઈ-ભાભી જ નહિ પરંતુ ઘણું બધું ગુમાવી દીધું હતું. થોડા દિવસ બાદ લેખકને જાણવા મળ્યુ હતું કે સવારે લેખકના ભાભી અને બપોરે તેમના ભાઈ એમ વારાફરતી બંન્ને મૃત્યુ પામ્યા હતા. લેખકને તેમના અંતિમ દર્શન પણ થયા ન હતા તેનો ભારે અફસોસ હતો. તેમના મોટાભાઇ તેમના

જીવનનો આધાર હોવાને લીધે તે પ્રસંગના છ માસ સુધી લેખક હસી શક્યા ન હતા. વડોદરામાં ગયા બાદ લેખકને મોટાભાઈની વધારે યાદ આવતી હતી. જીવનમાંથી રસકસ જ ઉડી ગયા હતા. ભણવામાં રસ ન હોવા છતાં લેખકે એમ.એસ.ડબલ્યુના બીજા વર્ષમાં પ્રવેશ મેળવ્યો હતો. આઘાત-પ્રત્યાઘાત કરાવનાર બનાવોને લીધે લેખક એક વિષયમાં નાપાસ થયા હતા. બીજા વર્ષે તેની પરીક્ષા આપી ત્યાંથી વતનમાં જતાં રહ્યા હતા. માનસિક પરિતાપ અને ક્ષુબ્ધ વાતાવરણથી લેખકની તબિયત બગડી હતી, દવાથી પણ ફેર પડતો ન હતો. પરીક્ષામાં તેઓ પાસ થયા હતા. તેવામાં તેમના પુત્ર હસિતનો જન્મ થયો હતો. આમ, લેખકના જીવનમાં ગતિ આવવા લાગી હતી. લેખકનો પ્રોજેક્ટ રિપોર્ટ પણ તૈયાર થઈ ગયો હતો. એવામાં જ લેખકના જીવન ઈમારતનો બીજો સ્તંભ પણ તૂટી ગયો હતો. જેમને લેખકની ડિગ્રીનો ખૂબ આનંદ હતો તેવાં દેવેન્દ્રભાઈ પણ મૃત્યુ પામ્યા હતા. જ્યારે ગામના લોકોએ લેખકનું સન્માન કર્યું હતું ત્યારે તેમના માટે દુઃખની વાત એ હતી કે, જે મૂર્તિની પ્રતિષ્ઠા થતી હતી તેના ઘડનાર જ ત્યાં હાજર ન હતા. તે સમયે લેખકને તેમના ભાઈ-ભાભીની યાદ તીવ્રપણે આવતી હતી. (2)

થોડા દિવસો પછી લેખકને તેમની ચીફ પ્રો.ઑફિસરની જગ્યા પર ભરૂચમાં હાજર થવાના સમાચાર મળ્યા હતા. આ નોકરીના સમાચારથી તેમના કુટુંબ અને સાસરીના બધાં ખુશ થઈ ગયા હતા. આમ, થોડા વર્ષો બાદ સમાજ સુરક્ષા કચેરીમાંથી કામગીરી પતાવીને લેખક 58 વર્ષે નિવૃત્ત થયા હતા. નવા પડકારો ઝીલવાનો શોખ, નિષ્ઠા અને નિખાલસતા લેખકને કાર્યમાં સફળતા અપાવતા હતા. જેનાથી તેમને જીવન જીવવાની નવી તાજગી મળતી. લેખકના પત્ની સહકારી અને સમજદાર હતા. આમ, લેખકના બાળકો વેલસેટ હોવાની સાથે સંસ્કારી, નમ્ર અને નિષ્ઠાવાન પણ છે. નિવૃત્તિ પછી લેખક ભારતીય જનતા પાર્ટીમાં જોડાઈ ગયા હતા. તેનો સદ્ઉપયોગ કરીને સમાજમાં મદદરૂપ થવા માગતા હતા. તે ઉપરાંત લેખકે જીવરાજ મહેતા હૉસ્પિટલમાં વહીવટી અધિકારી તરીકે સેવા આપી હતી. વિકાસ ગૃહના ડાયરેક્ટર તરીકે પણ તેમણે દસ વર્ષ સુધી સેવા આપી હતી. લેખકને તેમના સ્વજનોની યાદ ઘણીવાર દુઃખી કરતી હતી. જેમાં ત્રિકમલાલ, દેવેન્દ્રભાઇ, મોહનલાલ શર્મા જેવાં તેમની જીવન ઈમારતના સ્તંભનો સમાવેશ તેઓ કરે છે. જેમાં ચોથા સ્તંભ તરીકે તેમની પત્ની સરસ્વતી આવતા. આમ, વિઠ્ઠલરાયની જીવનની ઈમારતને ઘડવા અનેક માણસોએ એક મજબૂત સ્તંભ તરીકેની પોતાની ફરજ બજાવી હતી. જેથી લેખક પોતાના લક્ષ્ય પૂરા કરી શક્યા હતા.

સંદર્ભ:

- બજતા જાયે એક તારા- વિઠ્ઠલરાય શ્રીમાળી, નવભારત સાહિત્ય મંદિર, અમદાવાદ, પ્ર.આ.2009
- ભારતીય દલિત આત્મકથા- કાન્તિ માલસતર, ગુજરાત દલિત સાહિત્ય અકાદમી, અમદાવાદ, પ્ર.આ.2019

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Students' Perception Towards Online Learning

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Abstract:

The coronavirus disease 2019 (COVID-19) pandemic may be stressful for people. Fear and anxiety about the new disease and what would happen can be overwhelming and cause strong emotions in adults and children. Public health actions, such as social distancing, can make people feel isolated and lonely and can increase stress and anxiety. During this situation, the outbreak of COVID 19, has affected the education sector also. Virtual platforms are using for teaching and learning. It also creates a lot of problems for both students and teachers. The main objective of this study is to analyze the perception of online learning mechanisms among students' during this COVID 19 pandemic. This paper includes both primary and secondary data. Statistical tools are used for analyzing data. The study revealed that online classes are effective in some points of view, at the same time it will create issues like lack of teacher-student interactions, network problems, health issues, and data consumption.

Keywords: - COVID-19, Online teaching and learning, student's perception

INTRODUCTION

The coronavirus pandemic has become a norm and to adapt schools and colleges across the country have switched to remote learning. Children have been asked to stay on track with their syllabus through an online learning model at home. This transaction from classroom-based learning to online learning can be quite stressful for children as it changes from their normal structure and they are not accustomed to the new way of learning. More than 300 million students worldwide are having their education disrupted by the spread of Coronavirus. Schools and universities haven't faced this level of disruption in generations, but unlike any time in the past, we can continue education even when schools close. Learners, teachers, and families are at the heart of everything Pearson does and we are committed to helping everyone have positive learning experiences, whether online or in school.

In this uncertain environment, it's important that learning continues, even if it can't happen in person. That's why we're providing access to expert faculty, best practices, and other online learning resources for people who are studying, teaching, or working remotely. We'll be updating this site regularly with even more helpful resources. Students' participation in the home-learning program, online school was confusing to adjust to as we had not been prepared through simulations or practices beforehand. Students reported the home-learning program to be even more stressful than regular classrooms. Some of the common reasons for this went along the lines of: "Normal classes may have been difficult, but having friends makes it so much more manageable and less stressful. Online classes take out the benefits of having friends to socialize with and being stuck alone with nothing but assignments. "Many students participating in home-learning programs also say that the workload of online classes is larger than that of regular classes. The consensus is that home-learning programs — although highly beneficial and a good alternative to school as schools are closed — still require some getting used to by students, as it is a novel concept and not many are experienced with them. This is because those students lack the devices and internet access to be able to participate in online classes, and the schools and colleges cannot teach online.

REVIEW LITERATURE

Bączek, M., Zagańczyk-Bączek, M., Szpringer, M., Jaroszyński, A., & Wożakowska-Kapłon, B. (2020). , Students' perception of online learning during the COVID -19 pandemic on medical students. The COVID-19 pandemic has disrupted teaching in a variety of institutions, especially in medical schools. Electronic learning (e-learning) became the core method of teaching the curriculum during the pandemic. After eight weeks of only online learning, a survey was conducted to investigate the perception of this type of learning amongst medical students. A survey was conducted by distributing an online questionnaire to Polish medical students. Data gathered from the survey was analyzed with routine statistical software. 804 students answered the questionnaire. According to respondents' answers, the main advantages of online learning were the ability to stay at home (69%), continuous access to online materials (69%), learning at your own pace (64%), and comfortable surroundings (54%). The majority of respondents chose a lack of interactions with patients (70%) and technical problems with IT equipment (54%) as the main disadvantages. There was no statistical difference between face-to-face and online learning in terms of opinions on the ability of the learning method to increase knowledge (p=.46). E-learning was considered less effective than face-to-face learning in terms of increasing skills. E-learning is a powerful tool for teaching medical students. However, the successful implementation of online learning into the curriculum requires a well-thought-out strategy and a more active approach.

Agarwal, S., & Kaushik, J. S. (2020). Student's perception of online learning during the COVID pandemic. Indian Journal of Pediatrics**,** Coronavirus pandemic has not only impacted human life but also impacted medical education and residency training all over. With principles of social distancing, all face to face classes were suspended due to the ongoing COVID 19 pandemics. Considering its implications on our students, and online teaching session was conducted every day for 12 d. We used a free version of Zoom which allows a maximum of 100 participants and for some time of 40 min. Students' perceptions were collected at the end of this lecture series. Feedback responses were obtained from 77 participants. Of these, 87% (67) were post-graduate students. Participants found the sessions to be relevant to their learning needs and clinical practice [n = 75 (97%)]. The majority of the participants perceived that the sessions were tailored to their level of learning [n = 76 (99%)] and found the sessions to be interesting and enjoyable [n = 72 (95%)]. All of the participants (n = 77) felt that each pediatric sub-specialty should start their classes for postgraduates and that online classes should be made a part of the medical postgraduate curriculum. The study concluded that the COVID pandemic made us realize the importance of online training for our pediatric postgraduate students. Students' satisfaction levels with online learning were comparable to previous studies. Apart from the gain in knowledge, the present study revealed the impact of online learning on the morale of our students by creating a diversion from the ongoing pandemic situation. We conclude that online teaching is feasible, cheap, and must be made a part of the postgraduate training in India beyond the prevailing lockdown.

Smart, K. L., & Cappel, J. J. (2006). Students' perceptions of online learning: A comparative study. *Journal of Information Technology Education: Research*, *5*(1), 201-219. In search of better, more cost-effective ways to deliver instruction and training, universities and corporations have expanded their use of e-learning. Although several studies suggest that online education and blended instruction (a "blend" of online and traditional approaches) can be as effective as traditional classroom models, few studies have focused on learner satisfaction with online instruction, particularly in the transition to online learning from traditional approaches. This study examines students' perceptions of integrating online components in two undergraduate business courses where students completed online learning modules before class discussion. The results indicate that participants in an elective course rated the online modules significantly better than those in a required course. Overall, participants in the elective course rated the online modules marginally positive while those in the required course rated them marginally negative. These outcomes suggest that instructors should be selective in the way they integrate online units into traditional, classroom-delivered courses. This integration should be carefully planned based on learner characteristics, course content, and the learning context. For most participants of the study (83 percent), this was their first experience completing an online learning activity or module. Also, the largest dissatisfaction factor reported among the participants was the time required to complete the online modules. Future research is encouraged to explore: (1) how previous experience with technology and online learning affects students' attitudes towards and success with e-learning; and (2) the effects of interspersing online units that are considerably shorter in length into the traditional classroom model. This additional research can provide greater insight into which factors promote e-learning success.

STATEMENT OF PROBLEM

Since the COVID-19 pandemic has disrupted the normal lifestyle of people across the globe, the virtual world has come to the rescue. Amongst many institutions' schools and colleges have shifted their base to virtual platforms to conduct classes online consequently, catering to the needs of all stages of education from pre-primary to university level, online classes as an alternative to ordinary face to face classes. The present study aims to identify the perception of students towards online learning mechanism.

OBJECTIVES OF THE STUDY

1. To analyze students' perception towards online learning.
2. To study the impact of online learning mechanism.

RESEARCH METHODOLOGY

The study aimed to analyze students' perceptions of online learning during the COVID 19 pandemic situation. The data were collected from 280 respondents through questionnaires, articles, journals, and websites. A convenience sampling method was used for collecting data. Percentile analysis was used for analyzing data.

DATA ANALYSIS AND INTERPRETATION

PERCEPTION OF ONLINE LEARNING

TABLE 1 GENDER WISE DISTRIBUTION OF SAMPLE

GENDER	FREQUENCY	PERCENTAGE
Male	228	81.4
Female	52	18.6
Total	**280**	**100**

Source: Primary Data

Interpretation: The study reveals Gender wise classification. Out of 280 respondents, 81.4% are female and 18.6 are male.

TABLE 2 AGE WISE DISTRIBUTION OF SAMPLE

AGE	FREQUENCY	PERCENTAGE
16-20	190	67.9
21-25	84	30.0
26-30	1	0.4
Above 30	5	1.8
Total	**280**	**100**

Source: Primary Data

Interpretation: The age of the respondents is categorized into four categories. Table 2 shows out of 280 respondents,67.9% are in the age group of 16-20, 30% are in the age group of 21-25, 0.4% are in the age group of 26-30, and 1.8% are in the age group of above 30.

TABLE 3 STUDYING CLASS WISE DISTRIBUTION OF SAMPLE

CLASS	FREQUENCY	PERCENTAGE
S.S.L.C	4	1.4
Plus two	23	8.2
Degree	197	70.3
Masters	50	18
PhD	2	0.7

Others	4	1.4
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 3 shows the perception of the respondents based on their qualifications. It is classified into 6 categories. It is classified into 6 categories. 70% of respondents are doing their degree, 18% of respondents are doing post-graduation, 8.2% is a plus -two, 1.4% are S.S.L.C, 0.7% are doing PhD and 1.4% are others.

TABLE 4 OVERALL SATISFACTION OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	148	52.9
Disagree	15	5.4
Neutral	87	31.1
Strongly Agree	20	7.1
Strongly Disagree	10	3.6
Total	**280**	**100**

Source: Primary Data

Interpretation: From table 4, reveals the overall satisfaction of online learning .52.9% of respondents are agreed that online classes are satisfactory, 31.1% are neutral, 7.1% are strongly agreeing, 5.4% are disagreeing,3.6% are strongly agreeing with the statements.

TABLE 5 OVERALL EFFICIENCY OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	114	40.7
Disagree	28	10.0
Neutral	102	36.4
Strongly Agree	29	10.4
Strongly Disagree	7	2.5
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 5 shows the perception towards the overall efficiency of online learning.40.70% are agreed that online learning is very effective, 10.4% are strongly agreed, 36.4% are neutral, 10% are disagreeing and 2.5% are strongly disagreeing.

TABLE 6 FUN IN ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	80	28.6
Disagree	51	18.2
Neutral	107	38.2
Strongly Agree	27	9.6
Strongly Disagree	15	5.4
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 6 reveals the fun element in online learning. 28.6% agreed that online learning is quite funny, 38.2% are neutral, 9.6% are strongly agreeing, 18.2% are disagreeing and 5.4% are disagreeing.

TABLE 7 ASSIGNMENT WORKS IN ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	128	45.7
Disagree	23	8.2
Neutral	85	30.4
Strongly Agree	38	13.6
Strongly Disagree	6	2.1
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 7 shows the perception of students to work assigned by teachers. 45.7% of respondents agreed that there is a lot of assignments in online learning, 30.4% are neutral, 13.6% strongly agree with this, 8.2% disagree and 2.1% are strongly disagreeing.

TABLE 8 CONTENTS OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	162	57.9
Disagree	7	25
Neutral	60	21.4
Strongly Agree	46	16.4
Strongly Disagree	5	1.8
Total	**280**	**100**

Source: Primary Data

Interpretation: From table 8, it is understood that 57.6% of respondents are agreed with the quality contents of online learning, 21.4% are neutral, 16.4% are strongly agreeing,25% are not satisfied with the content quality and 1.8% are strongly disagreeing.

TABLE 9 EASE OF USE AND CLARITY OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	109	38.9
Disagree	22	7.9
Neutral	110	39.3
Strongly Agree	34	12.1
Strongly Disagree	5	1.8
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 9 indicates the perception of easy usage and clarity of information. 38.9% agreed with the statement, 39.3% are neutral, 12.1% strongly agreeing, 7.9% are disagreeing and 1.8% are strongly disagreeing.

TABLE 10 TEACHER – STUDENT INTERACTION IN ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	117	41.8
Disagree	27	9.6
Neutral	68	24.3
Strongly Agree	50	17.9
Strongly Disagree	18	6.4
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 10 reveals students' perception of teacher-student interaction.41.8% said that there is very good interaction with teachers in online learning, while 24.3% are neutral, and 17.6% strongly agreeing on that. 9.6% said that there is very low interaction and 6.4% fully disagreeing on this statement.

TABLE 11 STUDENTS' INTEREST IN ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	113	40.4
Disagree	32	11.4
Neutral	88	31.4
Strongly Agree	33	11.8
Strongly Disagree	14	5.0
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 11 shows the result of overall interest in online classes.40.4% are agreeing that online classes are interesting, 31.4% are neutral,11.8% are strongly agreeing on that. 11.4% said that online classes are not interesting and 5% are strongly disagreeing.

TABLE 12 USEFULNESS OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	123	43.9
Disagree	18	6.4
Neutral	77	27.5
Strongly Agree	54	19.3
Strongly Disagree	8	2.9
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 12 represents the usefulness of online classes.43.9% agreed that online classes are very useful, 27.5% are neutral, and 19.3% strongly agreed with this. 6.4% are disagreeing and 2.9% are strongly disagreeing with the fact.

TABLE 13 TIME CONSUMPTION OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	122	43.6
Disagree	22	7.9
Neutral	84	30.0
Strongly Agree	45	16.1
Strongly Disagree	7	2.5
Total	**280**	**100**

Source: Primary Data

Interpretation: From table 13, it is understood that 43.6% of respondents opined that online classes are time-consuming one, 30% are neutral and 16.1% are strongly agreeing.7.6% disagreed with this and 2.5% strongly disagreed with the opinion.

TABLE 14 USER FRIENDLINESS OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	130	46.4
Disagree	14	5.0
Neutral	92	32.9
Strongly Agree	40	14.3
Strongly Disagree	14	1.4
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 14 shows the perception of the user-friendliness of online classes. 46.4% are said that online learning mechanism is user friendly, 32.9% are neutral and 14.3% are strongly agreeing with this.5% are opined online classes are not user friendly and 1.4% disagreed with the statement.

TABLE 15 ACCESSIBILITY OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	138	49.3
Disagree	8	2.9
Neutral	95	33.9
Strongly Agree	32	11.4
Strongly Disagree	7	2.5
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 15 represents the perception regarding the accessibility of online learning. 49.3% are agreeing on this fact, 33.9% are neutral and 11.4% are strongly agreeing. 2.9% are disagreeing that online classes are not easily accessible and 2.5% are strongly disagreeing.

TABLE 16 CONNECTIVITY ISSUES OF ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	102	36.4
Disagree	15	5.4
Neutral	90	32.1
Strongly Agree	65	23.2
Strongly Disagree	8	2.9
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 16 shows the connectivity issues of online learning.36.4% are agreeing that there arises a lot of network issues while accessing online classes, 32.1% are neutral and 23.2% are strongly agreeing with the statement.5.4% are disagreeing and 2.9% are strongly disagreeing.

TABLE 17 STRESS AND HEALTH ISSUES IN ONLINE LEARNING

OPTION	FREQUENCY	PERCENTAGE
Agree	81	28.9
Disagree	22	7.9
Neutral	109	38.9

Strongly Agree	58	20.7
Strongly Disagree	10	3.6
Total	**280**	**100**

Source: Primary Data

Interpretation: Table 17 shows the stress and health issues in online classes. 28.9% is said that online classes create a lot of health issues and stress among students. Respondents are suffering a headache, eye problems and strain by continuously using electronic gadgets.38.9% are neutral, 20.7% are strongly agreeing, 7.6% are disagreeing and 3.6% are strongly disagreeing on the fact

TABLE 18 PROS AND CONS OF ONLINE LEARNING (RANKING)

OPTION	1		2		3		4		5	
	F	%	F	%	F	%	F	%	F	%
Content Quality	28	10	40	14.3	122	43.6	68	24.3	22	7.9
Way of Presentation	22	7.9	46	16.4	100	35.7	83	29.6	29	10.4
Teacher-Student Interaction	40	14.3	52	18.6	80	28.6	74	26.4	34	12.1
Interaction with peer teams	46	14.3	60	21.4	88	31.4	65	23.2	21	7.5
Mode of Online learning	33	11.8	55	19.6	96	34.3	77	27.5	19	6.8
HomeWorks & Assignments	31	11.1	48	17.1	74	26.4	87	31.1	40	14.3

Source: Primary Data

Interpretation: The above table reveals the pros and cons of online learning mechanism. The

Data collected and analyzed in 6 elements.

- **Content Quality:** Out of 280 respondents,43.6% said that the contents provided in online learning are moderately useful, 24.3% are opined very informative and useful,14.3% are telling, slightly useful, 7.9% are extremely satisfied and 10% opined not at all useful.
- **Way of Presentation:** 35.7% opined the way of presentation is good,29.6% are telling it's very useful, 16.4% are slightly using, 10.4% are very satisfied with the fact and 7.4% not satisfied.
- **Teacher- Student Interaction:** 28.6% of respondents reveals average opinion about teacher-student interaction, 26.4% said good interaction is possible in online learning,

18.6% opined slightly useful,12.3% are not at all satisfies and only 12.1% opined it's very useful.

- **Interaction with peer teams:** 31.4% are moderately satisfied with the interaction with friends,23.2% are opined very good communication is possible,21.4% not mush satisfied,14.3% are very not in able to communicate and 7.5% are maintaining relationships in a good manner.
- **Mode of Online learning:** 34.3% opined that mode of online teaching is useful, 27.5% said it is very good,19.6% are moderately expressed, 11.8% are not at all satisfied only 6.8% are very satisfied.
- **Home Works and Assignments:** 31.1% said that assignments are very informative and useful,26.4% are satisfied, 17.1% are not satisfied, 14.3% are very satisfied.

FINDINGS OF THE STUDY

- 81.4% of respondents are female and 18.6% are male.
- 67.9% of the respondents are belonging to the 16-20 age group
- The majority of the students are doing Plus two, UG & PG.
- Out of 280 respondents, 53% are opined that online classes are satisfactory.
- 41% are expressed that online classes are very effective.
- 46% viewed that the assignments and materials providing through online classes are very good.
- 58% opined that the contents are very useful.
- The majority of the respondents are agreed with the clarity of information, interest, usefulness, user-friendliness, accessibility of online classes.
- Online classes are time-consuming.
- Connectivity problems are there while using online platforms.
- Time management problems.
- Online learning requires Self -Discipline
- The online class creates stress and health issues like headaches, eye problems, and strain among students.
- Online leads to some behavioural issues among students
- Effective teacher-student interaction should not be possible in online classes.

CONCLUSION

During this pandemic situation students and teachers also have their struggle while accessing these online platforms. Due to financial constraints, students are not able to access internet facilities and electronic gadgets like a smartphone, laptop, and computer. Students are emotionally and mentally drained. They don’t feel like learning, nothing is sticking to their mind. Students are still comfortable towards the face to face learning rather than online learning. Administrative authorities and faculty members should take necessary steps for improving online teaching quality with funnier and more interactive for better results to students, during this COVID-19 pandemic.

RECOMMENDATIONS

- Schools and colleges have to take efforts to make online classes more user friendly.
- Ensure proper teacher-student interaction in between classes.
- Provide live classes to students, it should be more effective.
- Provide inclusive education like personality development and stress management.
- Reduce the syllabus for the time being.
- Every home is not conducive to learning.
- Students are emotionally and mentally drained.
- The plenitude of Homework and assignments lead to overburden to students.
- Social distancing creates a lot of mental changes among children.
- Should provide counselling or mentoring to needy students.
- Online classes adversely affect the teacher -student relationship
- Online Classes creates behavioural issues among students.

REFERENCES

Bączek, M., Zagańczyk-Bączek, M., Szpringer, M., Jaroszyński, A., & Wożakowska-Kapłon, B. (2020). Students’ perception of online learning during the COVID-19 pandemic: a survey study of Polish medical students.

Agarwal, S., & Kaushik, J. S. (2020). Student's perception of online learning during the COVID pandemic. Indian Journal of Pediatrics,

Chick RC, Clifton GT, Peace KM, et al. Using technology to maintain the education of residents during the COVID-19 pandemic. J Surg Educ. 2020. https://doi.org/10.1016/j.jsurg.2020.03.018.

Ferrel MN, Ryan JJ. The impact of COVID-19 on medical education. Cureus. 2020;12:e7492.

Spagnoli NI, Choo J, Tian J. Students' insights on the use of video lectures in online classes. Br J Educ Technol. 2019; 50:399–414

Smart, K. L., & Cappel, J. J. (2006). Students' perceptions of online learning: A comparative study. *Journal of Information Technology Education: Research*, *5*(1), 201-219.

WEBLIOGRAPHY

https://www.pearson.com/news-and-research/working-learning-online-during-pandemic.html

https://www.thejakartapost.com/life/2020/04/11/challenges-of-home-learning-during-a-pandemic-through-the-eyes-of-a-student.html

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A Study On Challenges In Implementation Of Ind AS In India With Special References To Gujarat State

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Abstracts

Any kind of business activities require a good accounting system. Without a good accounting and book keeping system business will run but effectiveness and efficiency of business entities operation will not identified, for identification of efficiency and effectiveness of business operation we need to have good accounting system. As of now need of accounting is arouse at global level common financial reporting language. MCA has already provide road map for implementation of Ind AS but as of now many challenges has been raised to implement Ind AS in India. Major state like Mumbai, Delhi etc. might have professional work force like PWC, E&Y etc. are the major accounting firm which are practicing advance level. As far as Gujarat state is concern professional workers having less awareness on that area of financial reporting. Ind AS is again converged form of IFRS and India is already having their own standards. So through the introduction of Ind AS India has done try to be with IFRS. This paper deal with challenges faced in implementation process of Ind AS in India with special references to Gujarat state.

Key words: IFRS, ICAI, Ind AS, AS, Convergence of IFRS, MCA.

Introduction

Now a days Gujarat is become a hub of small, medium and large level enterprise in India. Any business which raises they are creating the complexity in various terms, like increasing of transaction required more focuses toward book keeping and accounting records. As we all know India is suffering from one basic problem that is to have a common reporting language for financial reporting. Earlier time in India books of accounts are keeping by following Accounting standards (AS). Which is local level language of accounting of transaction, but the era is come for India as well as Gujarat that cross border transaction are raises like anything and India is become a global leader in enterprise level by exporting some good product in various country of the world. Now there are some big issue happened from the perspective of global accounting language and that are called to have common reporting language for entire world and that is International Financial Reporting Standards (IFRS). Many country adopted IFRS as it is but India has already their own standard so our Indian government make proposal for not adopting IFRS as it is but try to make our own standards like IFRS and that is ultimate solution for Indian business enterprise. After the above we have changed our local level standard in to international level standard and given a new name called as Ind AS.

Back ground of implementation of IND AS in India

ICAI (Indian Institute of Charted Accountants of India) has already given a road map to implement IFRS in India in 2011 but due to some basic problem of Company Law, taxation issues and other framework need to be addressed and which is not possible for Indian entities in short period of time that's why Ministry of Corporate Affairs (MCA) decide to postponed the implementation of IFRS.

In Budget speech of July, 2014 Honourable finance minister of India Mr Arun Jetly ji stated that- "There is an urgent need to converge the current Indian accounting standard in to International Financial Reporting Standard Ind AS has propose for adoption of the new Indian accounting standards (IND AS) by the Indian companies from the financial year 2015-16 voluntarily and from financial year 2016-17 on a mandatory basis. Based on the international consensus, the regulators will separately notify the date of implementation of Ind AS for the Banks, Insurance companies etc. Standard for the computation of tax would be notified separately".

The Ministry of Corporate Affairs (MCA) the country's governing arm, notified organizations, recommended the implementation should be in phased manners as of april, 2016 road map for implementation are as follows;

- ✓ Voluntarily adoption from 1st april,2015
- ✓ 1st April, 2016 - Mandatory adoption by companies having net worth is Rs. 500 crore or more, whose equity or debt securities are listed in India or outside India with applicability to holding, subsidiary, joint venture or associate companies of the above companies.

- ✓ 1st April, 2017 – mandatory adoption for unlisted companies having net worth of Rs.250 crore or more. Applicable to companies with net worth less then Rs.500 crore whose equity or debt securities are listed in India or outside India with applicability of holding, subsidiary, joint venture or associate of the above companies.

Objective of study

- ✓ IND AS is qualitative way of accounting
- ✓ Frame work of INDAS is relevant, honest and faith full representation of financial statements.

  In spite of having above characteristics there are many issue in implementation of IND AS. This research paper provide the challenges which faced in implementation of Ind AS in India with special reference to Gujarat state in converging from AS to IND AS.

Research Methodology

This paper is based on secondary data analysis which is collected through various web sites, research paper, books and reports.

Literature review

i. **"Impact of Implementation of Indian Accounting Standards in Selected Central Public Sector Enterprises (CPSEs)"; Comptroller and Auditor General of India; 2018**.

   Adoption of Ind AS resulted in changes in the financial reporting framework, increased use of fair valuation as against historical cost valuation and greater focus to substance than the legal form of the underlying transaction

   Adoption of Ind AS resulted in to increase use of fair value concept against use of historical cost concept, it is more focus toward substance then the legal form about the transaction. Hence we can say that Ind AS will resulted in changes in the financial reporting framework.

   In that particular report it is also describe that it has impact on different sector out of which one is automobile sector.

ii. **"The Impact of IFRS Adoption on Key Financial Ratios- An Analysis of Wipro"; pallavi gupta, javaid Akhtar, DR. barnali chakledar; Imperial journal of interdisciplinary research (IJIR); 2017.**

Author has conducted research on IFRS impact on ration analysis and found that there is significant difference between ration calculated as per GAAP and ratio calculated as per IFRS in Wipro. Key financial ration is an important part in financial statements analysis.

iii. **"Comparative analysis of Indian GAAP, IFRS, IND AS";Paramjot kaur, Dr. Balwinder singh, Dr. Amit Madhav bhattacharya.; "IOSR journal of business and management";2019**

In this study author provided comparison of Indian GAAP, IFRS and IND AS also mention that there is no big challenges in adoption of IFRS and provide detail about IFRS that IFRS is nothing but a accounting language which common for globally for all corporate giant. Author has also concluded that IND AS is converged form of IFRS and most of provision of IFRS is adopted in IND AS. There is major difference between Indian GAAP and IFRS.

iv. **"A study on challenges in implementation of Ind AS in India"; Madhu bala sharma, Dr. Pratik gupta; Conference proceeding; "Emerging role of leadership"; KIET school of management, Ghaziabad; 2018.**

In this conference paper author has try to identified challenges in implementation of IND AS in India also has put some solution to face the same challenges. Broadly author has given some basic solution to face such challenges on reporting issue. There are major challenges like fair value measurement, conversion cost, and complexity in understanding various term etc. for such challenges researcher come with the solution training programme and seminar and various conference or one can go for expert talk. Author has also site the reference of MCA and ICAI specially.

Problems in IND AS implementation process in Gujarat

Above literature review are providing the challenges and issue faced by Indian corporate majority issue are as follows;

Awareness of IFRS

The basic issue with Indian corporate are basic awareness about IFRS. Which is making tremendous difficulties in transition phase. Also need to prepare whole set of books of accounting accordance with international standard is very difficult.

Fair value measurement

Ind AS consider Fair value as a base of valuation for most of item of financial statements.it can bring variability and subjectivity in the reporting.it also requires lot of knowledge and expertise to arrive fair value.

Cost benefit analysis

It is not so cost effective for Indian corporate to bring the convergence of AS to IFRS. Service of expert need to hire charges are higher in respect of work which involve specialisation.it have has conversion cost.

Complexity in reporting

Reporting by IND AS is not easy task it require more disclosure as compare to local standard, because IFRS focus toward more disclosure requirement.

Lack of trained Professionals

India is having a high population but the professional are very law only 30% population involve in service sector which consist of professional and pout of that accounting professional are very low. They also required training to adopt IFRS which is again dis advantage for implementation process.

So, above are the some basic challenges and issue which describe in the various paper, books or in the reports but here I would like to focuses toward challenges specifically emerge to Gujarat state during the transition phase except from the above. Which are as follows;

Understandability of financial term

Gujarati people having a language barrier specifically in financial and accounting term all people are not able to understand each and every terminology used in accounting statement same way professional person is also having problem with interpretation about IFRS terminology.

Relevance of the information

Relevance is the primary requirement in the financial statement which is somewhere missing in Gujarat state because many time owner is involve in different activities under one rough there are many chances that activities of one is clubbed with another and that will miss lead to professional accountant also.

Reliability of accounting record

Reliability is most important aspect which need to consider while compiling the financial statements, which is again missing in Gujarat state's industry because in last five year number of scandals are come in to picture which is again wrong practices of professionals only. Ultimately third person who has independent check on financial statement need to be more proactive.

Limitation on scope

Many time owner of the organisation having control over professional person. Professional person try to complete all the necessary requirement but management or owner are restrict them from doing some act. Which need to be prohibited to complete Ind AS implementation process.

Time constrain

We have observe many professional who are working on the ending time as an when due date is come everything work out on that time only at that time due date is also there so they need to complete all the pending work before due date that's why professional having time constrain and they are not able to complete all the requirements of IND AS.

Varity of industry

In Gujarat we will find number of industry which is working in different process and at different level some of are there small industry some of are large and some of are medium size all need to follow same regulation is not possible so having some flexible format of reporting from industry to industry may cause challenges. Common set of accounting language will be there but requirement should not be like large scale industry which need to be consider.

Limitation of law itself

Enterprise in India as well as Gujarat are most of working for profit making activities. For the non-payment of income tax they are ready to do some transaction which involve related party transaction, transaction by mere book entries, etc. they are making books of accounts which are different for personal use and different for income tax purpose. It can be consider as a fault of own act. There are some common law which need to be having effect of one transaction with others. Like related party transaction should not be there as per companies act which limit provided by companies act are different from accounting also different from income tax purpose.

Solution:

A continues research required to standardise and harmonise accounting process at global level. Following are the some of suggestions which can be consider for adopting smooth implementation of IND AS from Gujarat as well as Indian point of view;

- ✓ More independences need to be given auditor and professional accountant
- ✓ More training programme required to be done for professional of India as well as Gujarat.
- ✓ Enactment of inter related law need to do carefully for referencing provision
- ✓ Provide various courses for professional development of better knowledge and expertise.
- ✓ Consultation to owner and management need to provide by professional person for requirement of framework of reporting.
- ✓ Need to provide flexible framework for small and medium size enterprise.

Conclusion

In the context of India Ind AS enhance the credibility, reliability, uniformity, comparability and understand ability of the financial statement which is prepared accordance with framework given by Ind AS. Journey from GAAP to Ind AS are difficult but it is provide fruitful result in near future so importance given to Ind AS is beneficial in every aspects. Impact of IFRS is cross functional in all the respect. In near future Indian corporate which preparing financial statements on historical cost basis will have tough time in converting them in to fair value? Above are some of solution need to consider for smooth implementation of Ind AS.

References

i. Ashwini attri, Rajiv mehrishi (2018), Impact of Implementation of Indian Accounting Standards in Selected Central Public Sector Enterprises (CPSEs), chapter VIII, report no. 18 of 2018.

ii. Ramesha, V. (2016), Convergence of Indian Accounting Standards with IFRS – Prospects & Challenges, National Seminar on “IND-AS: A Road Map for IFRS in India”, ISBN: 978-93-5254-333-5.

iii. Madhu bala sharma, Dr. Pratik gupta. (2018), “A study on challenges in implementation of IND AS in India” International Journal of Research in Engineering, IT and Social Sciences, ISSN 2250-0588

iv. Babu, R., Narendra, J.M. and Venkateswarlu, M. (2016), International Financial Reporting Standards (IFRS) in India: Problems and Challenges, National Seminar on “IND-AS: A Road Map for IFRS in India”, ISBN: 978-93-5254-333-5.

v. Dr. D.S.Rawat,(2019), “Students guide to IND AS’s with converged IFRS”; Taxman publication, ISBN 9789389546286

vi. CA Praveen Sharma, CA Kalpeshwar Bhalla,(2019), “Hand book on IND AS for CA final students and other professional examination”;pooja law publishing company, ISBN 9789384467913, 938446791X.

vii. Sunita Ajay Kumar Rai, IFRS- Problems and Challenges In First Time Adoption, International Indexed & Referred Research Journal, ISSN- 2250-2556; Vol. I

viii. www.icai.org

ix. www.mca.gov.in

x. www.delloitte.com

xi. www.pwc.in

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Swami Vivekananda's views on the Sanskrit Language

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ABSTRACT

An attempt is made to discern a few important dimensions of the Sanskrit language, as perceived by Swami Vivekananda, that would enable to rejuvenate our nation. The identified dimensions are:

1. Sanskrit – the only common language of our country
2. Sanskrit – the custodian of our culture and prestige
3. Sanskrit – the leveler of castes and up-lifter of the classes/masses, and
4. Sanskrit – the bestower of poetic insight.

Expanding the above dimensions, Swami Vivekananda provide us with an understanding that the great Sanskrit language, is not only a *devabhasha* signifying purity and sacredness, is not only an etymologically 'perfected' language, but is equally a dynamic, practical and powerful language, the study of which would enable us to solve the linguistic, caste and class based problems of our nation.

Key words: Swami Vivekananda, Sanskrit language, Linguistic solution, Culture and prestige, Castes and classes, Poetic insight.

Swami Vivekananda's views on the Sanskrit Language

Swami Vivekananda, one of the greatest Neo - Advaitin, adores the Sanskrit language and being a practical visionary, he identifies critical dimensions of the Sanskrit language that would enable to rejuvenate our great nation.

Let us briefly focus on a few important dimensions of the Sanskrit language, as perceived by Swami Vivekananda.

Sanskrit – the only common language of our country

While discussing the linguistic problem of our country, Swami Vivekananda emphasizes the need and importance of identifying a common language and that does not destroy the vitality of the various existing languages.

Swami Vivekananda finds a solution in the Sanskrit language. He states "The only solution to be reached was the finding of a great sacred language of which all the others would be considered as manifestations, and that was found in the Sanskrit".[1]

Swamiji observes that even Dravidian languages, which may not be originally sanskritic, while maintaining their vital distinctiveness are converging towards the Sanskrit language for all practical purposes.

Thus, we clearly understand that Swami Vivekananda perceives the Sanskrit language as the only common language that solves the linguistic problem of our nation.

Sanskrit – the custodian of our culture and prestige

In the process of expounding his plan for the future of India, Swami Vivekananda proclaims that religion is the life-current of our nation and attempts to strength it must be done through its corner – stone, namely, spirituality and Sanskrit education.

According to Swami Vivekananda, spirituality and knowledge may be taught in the language of the people, but "….. Sanskrit education must go on along with it, because the very sound of Sanskrit word gives a prestige and a power and a strength to the race ".[2]

Swamiji firmly believed that the Sanskrit language gives culture and prestige to our nation. He explicitly states, "Sanskrit and prestige go together in India. As soon as you have that, none dares say anything against you. That is the one secret; take it up".[3]

Reasoning out the important role played by culture, Swami Vivekananda proclaims, "It is culture that withstands shocks, not a simple mass of knowledge. You can put a mass of knowledge into the world, but that will not do it much good. There must come culture into the blood".**4** This all important culture comes from the study of the Sanskrit language.

Sanskrit – the leveler of castes and up-lifter of the classes/masses

While extending the above deliberations on Sanskrit language and culture, Swami Vivekananda finds a solution to the castes problem of our country.

Swamiji strongly believed that a permanent solution to the caste problem lies in appropriating the Sanskrit language, the embodiment of culture, to all the castes of our nation. In his own words "The only safety, I tell you men who belong to the lower castes, the only way to raise your condition is to study Sanskrit, …. The only way to bring about the leveling of caste is to appropriate the culture, the education which is the strength of the higher castes. That done, you have what you want".[5]

Swami Vivekananda, a keen intellect, perceives the study of Sanskrit language as a permanent up-lifter of the classes/masses of our country. He observes that the ultimate effect of the attempts made by the great men to raise the lower classes, were more temporary than permanent because they taught in the vernacular language and failed to give importance to the study of the Sanskrit language among the classes/masses. Swamiji proclaims, "The secret is here. They raised the lower classes; they all had the wish that these should come up, but they did not apply their energies to the spreading of the Sanskrit language among the masses".[6] It is the study of Sanskrit language that leads to a permanent up-liftment of the classes/masses.

Thus, we understand that Swami Vivekananda perceives the study of Sanskrit language as a solution to castes problem as well as up-liftment of the classes/masses of our country.

Sanskrit – the bestower of poetic insight

In the process of tracing the historical evolution of our country, Swami Vivekananda identifies analytical keenness and poetic insight as the two great internal causes that made-up our race. They together formed the key note of our national character.

Swami Vivekananda points out that poetic insight springs from the Sanskrit language. While elaborately describing our race, Swamiji states, "Its religion, its philosophy, its history its ethics, its politics were all inlaid in a flower-bed of poetic imagery – the miracle of language which was called Sanskrit or "perfected', leading itself to expressing and manipulating them better than any other tongue".[7]

Swamiji further points out that it is this poetic insight that elevates our race towards higher realm of existence. He states, "Arts and sciences, even the realities of domestic life, are covered with a mass of poetical conceptions, which are pressed forward till the sensuous touches the super-sensuous."[8] Thus, Swamiji brings out the metaphysical and holistic nature of the Sanskrit language.

Let us conclude by stating that Swami Vivekananda has enabled us to understand that the great Sanskrit language, is not only a *devabhasha* signifying purity and sacredness, is not only an etymologically 'perfected' language, but is equally a dynamic, practical and powerful language, the study of which would enable us to solve our linguistic, caste and class based problems, and thereby, rejuvenate our great nation.

References

1. *The Complete works of Swami Vivekananda*, Vol. IV, 1997, P.309
2. *ibid*., Vol. III, p.290
3. *ibid.*, Vol. III, p.299
4. *ibid*., Vol. III, p.291
5. *ibid*.
6. *ibid.,* Vol.III, pp. 290-91
7. *ibid.*, Vol. VI. p. 158
8. *ibid*.

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Tax Saving Instruments of Income Tax in India: A Study on Tax Assessee in Junagadh City

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ABSTRACT

Tax Planning is an important aspect of our overall financial strategy. We may keep our tax liability to a bare minimum by using effective tax planning. This is accomplished by utilising all available tax exemptions, deductions, rebates, and allowances under Chapter VIA while ensuring that your investments are aligned with your long-term objectives. The goal of the research is to determine the most appropriate and popular tax saving tool, and To Examine the amount saved by utilising that instrument. Over all findings reveals that the most adopted tax saving instrument is Life Insurance policy, which got the first rank in this study and the second most adopted tax saving instrument is Housing Loan Interest/Principal Amount.

Keywords: Income Tax, Tax saving Instruments, Tax Saving, Tax Planning, Tax Avoidance, Tax Evasion, Tax Management

Introduction

Let's start with a definition of the term "tax." A tax is a government-imposed fee on a product, income, or activity. Direct and indirect taxes are the two types of taxes . A direct tax, such as incometax, is one that is levied directly on a person's income or wealth. An indirect tax is one that is levied on the price of an item or service, such as excise duty. When it comes to indirect taxes, the person who pays the tax transfers the burden on to someone else.

Income Tax Law in India

The most substantial direct tax is income tax. We will introduce the students to the Indian Income Tax Law in this content.

Income Tax Act, 1961: The Income-tax Act of 1961 governs the collection of income tax in India. This will be referred to as the Act in this book. This Act became effective on April 1, 1962. There are 298 sections and XIV schedules in the Act. Every year, the annual Finance Act, which is passed by Parliament, changes them with additions and deletions. Rules have been created to aid the proper administration of the Income-tax Act, 1961, in accordance with the authority granted by the Income-tax Act, 1961.

Income-tax Regulations: The Central Board of Direct Taxes is responsible for the administration of direct taxes (CBDT). The CBDT has the authority to create rules to carry out the Act's objectives. The CBDT issues rules from time to time to ensure that the Income Tax Act of 1961 is properly administered. The Income-tax Rules of 1962 are a collection of these rules. It's crucial to remember that these guidelines should be studied in addition to the Income Tax Act of 1961.

Income Levy of Income Tax

Income-tax is a tax levied on the total taxable income of the previous year of person.. A person includes an individual, Hindu Undivided Family (HUF), Association of Persons (AOP), Body of Individuals (BOI), a partnershipfirm, a company etc.

Assessee [Section 2(7)]: An assessee is a person who is liable to pay any tax or other sum of money under the Income-tax Act of 1961. It covers anyone who has had a proceeding brought against him for the purpose of determining his income or fringe benefits. A person may be assessed in relation to the earnings of others on occasion. In this situation, he may also be regarded an assessee. Every individual who is regarded to be an assessee or an assessee in default under any provision of this Act is included in this term.

Tax Planning

Tax planning is a process of reducing income by making the best use of all available allowances, deductions, exclusions, exemptions, and other tax benefits.

Tax planning is the process of arranging one's financial and economic affairs to take maximum advantage of all available deductions, exemptions, allowances, and refunds in order to lower one's tax liability to the bare minimum. To put it another way, all arrangements in which the tax is saved through ways and means that comply with legal obligations and requirements and are not colorable devices or techniques to meet the wording of the law but the spirit behind them would be considered tax planning.

In a nutshell, tax planning is the arrangement of one's financial affairs in such a way that, without violating the legal provisions of an Act in any way, full advantage is taken of all exemptions, deductions, rebates, and reliefs allowed under the Income Tax Act, so that the burden of taxation on an assessee is as light as possible. The exemptions, deductions, rebates, and reliefs were created by the law to achieve specific social and economic objectives. For example section 80IB of the Income Tax Act, 1961 enables deduction from gross total income in respect of earnings from newly created industrial operations in industrially backward State or industrially backward area as may be specified in this behalf. The goal of the tax break is clear: economic growth in industrially underdeveloped areas or states. If an individual or an H.U.F. saves money and invests or deposits it in the approved schemes, Section 80C offers a deduction from gross total income.

The deduction was established to stimulate savings and investments in the country's economic development. Thus, by taking advantage of the aforementioned deductions, a person not only decreases his tax liability but also contributes to the legislature's goal of lawful, social, and ethical behaviour. As a result, tax planning is an act that occurs inside the four corners of the Act, not a colorable device to avoid tax liability.

Tax Evasion

It refers to a circumstance in which a person tries to reduce his tax liability by concealing income or inflating expenditures to make the income appear smaller than it actually is, as well as other sorts of deliberate manipulations. The appropriate law punishes an assessee who commits tax avoidance. Tax evasion can include willfully making a false statement, providing deceptive papers, suppressing information, failing to keep adequate accounting of earned income (if required by law), and omitting material facts in assessments. Tax evasion would be committed by an assessee who fraudulently claims the benefit under the statute by making false declarations.

Tax Avoidance

The border between tax planning and tax avoidance is extremely thin and hazy. There could also be a mollified incentive at work in the tax avoidance. Tax avoidance can be defined as any strategy that, by rigorously adhering to legal rules, defies the underlying goal of the legislature behind the statute. It is usually accomplished by modifying the situation such that no tax regulations are broken and by taking full use of the loopholes that exist in order to draw the lowest tax incidence. Previously, tax avoidance was deemed totally legal, but it is now only legal in limited circumstances.

Tax Management

Tax planning is a general phrase that refers to the management of affairs in such a way that reduces or eliminates tax liability. Tax management is necessary for tax planning. Internal management is an aspect of tax planning. It takes the required precautions to adhere to the legal procedures in order to obtain tax exemptions, deductions, refunds, or relief as contempts in the tax planning scheme. By complying with the appropriate standards, tax management plays a critical role in calming allowances, deductions, and tax exemptions. For example, if an assessee uses a mercantile accounting system, the claim of expenses should be made on an accrual basis, subject to the restrictions of section 43B; if the assessee fails to do so, such expenses cannot be deducted in later years. Similarly, the prescribed deductions under sections 80IA, 80JJA, and other provisions etc. Tax management also protects an assessee from penalties and punishment by ensuring timely payment of tax obligations. As a result, without tax management, the study of tax planning is incomplete. Knowing the medicine but not knowing how to use it is like knowing the medicine but not knowing how to use it.

DIFFERENCE BETWEEN TAX PLANNING AND TAX MANAGEMENT

Tax planning is primarily concerned with establishing a strategy that will result in the lowest possible tax incidence under the law. Tax management, on the other hand, covers a broader range of activities such as adhering to legal requirements, anticipating financial constraints that may arise when fulfilling obligations through tax payment, keeping a close eye on and monitoring the statutory requirements of other laws, claiming due reliefs arising from double taxation avoidance agreements or unilateral relief, and so on. While tax planning is the pivot that allows for the creation of various incentives and maintains the application of tax law, tax management is the revolving wheel that turns policy into results. The distinction between tax planning and tax management is as follows:

1. Tax preparation is a long-term strategy. It also covers tax planning. The first step toward tax planning is tax management.

2. The fundamental goal of tax planning is to reduce tax incidence, whereas the primary goal of tax management is to ensure that legal formalities are followed.

3. While tax planning is not necessary for every assessee, tax management is. Otherwise, he may be subject to penal interest, penalty, and prosecution. For example, a person may not be able to reduce his tax due by claiming any exemption, deduction, relief, etc. in his or her tax return. He must follow all legal procedures in calculating his total income, but if he is required to pay advance tax or is responsible for tax deduction at source, etc.

4. Tax planning is a tool for making decisions, whereas tax management is an ongoing process.

5. Exemptions, deductions, and reliefs are claimed in tax planning, while requirements must be met in tax management to claim exemptions, deductions, and reliefs.

6. Alternative economic activities are investigated in tax planning, and the activity with the lowest tax incidence is chosen, whereas tax administration entails maintaining accounts in prescribed form, having books inspected, completing needed forms and returns, and paying taxes, among other things.

7. Tax planning is primarily concerned with future benefits stemming from current acts. Tax planning encompasses the past, present, and future. It deals with the past in terms of appeals, revisions, and rectification of errors, among other things. Maintaining records, self-evaluation, submitting returns and other Relevant paperwork, keeping up with changes, and so on are all ongoing activities. Plans for follow-up, etc. are in the works.

Review of Literature

(Kathikeyan, 2012) Here researcher made study on "Awareness of tax planning - A study with special reference to Government employees" and the objective of the study is to study the awareness of government employee towards various provision of income tax deduction applicable to them in this study it is concluded that tax planning different from person to person and depend on a source of income family background and quantum of income.

(Geetha A., 2012) Here researcher made study on "A study on tax planning measures adopted by the salaried class in Kerala". Researcher made an effort to review reform insert by income Tax department and try to study it's impact on salaried income Tax assesses. Researcher found that claim under section 80C cannot be claimed by employees of private sector in compare of government employee and they have Low knowledge of capital gain and it's a relief.

(Arora, 2018) Here researcher made study on "A Study of Awareness and Perception Regarding Tax Saving Options Among Salaried People "The study was organised to know if there was any difference in income saving and investment pattern on the basis of factor keep in mind before investment option researcher used correlation analysis and 266 respond and conclude that women wear more civility toward saving and investment and study also found PPF as the most preferable investment

(Pimple, 2019) In their research paper made a study on "An Empirical study on perception towards Tax planning among youth" and the main objective of the study is to measure perception of individual toward tax planning among youth and compare perception of individual toward tax planning between arts science and Commerce streams of the education. Here, researcher collects primary data with questionnaire. And collect data through convenience method and analyse data through chi square test in this study it is concluded that there is enough evidence to suggest an association between gender and essential of tax planning.

Research Gap

From the survey of literature, it is revealed that a number of researchers have carried out extensive research in the field of tax planning and investment behaviour, and have come up with many interesting findings. But No researcher has come across so far any study on Tax Saving Instrument Adopted By assessee of Junagadh City . Hence, the present study has been carried out under the title, "Tax Saving Instruments of income tax in india: A study on tax assessee in Junagadh City"

Objective of the Study

1. To study the planning of individual income tax.
2. To Examine the saving instrument of individual income tax.

RESEARCH METHODOLOGY

The research design is descriptive in nature since it sheds insight on the relationship between assessee income and income level on the amount of tax savings. A research technique is a method for solving an issue in a systematic manner. Stratified Random Sample Technique was used as the sampling method. The assessees in Junagadh City make up the population for this study. The survey respondents were picked at random and a sample of 110 people was taken. Personal interviews and questionnaires were used to get accurate information as primary data. Secondary data was gathered from a variety of sources, including text books, journals, online published articles, local newspaper stories, and internet search engines.

TAX SAVING INSTRUMENTS

Limits on tax deductions under a few sections of the Income Tax Act for FY 2021-22 (AY 2022-23). Important portions and new recommendations about Income Tax Deductions for FY 2021-22). This list can assist you with tax preparation.

Section 80C

Taxpayers love Section 80C because it allows them to lower their taxable income by making tax-saving investments or incurring qualified costs. It permits the taxpayer to deduct up to Rs 1.5 lakh from their total income each year. Individuals and HUFs alike can benefit from this deduction. This deduction is not available to corporations, partnership firms, or LLPs Subsections 80CCC, 80CCD (1), 80CCD (1b), and 80CCD (2). make up Section 80C.

The following are the numerous investment options or expenses that can be claimed as tax deductions under section 80C.

- PPF (Public Provident Fund)
- EPF (Employees' Provident Fund)
- Five year Bank or Post office Tax saving Deposits
- NSC (National Savings Certificates)
- ELSS Mutual Funds (Equity Linked Saving Schemes)
- Children's Tuition Fees
- SCSS (Post office Senior Citizen Savings Scheme)

- Principal repayment of Home Loan
- NPS (National Pension System)
- Life Insurance Premium
- Sukanya Samriddhi Account Deposit Scheme

Section 80CCC

Contributions to the LIC (Life Insurance Corporation of India) or any other Life Insurance Company's annuity plan for the purpose of receiving a pension from the fund are tax deductible. This clause allows for a maximum tax deduction of Rs 1.5 lakh.

Section 80CCD

Employees can invest in government-approved pension plans (such as the National Pension Scheme – NPS). Contributions can be up to ten percent of the gross remuneration. Additional deduction of up to Rs 50,000 under section 80CCD (1b).

To be eligible for this deduction, the employee must contribute to a government-sponsored pension plan such as NPS. Salaried individuals are subject to a 10% salary cap, while non-salaried individuals are subject to a gross income limit. 'Dearness Allowance' is the only definition of salary. If your employer additionally contributes to a pension plan, you can claim the entire contribution (10 percent of your salary) as a tax deduction under Section 80CCD (2).

Please note that the total deduction under sections 80C, 80CCC, and 80CCD (1) for the financial year 2021-22 cannot exceed Rs 1,50,000. The extra tax deduction of Rs 50,000 under section 80CCD (1b) is in addition to the Rs 1.5 lakh limit.

Section 80D

The deduction for health insurance premiums under section 80D is Rs 25,000. It is Rs 30,000 for Senior Citizens. A deduction of Rs 30,000 is allowed for medical expenses for very senior citizens above the age of 80 who are not qualified for health insurance. Tax deductions are available for preventive health checkups (Medical checkups) up to Rs 5,000 per family. Remember, this is in addition to the previously stated individual limits. (Family includes self, spouse, children under the age of 18, and parents.)

Section 80DD

You can claim up to Rs 75,000 for medical treatments for your 40 percent disabled dependents (spouse, parents, children, or siblings). If you have a serious disability, you can claim a tax deduction of up to Rs 1.25 lakh.

Section 80DDB

An individual can claim a deduction for medical expenses incurred for themselves or a family member. An person can claim a deduction of up to Rs 40,000 under Section 80DDB. If the person on whose behalf such medical expenses are made is a senior citizen, a deduction of up to Rs 1,00,000 per year can be claimed.

Section 80E

If you accept a loan for higher education, you can claim a tax deduction for the interest you pay on the loan under Section 80E. This loan should have been used to fund higher education for you, your spouse, or your children, or for a student over whom you have legal custody. A tax deduction for principal repayment on an educational loan is not available. The amount of interest you can claim as a deduction under section 80E has no limit. The deduction is available for up to eight years or until the interest is paid, whichever comes first.

Section 80G

Contributions to certain relief funds and charity organisations can be deducted under Section 80G of the Internal Revenue Code. This deduction is only available if the contribution was made by check, draught, or cash. However, monetary donations over Rs 10,000 are not eligible for tax deduction. In-kind contributions, such as food, clothing, and medications, are not eligible for the section 80G deduction.

Section 80GG

The annual tax deduction under section 80GG has been enhanced from Rs 24,000 to Rs 60,000. Allowable deductions include the least of the following:

- Rs. 5000 per month or annually Rs. 60000
- 25% of the adjusted total income of the individual

- Amount derived after deducting 10% of the adjusted total income from the amount of total rent paid in the financial year.

Section 87A rebate

The Section 87A rebate assists taxpayers in lowering their tax liability. If your total income, after Chapter VIA deductions, does not exceed Rs 5 lakh in a financial year, you can claim the rebate. After claiming the Section 87A rebate, your income tax burden is zero.

For the PY 2021-22, the maximum rebate under section 87A is Rs 12,500.

Section 80TTA

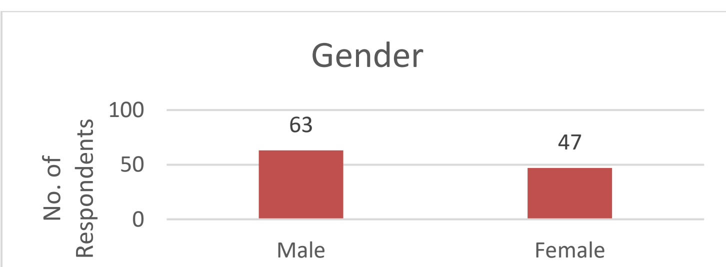
This provision allows an individual or HUF to claim a deduction from gross total income of up to Rs. 10,000/- for interest on deposits in a bank, co-operative society, or post office savings account. Interest income from fixed deposits is not eligible for the Section 80TTA deduction.

Section 80U

Section 80DD is identical to this. Any person who is certified by a medical authority to be a person with disability receives a deduction. In the event of a disabled person, a deduction of Rs.75,000 is allowed. If a person has a serious impairment, the amount is Rs.125,000 (80 percent or more disability).

ANALYSIS AND INTERPRETATION

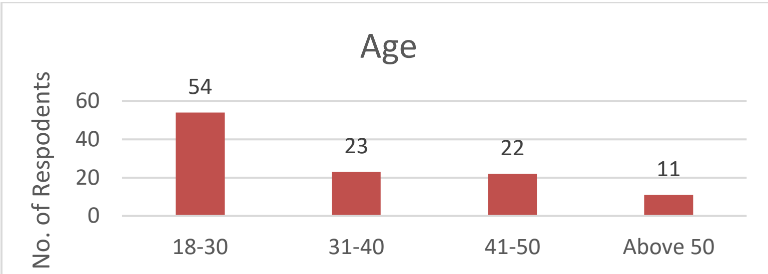
Figure 1: Gender of the respondents



(Computed by Researcher)

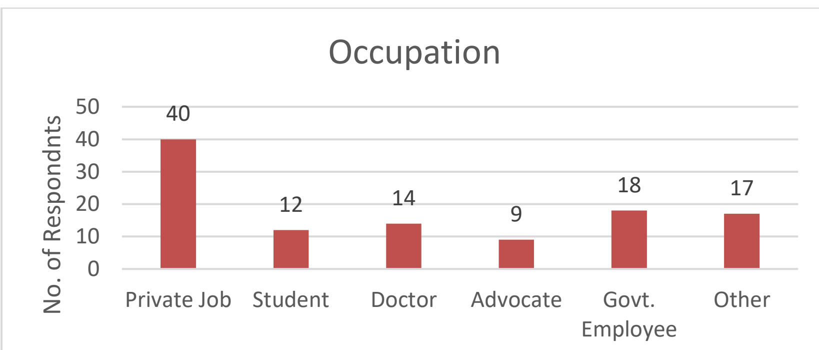
The total numbers of respondents are 110 in which there are 63 male & 47 female respondents. The percentage of male & female respondents is 57.3 % & 42.7 % respectively.

Figure 2: Age of the Respondents



The age of the respondents are classified in to Four groups, In which 54 respondents (49.1%) are from the age group of 18-30, 23 respondents (20.9%) are from the age group of 31-40, 22 respondents (20%) are from the age group of 41-50, 11 respondents (10%) are from the age group of 50 Above.

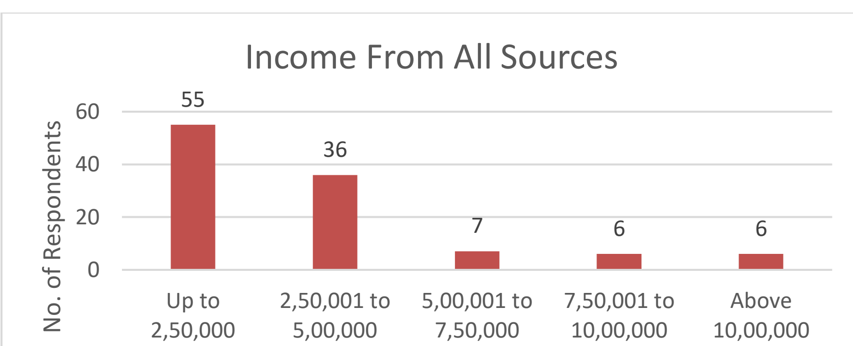
Figure 3: Occupation of the Respondents



(Computed by Researcher)

The total respondents are further divided in to five classes, which includes 40 Private Job(36.4%), 12 Students (10.9%), 14 Doctors (12.7%), 9 Advocates(8.2%) , 18 Govt. Employees (16.4%) , 17 other(15.5%)

Figure 4: Respondents of the Income



(Computed by Researcher)

The respondents below the income 2.5 lakhs are 55 (50%), between the incomes of 2.5 to 5 lakhs are 36 (32.7%), between the incomes of 5 to 7.5 lakhs are 7 (6.4%), between the incomes of 7.5 to 10 lakhs are 6 (5.5%) and the income more than 10 lakhs are 6 (5.5%).

Figure 5: Amount invest in Tax Saving Investment

There are 35 respondents (31.8%), who saves Up to Rs. 50,000, 26 respondents (23.6%), who saves between Rs. 50,000 to 1 lakhs, 34 respondents (30.9%), who save between Rs. 1 lakhs to 1.5 lakhs, 5 respondents (4.5%), who save between Rs. 1.5 lakhs to 2 lakhs, 6 respondents (5.5%), who save between Rs. 2 lakhs to 2.5 lakhs, and 4 respondents (3.6%), who save above Rs. 2.5 lakhs.

Table 1: Preferred Tax Saving Instruments

Tax Saving Instrument	**Strong(5)**	**High(4)**	**Neutral(3)**	**Low(2)**	**Very Low(1)**	**Mean**	**Rank**
PPF/EPF	21	9	23	9	9	2.20	III
LIC	70	12	13	12	10	4.28	I
Housing Loan Int/Principal Amt.	5	37	22	11	6	2.43	II
Tution Fees	2	3	9	18	5	0.81	VI
Fixed Deposit	6	37	10	11	10	2.18	IV
NPS	-	3	2	3	15	0.35	IX
NSC	-	1	4	5	3	0.26	X
Medical Insurance	2	6	22	1	16	1.07	V
Donation	1	1	2	27	6	0.68	VIII
Equity Linnked saving Scheme	3	2	3	13	30	0.80	VII

(Source- Based on primary data)

According to this responses, rank is given to various tax saving instruments. The respondents preferred Life Insurance as the best tax saving instrument and ranked as One. Housing Loan Int/Principal Amt.is the 2nd highest ranked tax saving instrument while respondents ranked PPF/EPF as 3rd. Fixed Deposit ranked as IVth highest preferred tax saving instruments. Medical Insurance ranked as 5th . Respondents preferred Tution Fees as the 6th and Equity Linked Saving Scheme ranked as 7th. Donation ranked as 8th and NPS ranked as 9th and NSC ranked as 10th respectively.

Conclusion

This is Crux of this study, the respondents rank various tax saving instruments according to their priority of saving tax. The most adopted tax saving instrument is Life Insurance, which got the first rank in this study. The second most adopted tax saving instrument is Housing Loan Int/Principal Amt.. Further, the third choice is PPF/EPF, the fourth choice is Fixed Deposit. After that Medical Insurance, Tution fees, Equity Linked saving Certifcate, Donation, NPS and NSC respectively. Any individual who want to Compute income tax and want to tax planning and want to do savings, he/she Should first calculate for total income From all Sources then compute the income tax by deduction and adjustment in Gross income as per tax table structure. If tax is paid in access then he/she get refund from the income tax department.

REFERENCE

1. Kathikeyan, U. (2012). Awareness of tax planning - A study with special reference to government employees. international journal of research in computer application and management , 113-116
2. A., Geetha. C. (2012, February). A study on tax planning measures adopted by the salaried class in kerala. Retrieved january 12, 2022, from mgutheses.in: https://mgutheses.in/page/authors_view.php?q=T%202206&word=G#1
3. Arora, a. (2018). A study of awareness and perception regarding tax saving option among salaried people. indian journal of finance
4. Pimple, S. (2019). An Empirical Study on Perceptions towards Tax Planning among Youth. International Journal of innovation science and research technology , 9-12
5. Planning Commission, Government of India (2001):"Report of the Advisory Group on Tax Policy and Tax Administration for the Tenth Plan", New Delhi
6. Dornbusch, R., Fischer, S., Startz R. (2004). Macroeconomics 9th Ed. New York: McGrawHill.
7. Savita & Lokesh Gautam, (2013)"Income Tax Planning: A Study of Tax Saving Instruments", International Journal of Management and Social Sciences Research (IJMSSR) ISSN: 2319-4421, Volume 2, No. 5, May 2013, P.83 -91

8. Lall,VD , Direct taxes on individual and business income: Economic implications and impact, Economic and Political Weekly Vol 17, No,12 ,1982.

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The Role of Educators in Teaching the English Language for Students with Special Educational Needs in Inclusive Classrooms: Challenges and Strategies to Overcome in the 21st Century Educational Systems

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Abstract

The contemporary study deals with the role of educators in teaching the English language students with special educational needs (SwSENs) in inclusive classrooms: challenges and strategies to overcome in the 21st century educational systems. Most global discourse and practice are in English, which also serves as communication. As everyone is aware, it is a Worldwide or extensive language in which today's world advances by communicating with others to carry out their friendly relationships. Educators play a vital role in obtaining students' attention in English language learning, mainly when English is linked to inclusive classroom settings. Students of various ethnic groups and nations can engage in regular classrooms through inclusive education. It includes offering students with SENs the opportunities to educate on the same level as their peers. In relation, they must study English as a second language. In contrast, teaching in an inclusive classroom is a challenging task. During the teaching and learning process, English educators face several challenges. Educators must be aware of their challenges and develop techniques to address them, especially dealing with students with SEN. The legal position on inclusive education. It is used to describe students with SENs who attend regular school. Teachers and parents of typical students are concerned about a variety of issues. They are unsure whether it will be beneficial. Students with SENs have difficulty fitting in in an environment where their peers mock them. Some students are reluctant to engage in the teaching process or extra-curricular activities with their peers. Unsatisfactory understanding can affect the outcome of insulting comments or inappropriate behaviors. Planning is required at every school stage to ensure a safe and nurturing environment where everyone feels included and understood. This study aims to identify the difficulties that English teachers face. It also provides advice on

how to deal with the issue. In this study, English educators face challenges when teaching students with SEN. As an outcome, they must be concerned with identifying and addressing the concerns they encounter in teaching English to students with SENs in inclusive classrooms in the 21st century educational systems.

Keywords: Role of Educators, English Language, SwSENs, Inclusive Education, Challenges, 21st Century, and Educational Systems

Introduction

Language influences every part of our lives, and our unique identity is formed by it. Imitating what we hear has a cascade effect that connects us to the people and the culture around us. Language can foster a feeling of belonging and identity. As a result of our ability to communicate, we are better able to carry out our obligations. Whenever we're trying to piece together the story of our life, we resort to this method. Our culture may be transferred, maintained, and finally destroyed because individuals have diverse notions about what it is to be human. During the first decade of this century, the number of people who speak English as an additional language significantly increased across the globe. In this area, we'll put our effort. Many individuals now prefer texting and instant messaging over email and other forms of online communication. As the English-speaking world has grown and developed, so has the popularity of English language users. Educators have adjusted their focus as an outcome of the study. We'll look at English teaching and learning tactics and see how they relate to other aspects of language study and technique. The goal of this work is to conduct a study on the best techniques and approaches for teaching English to students with SENs. Teachers of English and children with and without special educational needs were encouraged to complete the initiative. The theoretical portion of the course focuses on teaching English to children with special educational needs, while the practical part contrasts the reactions of instructors and students. Since there are so few options for students with SENs' English language education, it was hardly surprising that people are pushing for more. Teachers should be educated about special education needs as part of standard improvement, as per Morita (2015) and Lowe (2016b), respectively. It is at the core of this investigation whether children with SENs should be taught English by regular school teachers or by support teachers. Another goal of the study is to identify the best successful ways and strategies for teaching English to these young people. Even though these are only two instances of how children with SEN might affect English language teaching-learning, all of the factors discussed above will impact the topic and need inclusive classroom practices and styles of teaching. Wire (2005) has some great case studies on teaching and learning strategies for students with autism spectrum disorders. Students with SEN may also have difficulties while taking English language assessments. Students with SEN who are deaf or have dyslexia may have trouble with reading and writing tests because of their disability to overcome the challenges and strategies in the 21st century educational systems.

The Significance of the English Language

Language is the foundation of any society. As a culture, we find meaning in one another via the Language we communicate. In this nation, many people can communicate well in English. Since there are so many English-speaking teachers and students in an inclusive classroom, there are several methods for teaching the Language. When it comes to English education in schools, the government is reacting to public sentiment for the first time. The academic community largely agrees that English should be taught to students later and more successfully, in line with the widely held scholarly perspective. Opportunities for hands-on exploration and involvement in the natural world are abundant throughout a child's early years. For instance, being able to read in many languages might be helpful too. Reading materials published in languages other than your own may help you enhance your language skills. Most of the world's population speaks English as a first or primary language. In our search for these people, we've been hunting for English-speaking native speakers for a long time. Teaching a textbook for development has long been standard in schools nationwide, thanks to English-language teaching experts and instructors' opinions (Sandberg, J., Maris, M., & De Geus, K. 2011). Some believe English should not be the primary Language in schools and colleges, while others think it should. It's a great idea to limit the usage of foreign languages in higher learning. It doesn't matter whether other languages are offered; English must be taught through the 12th grade in this area. According to most instructors, English is the primary Language of teaching in bachelor's degree courses. The introduction of an educational medium is likely to enrage and scare people. Students may enhance their English communication skills at the English Language Schools of their respective academic institutions. Students learn to read, write, talk, and listen in school. This deters people from learning English as a second language or teaching it to others. In an inclusive classroom, it may be challenging for students and teachers to maintain concentration. English is the primary language of instruction in most academic subjects. The actual effect of this reform on higher education will not be known for many years. Students who learned English as a second language had a higher chance of becoming fluent speakers of the Language (Graddol, 1997). The English Language will never be entirely eradicated because "English is not going away." Because of the currency's increasing importance in the global economy, many people are keen to learn English. People worldwide are learning English as a second language (Crystal, 2004). Political parties, institutions, and other global entities communicate in English. About a quarter of the population is thought to be fluent in English. A paradigm shift seems to occur in parts of the world. Many people have found it challenging to adapt to their new circumstances. However, many students delay studying English until after high school because of its widespread usage in college and university courses. Non-English-speaking pupils are embarrassed, powerless, and discouraged due to this policy. This quick shift significantly impacts students' capacity to perform and learn. Because of this, many students get poor grades, are expelled, or fall short of their goals in school. Having to learn a new language and adapt to a new culture are two of the most challenging tasks faced by college students. Students who don't show up on time or don't pay attention in class might suggest a problem with the student-teacher connection. Translating from one language to another is a common request from students and educators to overcome the challenges and strategies in the 21st century educational systems.

Students With SEN Involved in English Language Learning

English language learners and instructors are standard in twenty-first-century academic institutions. Here, we can't possibly cover all of the many categories of pupils with special needs. This category includes those who are deaf or hard of hearing. Hearing difficulties might make it challenging for students with SENs to pronounce their or others' names. For the sake of one's health, it may be vital to get enough knowledge (Swisher 1989). For deaf English students, the usual technique of focusing on conversational English does not work, as stated by Mayer (2009), since they lack access to the primary form of their original Language. Visual aids might help students who have difficulty understanding what their instructor is saying. Teachers need to keep this in mind while designing the classroom arrangement. Visual aids like board work or pointing to specific parts in their books may be necessary to supplement teachers' spoken instructions and explanations. It's been suggested that deaf or hard-of-hearing children may benefit from a concentration on literacy in foreign language learning by using sign languages (Kontra, Csizer & Piniel 2014). Everyone may benefit from special education, no matter their requirements. As per Nikolic (1986), those with visual impairments might benefit from auditory training and memory growth. However, contrary to widespread assumption, people with ADHD do pretty well in English language lessons (Sparks, Javorsky, and Philips, 2004; 2005). Teachers may benefit from being more aware of how children with special needs impact their ability to learn English. If teachers are more mindful of their limits, students with hearing issues may benefit from language schools that promote reading and writing (Kontra, Csizer & Piniel 2014). Regardless of country, many English language schools cannot accommodate students with SENs. For the most part, school systems do not promote teaching methods that cater to all students. It can meet most of your English language demands outside the national government's supervision. An inclusive classroom may not provide as many challenges for English language learners with SENs as for those without disabilities. As a result of a scarcity of English-language resources on special needs children's education, researchers looked into the experiences of instructors in mainstream schools. Learning how to better aid children in language schools, especially English language schools, came from my personal experience teaching a blind boy. Attending an English-language school that employs this teaching paradigm may benefit any student, regardless of individual learning challenges. Only a tiny percentage of students with disabilities go to special schools and those who do tend to have more severe disabilities. Students with SENs must be integrated into the general population, as the law requires. Teachers and parents of children in public education often ask this question. Children with SENs struggle to learn English in a hostile setting where they are insulted and forced to put in a lot of effort. Teachers are not adequately prepared to deal with these situations and give the best educational aid to these students. Teacher concern is heightened by the extra academic strain these students are under. There is a suggestion that pupils are being denied an education because they cannot finish the course. This group believes that teaching children with special needs takes too long. In the end, these special-needs pupils have no notion of what they've learned after much time and effort. This study will include an examination of the effectiveness of IE in the future. English language education has a dearth of detailed education research compared to other academic subjects. Several books and articles have been written on learning for people with special needs. Instead of focusing on teaching dyslexic children to read and speak English, Schneider & Crombie (2003a) studied the challenge of educating deaf and hard-of-hearing youngsters to read and converse. Only a few works are specifically designed with students with SEN in mind (Artilez & Ortiz 2002; Hamayan, Marler & Damico 2013; Echevaria & Graves 2014). Teachers who do not have access to academic resources at their schools or the financial ability to purchase specialist books are more likely to be without this data. Specifically trained English language teachers may be unprepared to deal with pupils with SENs to overcome the challenges and strategies in the 21st century educational systems.

The Challenges Faces by Students with SEN in the English Language

Challenges in language development are linked to dyslexia. Dyslexic children have difficulty distinguishing between letters and sounds in words because of problems with phonology or long-term memory. By employing bigger fonts, a wider line spacing, and printing on different colored materials, teachers may accomplish this goal, according to Dal (Palladino et al. 2016). Children from non-English-speaking families and their educators have the problem of adjusting to a new educational environment. As per several studies, new students need to learn how to conduct themselves in a manner suitable for their unique school setting. New students have difficulty coping with their educational journey due to a lack of social interaction. So many students with SEN get alienated and unmotivated to participate in school activities because of this situation! In Karanja's (2007) study, many recently arrived students drop out of school considering the problems they encounter in their new communities. Studies reveal that English-speaking students are more likely than their non-English-speaking counterparts to suffer from dyslexia. This research will teach students with SEN English as a second language. Students with SEN, such as learning disabilities, dyslexia, mental retardation, or exceptional intelligence, provide additional challenges for teachers. Students who often miss tests have several challenges, including a lack of access to resources such as direct instruction, curriculum, assessments, and exams. If your kid has been identified with a disability, you may be able to receive these benefits. Current legislation does not adequately support or safeguard students with diverse learning needs, and teachers are not provided enough English language training or help. Students with SEN must be protected from abuse, ridicule, and discrimination if they will ever reach their full potential and handle the stress of testing. Students with SEN have particular challenges while learning English as a second language. Insufficient studies have been done on the challenges faced by children with SEN who are also learning English as a second language. Teachers of English were surveyed for the study. Studies show that immigrants and English teachers face many challenges, but few solutions exist. When new students enter with low levels of English competence, teachers complain that they cannot correctly structure them within their zone of cognitive development (Aljaafreh & Lantolf, 1994). Students' and teachers' performance in the classroom suffered due to their inability to communicate effectively in English (Hopkins et al., 2003; Karanja, 2007, Erhayem, 2019, Jörgen, 2011 Mehkar, 2018). Immigrants' inability to focus on English education is also attributed to their need to study their host country's Language (Erhayem, 2019, Jörgen, 2011, Mehkar, 2018). Students with SEN provide unique challenges for special education teachers. The low self-esteem of their students makes it difficult for remediation teachers to keep these students motivated and upbeat. The ideal way to reinforce their students with SEN may be challenging for remedial teachers to identify as a consequence. English-language adjustment teachers have distinct challenges when teaching English as a second language. A list of materials must be available to remedial course teachers in advance. The student with SEN's enthusiasm for studying English may be diminished if native dialects are spoken in class. Your original Language is more critical and less time-consuming than learning English since you can employ the Language instead of just reading and writing it if necessary. Due to their limited English proficiency, newcomers must put in extra effort in the classroom. These young men are stressed out due to the language barrier. Due to their heavy class loads, these SEN students are believed to be very stressed out. Teaching English to newly arriving children with SEN at a low level should not be the primary responsibility of teachers in inclusive classrooms challenges and strategies to overcome in the 21st century educational systems.

Teacher's Role in Teaching English Language among SENs

How people look for information evolves along with their evolving requirements. Teachers will continue to play an essential role in the future of education, with only minor changes to their positions. It is the teacher's responsibility to teach their students with SEN an awareness of the importance of education. Listen to what your students have to say before merging them into excellent English Language skills. Students with SENs require teachers to construct their classes with them in mind before the first day of school. Teaching children with SEN involves a lot of effort from teachers who are already overworked. Teachers in an inclusive classroom can help students with SEN in their academic development. Teaching and learning techniques are constantly changing in today's fast-paced world. Teachers and parents significantly impact whether or not a child develops an interest in a subject or the English Language. When teaching pupils with SENs, teachers must thoroughly examine the topic and make it relevant to everyday life. Children with SEN need to feel that their instructors care about them, so teachers should be the most exemplary facilitators in all areas for these students. They must support and encourage students to understand their identities to be great facilitators. For students with SEN, teachers must provide the best possible learning environment that reflects their own life on all levels, including their ability to speak English fluently, socially, cognitively, and emotionally. For students with special needs to progress, they need a firm foundation (S. Archanai & K Usha Rani, 2017). There must be a balance between the teacher's and the students' power in the classroom. It's time for them to take control of their destiny. Teachers' responsibilities include classroom management and teaching students' self-management skills (Ince, 2000). Many different duties are involved in teaching English as a second language or language acquisition.

Teachers who work with students who have SEN wear several hats, including those of student, guide, manager, and evaluator. Teachers have a variety of roles in their students' futures. You'll need these four characteristics to be an effective communicator or subject matter expert. To participate entirely in discussion and writing, one must be able to do all four simultaneously. Before developing these abilities, students with SEN need to be motivated to learn the subject or English Language in the first place. Teaching special-needs students are challenging, but it must be approached with care. You might be a student, facilitator, assessor, or even supervisor as a teacher. Teachers must put themselves in their students' shoes to successfully teach English to their students. Because of this, students with SEN are more likely to develop a lifelong love of learning. Students with SEN may learn about teaching and other aspects of the curriculum in class as part of their preparation. Think about the roles you'd most want your instructor to play and how this predisposition ties to your entire approach to learning when identifying the scenario for students with SENs. When a teacher's performance is assessed positively, their career prospects improve. To judge something in English education is a profoundly personal experience. Learning English as a second language is challenging for students with SENs. Teachers confront an uphill battle when it comes to teaching students grammar, vocabulary, reading, and writing. A teacher must be a good judge of character when assessing a student. A teacher's assessment must be fair and truthful to do a student's career justice. Mistakes caused by students with SEN allow them access to a wide range of information. When working with SEN students, evaluations should stress successes rather than errors. In response to their concerns, a group of English teachers may be able to assist their co-workers in enhancing the effectiveness of their students' academic tasks. Many studies are evaluated by scientific teachers with the assistance of English teachers who serve as educational experts. To help their students with SENs become more effective communicators, they examine the methods they employ in their inclusive classrooms, challenges, and strategies to overcome in the 21st century educational systems.

English Language Teaching-Learning in Inclusive Classrooms

All students have the opportunity in classroom activities now that IE has been adopted. All children, including those with SEN, have equal access to a high-quality education, regardless of social class. Over this, children will also have to learn English. Being a teacher in a classroom setting may be challenging. Many problems and barriers confront English teachers in their employment. Teachers of students with SEN must be aware of their challenges and design strategies for overcoming them. As per the outcome of this study, English teachers face several challenges. Guidance on how to cope with problems is a bonus. As a result, it is based on extensive interviews and other in-depth research. As per this study's experts, English teachers dealing with students with SEN confront various problems. They must focus on figuring out what's wrong and devise solutions that will work. To begin, visual aids are employed. Inclusion necessitates a broader strategy than simply having a child sit in a classroom. As a unique individual, he should be treated as such, even if it means going beyond what is currently achievable in our educational system. The highest interests of society are served when children with SENs achieve academically and socially. As per Haver (2009), you should ensure that your classroom has all the materials you'll need to succeed in English class. In inclusive classrooms, Haver encourages teachers to use props and visuals well. Photos were also used to create these visual aids. Classrooms for students with SENs need to be large enough to accommodate a wide range of educational activities and pleasant sufficient to keep them motivated and interested in their studies. Students with SENs, in Ms. Smith's opinion, should be allowed the opportunity to make errors without fear of being judged based on their own experiences. To ensure that the people you're attempting to reach comprehend what you're trying to communicate, make sure you're making direct eye contact with them. SEN assistance from a teacher might help kids improve their performance in class. This might inspire them to make more attempts. Students with SEN can benefit from using English as a teaching method. Teachers use a variety of strategies to help children learn, but modelling is one of the most successful. Teachers may ensure that all students receive the high-quality education they deserve by employing these strategies and a patient attitude. Children with SEN can no longer hide behind their schools when the time comes. An English-language school needs to have periodicals, images, study guides, puppet performances, and activities to use as visual aids. Children with SENs should participate in activities and events that will help them improve their language skills. As per most academics, inclusive classrooms don't work as intended. They say kids with SEN might harm other students if they lack self-control. The ideas presented were easily grasped. The intended goals of the English Language were not achieved since the lesson had to be repeated frequently. Yet, a few students with SEN were gloomy about the whole thing. Sadness and a lack of self-assurance defined this group. It was a result of their expulsion from the group. The outcomes were a lack of self-worth and social inclusion (Bullock, 1992). If a link is "uncomfortable," it might lead to "less pleasant perceptions of schools, higher degrees of antipathy to schools, and worse educational results." As per experts, students with SEN are undervalued by society (Kemple, 1991). They are entitled to the same level of concern and care as their peers. As a result, they could not develop personally or further their English academic goals due to their exclusion. As a result, children who do not attend their local schools miss various opportunities to become fully integrated members of society in their inclusive classrooms, challenges, and strategies to overcome in the 21st century educational systems.

How challenges were Overcome

As per a study, new students and teachers face unique challenges in diverse, inclusive classrooms. More than one issue has to be addressed in this case. Some solutions are being adopted to help immigrants deal with their challenges in their new environments, but there is no one-size-fits-all strategy. Hundreds of thousands of people are fluent in the English Language.

Many of the pupils at the school, even those fluent in English, struggle to use it in their everyday lives even though it is their first Language.

- In a few schools, mainstream language assistance teachers are employed to enhance students' English language skills. Because they can work with students one-on-one, these instructors are viewed as gold mines by those just starting in the field. For instance, (Smyth et al. Theodore (2007). Gándara and co-workers. Access to English language teachers who can help these youngsters academically and personally is essential. Moreover, they become students' confidantes and friends (Karanja, 2007).
- Students in inclusive classrooms must acquire English as a second language in addition to their native tongue. In elementary school, students with SEN had to contend with challenges that hindered their language acquisition. Now you will discover advice on overcoming some of these challenges and ideas for making English learning more pleasant.
- Immigrant children have many challenges, and one of the best ways to alleviate these difficulties is for teachers to know better their students' backgrounds (Endo and Miller, 2004; Karanja, 2007). Knowing what their students require helps teachers build better methods of instruction. Teachers and parents can work together to learn more about the backgrounds of new students, as per Karanja (2007). New ways of teaching may emerge through a teacher's interactions with their students with SEN.
- Several groups are using peer tutoring to help new immigrants learn the English Language (Karanja, 2007). Most teachers allow their pupils to work in groups so that they may draw on one another's skills and expertise. This might be an excellent way for kids to make new friends and advance their careers simultaneously. For adaptation, all new students are partnered with classmates their age as part of a "buddy system" (Karanja, 2007).
- Using a collaborative tool and peer tutoring for newcomers who have struggled with the English Language is not the best alternative.

Conclusion

Studying many languages at once is practically impossible because of the structure of academic institutions. When translating a text, we must first understand the original's meaning and language structure to do so correctly. There are no assurances that all students with SEN will be able to answer test items at the same level, so it's challenging to plan. Test takers with SEN who are apprehensive. Students with SEN should be allowed to excel in the classroom. As their English improves, more students with SEN ask for their support. To teach children with SEN effectively, we must be thoroughly aware of the methods and resources available. Students with SEN are helped by everyone in the inclusive classroom, not just their teachers. Teachers, schools, parents, and the government must all work together if we are to achieve this goal. It is challenging for students with SEN and their teachers to face the demands of the 21st-century educational system. As per studies, children with SEN do not need to attend special schools to acquire English. Second language teaching should be offered to students who can still not communicate in their native language. Learning a new language may improve your ability to think, share your ideas clearly, and boost your self-confidence. Students with SEN require classroom adaptations that consider their students' diverse learning styles. Because these tactics are challenging, create conversation, and encourage students with special needs to engage in inclusive classrooms, they can benefit typical students in an inclusive classroom.

References

1. Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The modern language journal*, *78*(4), 465-483.
2. Archana, S., & Usha Rani, K. (2017). Role of a teacher in English language teaching (ELT). *International Journal of Educational Science and Research (IJESR)*, *7*(1), 1-4.
3. Artiles, A. J., & Ortiz, A. A. (2002). English Language Learners With Special Education Needs.
4. Bonifacci, P., Canducci, E., Gravagna, G., & Palladino, P. (2017). English as a foreign language in bilingual language-minority children, children with dyslexia and monolingual typical readers. *Dyslexia*, *23*(2), 181-206.
5. Bullock, D. G. (1992). Crop rotation. *Critical reviews in plant sciences*, *11*(4), 309-326.
6. Crombie, M., & Schneider, E. (2003). *Dyslexia and Modern Foreign Languages: Gaining Success in an Inclusive Context*. David Fulton.
7. Crystal, B., & Crystal, D. (2004). *Shakespeare's words: a glossary and language companion*. Penguin UK.

8. Erhayem, M., Hosouna, B., & Zidan, M. (2019). Modeling and simulation of sorption of Pb (II) ions onto synthesized graphene oxide surface. *J Nanosci Nanotechnol Appl*, *3*, 301.
9. Gaul, L., Klein, P., & Kemple, S. (1991). Damping description involving fractional operators. *Mechanical Systems and Signal Processing*, *5*(2), 81-88.
10. Graves, A., & Jaitly, N. (2014, June). Towards end-to-end speech recognition with recurrent neural networks. In *International conference on machine learning* (pp. 1764-1772). PMLR.
11. Graddol, D. (1997). *The future of English?: A guide to forecasting the popularity of the English language in the 21st century*. British Council.
12. Hamayan, E. V., Marler, B., Lopez, C. S., & Damico, J. (2013). *Special education considerations for English language learners: Delivering a continuum of services*. Philadelphia: Caslon Publishing.
13. Hopkins, D. (2003). *School improvement for real*. routledge.
14. Karanja, L. (2007). ESL learning experiences of immigrant students in high schools in a small city. *TESL Canada Journal*, 23-41.
15. Mayer, R. E. (2014). Incorporating motivation into multimedia learning. *Learning and instruction*, *29*, 171-173.
16. Nikolić, T. (1986). Teaching a foreign language to visually impaired children in school. *Language teaching*, *19*(3), 218-231.
17. Okalebo, J. R., Othieno, C. O., Woomer, P. L., Karanja, N. K., Semoka, J. R. M., Bekunda, M. A., ... & Mukhwana, E. J. (2007). Available technologies to replenish soil fertility in East Africa. In *Advances in integrated soil fertility management in sub-Saharan Africa: Challenges and opportunities* (pp. 45-62). Springer, Dordrecht.
18. Padurean, A. N. (2014). Teaching English Language to Children with Special Educational Needs. *TEM Journal*, *3*(4), 309.
19. Piniel, K., Csizér, K., & Kontra, E. (2014). Validation of a questionnaire for measuring individual differences of hearing impaired language learners. *Studies in honour of Marianne Nikolov*, 274-288.
20. Rowan, A., Bates, C., Hulme, W., Evans, D., Davy, S., Kennedy, N. A., ... & Goldacre, B. (2021). A comprehensive high cost drugs dataset from the NHS in England-An OpenSAFELY-TPP Short Data Report. *Wellcome open research*, *6*(360), 360.

21. Sandberg, J., Maris, M., & De Geus, K. (2011). Mobile English learning: An evidence-based study with fifth graders. *Computers & Education*, *57*(1), 1334-1347.
22. Sparks, R. L., Javorsky, J., & Philips, L. (2004). College students classified with ADHD and the foreign language requirement. *Journal of Learning Disabilities*, *37*(2), 169-178.
23. Smyth, B. (2007). Case-based recommendation. In *The adaptive web* (pp. 342-376). Springer, Berlin, Heidelberg.
24. Swisher, K., & Deyhle, D. (1989). The styles of learning are different, but the teaching is just the same: Suggestions for teachers of American Indian youth. *Journal of American Indian Education*, 1-14.
25. Wire, V. (2005). Autistic spectrum disorders and learning foreign languages. *Support for Learning*, *20*(3), 123-128.

71 વિદ્યાર્થીઓના જાતિ અને શૈક્ષણિક સ્તરના સંદર્ભમાં સમાયોજન નો તુલનાત્મક

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- સંશોધન સારાંશ

આ સંશોધનનો મુખ્ય હેતુ એ હતો કે શૈક્ષણિક સ્તરના સંદર્ભમાં કોલેજના વિદ્યાર્થીઓમાં સમાયોજનનો અભ્યાસ કરવો. કુલ નિદર્શ ૮૦ વિદ્યાર્થીઓનો હતો. જેમાં ૪૦ વિદ્યાર્થી આર્ટસના છોકરા અને છોકરીઓ અને ૪૦ વિદ્યાર્થી કોમર્સ શાખાના છોકરા અને છોકરીઓ હતા. આ સંશોધનમાં જે પ્રશ્નાવલીનો ઉપયોગ કરેલ છે તે આર.કે.ઓઝા. અને બેલ સમાયોજન સંશોધનીકાનું ગુજરાતી રૂપાંતર ડો.બી.ડી.ઢીલા અને ગુંજન ભટ્ટ રચિત સમાયોજન ની પ્રશ્નાવલી છે. અહી આંકડાશાસ્ત્રીય પૃથ્થકરણ 'ટી' ટેસ્ટ દ્વારા સંશોધનની સાર્થકતા તપાસવામાં આવેલ છે. સંશોધનમાં આર્ટસ અને કોમર્સના વિદ્યાર્થીઓ વચ્ચે સાર્થક તફાવત જોવા મળેલ છે, જેમાં આર્ટસ અને કોમર્સની વિદ્યાર્થીનીઓમાં સમાયોજન વધુ જોવા મળે છે.

ચાવીરૂપ શબ્દો: સમાયોજન, આર્ટસ અને કોમર્સ શાખા, છોકરા અને છોકરીઓ

- પ્રસ્તાવના :

માનવીના જન્મથી મૃત્યુ સુધી પ્રાણી કે મનુષ્ય વર્તન આંતરિક અને બાહ્ય રીતે વાતાવરણના વિશિષ્ઠ ક્ષેત્રોમાં સમાયોજન સાધવા માટે તત્પર હોય છે.એટલે જ તો સમાયોજન એક વ્યક્તિગત પ્રક્રિયા છે. બાળક જન્મે તરત જે તે વાતાવરણ સાથે સમાયોજન શરૂ થઇ જાય છે. નવ પરણિત સ્ત્રી સાસરિયા સાથે સમાયોજન કરવું પડે છે. નોકરી ધંધામાં 'બોસ'ને અનુકુળ થવું પડે છે.સમાયોજન સાધવા પ્રાણીમાત્ર ને સતત સક્રિય રહેવું પડે છે.. કોરોના ની મહામારી થી બચવા લોકો 'માસ્ક' પહેરી લેતા અને પોતના નિવાસ સ્થાનમાં જ રહેતા હતા (2019) વિદેશમાં અભ્યાસ કરવા જઈએ તો વિદેશી સંસ્કૃતિ સાથે મેળ બેસાડવો પડે છે .આપણા ચારેબાજુ સમાયોજન સાધવાના પ્રયત્નો ચાલુ જ રહે

છે.સમાયોજન સધાયું તો ઠીક,નહીતર ઝગડા ,સંઘર્ષ,ઘર્ષણ અને હતાશા અને છેલ્લે મનોવિકૃતિ પણ આવી જાય!

રવીન્દ્રનાથ ટાગોરે કહ્યું છે.તેમ માલિકી,હક્ક જમાવવો એ માનવીની મોટી મર્યાદા સૂચવે છે.જેને પરિણામ અંતે માનવીના તન અને મનનું આરોગ્ય જોખમાય છે.સાચા સુખ,સંતોષ,શાંતિ અને આનંદ શામાં રહેલા છે.એ જાણવા માટે સમાયોજનનું મનોવિજ્ઞાન શાખાનો અભ્યાસ કરવો ખુબ મહત્વનો છે.તુલસીદાસે પણ કહ્યું છે કે સમાજમાં આપણે બધા સાથે હળીમળીને ચાલવું જોઈએ જેથી માનસિક શાંતિ અને કાર્યસિદ્ધિ બંને પ્રાપ્ત થાય છે.

સમાયોજન એ ફક્ત મનોવિજ્ઞાનનું જ પરિવર્તનશીલ પરિબળ નથી પરંતુ તે માનવ – જીવન માટેનો એક અગત્યનો તબક્કો અથવા શરત છે.

- સમાયોજનનો અર્થ :

"સમાયોજન એ વ્યક્તિ અને વાતાવરણ વચ્ચેની ક્રિયા-પ્રતિક્રિયા" સમાયોજનમાં "બે" શબ્દો રહેલા છે. સમ-સમાયોજન :સરખી ગોઠવણી કરવી.

"પરિવર્તન સાથે અસરકારક રીતે કામ પૂરું પાડવું એટલે સમાયોજન"

માણસે જીવનમાં ડગલેને પગલે અનુકુલન કરવાનું હોય છે.કંઇક જતું કરવાનું હોય છે. બાંધછોડ કરીવાની હોય છે.કે જીવન સાથે સમાધાન કરવાનું છે. વ્યક્તિગત ઈચ્છાઓ, શોખો, વલણો, રસો, ટેવો, આદર્શો, મૂલ્યો, મહત્વાકાંક્ષાઓને જરૂર પડ્યે ક્યાંક તો ત્યજવા પડે છે અથવા તો બાંધછોડ કરવા તત્પર રહેવું પડે છે. માણસ ધારે છે તે પાર પડતું નથી.તેથી બાહ્ય વાતાવરણ કે સંજોગો પરિસ્થિતી પ્રમાણે માણસને જીવનની યોજના ઘડવી પડે છે.તેને સમાયોજન સાધવું પડે છે.અને તે જીવનભર સાધવું પડે છે.તેથી જ આપણે કહી શકાય કે,

"જીવન એટલે જ સમાયોજન સાધવું"

"સમાયોજન એટલે પોતાની જરૂરિયાતોના સંતોષ અને પોતાના વાતાવરણ વચ્ચે સમાયોજન સાધવાના વ્યક્તિના પ્રયત્નોની અસરકારકતા." - કોલમેન

"સમાયોજન આંતરક્રિયાની એક પ્રક્રિયા છે.એ સતત પ્રક્રિયા હોવાથી કદી પૂર્ણ થતી નથી એ પ્રક્રિયામાં કાર્ય-કારણ સંબંધો જોઈ શકાય છે." - લેહનર અને ક્યુબ

"સમાયોજન એ જોવાની પ્રક્રિયા છે કે વ્યક્તિ અને તેના વાતાવરણ વચ્ચે સુમેળ છે." - સોરેમ્સ અને મામ

"સમાયોજન એટલે વ્યક્તિ અને વાતાવરણ વચ્ચે અસરકારક સંબંધોનું સ્થાપન." - કોલમેન (૧૯૬૯)

વ્યાખ્યા ઉપરથી કહી શકાય કે સમાયોજનની અસરકારકતા પર વ્યક્તિ અને તેનું વાતાવરણ એમ બંને બાબતો આધારિત છે.વ્યક્તિનું વાતાવરણ તેની જરૂરિયાતો સંતોષવામાં મદદરૂપ પણ થાય છે.અને અનુભવો પણ લક્ષ્ય પ્રાપ્તિ માટે સહાયરૂપકો વિધ્નરૂપ છે.

- પૂર્વ થયેલા અભ્યાસો :

૧. ૧૯૯૨ માં ચૌધરી બિનય.કે અને સિન્હા રનબી વ્યક્તિગત ઘટકના સંદર્ભમાં સમાયોજન અભ્યાસ કરેલ છે.જેમાં સામાજિક સમાયોજન ક્ષેત્રમાં ઉચ્ચ બહિર્મુખી નીચ બહિર્મુખથી અલગ પડે છે.પછીના સમાયોજન કરતા પહેલાનું સમાયોજન વધારે સારું છે.ઉચ્ચ અને નીચ લાગણીશીલતાને સમગ્ર એ ચાર સમાયોજનમાં મહત્વની રીતના અલગ પડતા હતા.

૨. ૨૦૦૧,એપ્રીલ હિમરલી,ગોમરી આર.એલ. મિસોરી યુનિવર્સીટી,યુ.એસ. માં કોલેજ ભૂમિકામાં પોતાને અપ્રગટ કરવું અને સમાયોજન પર અભ્યાસ કરેલ છે.જેમાં સામાજિક જૂથ ગોઠવણમાં પોતાની જાતને અપ્રગટ બતાવે છે કે તેનું સમાયોજન નબળું બતાવે છે.જેક્સનના ૧૯૮૧ નું પ્રમાણ પણ સ્ત્રીઓ કરતા પુરુષો ઉંચો સ્કોર બતાવે છે.અને જાતિ માટે કોઈ પારસ્પરિક અસર જોવાઈ નથી.આ રીતે પોતાની જાતને અપ્રગટ કરવી તે કુસમાયોજન સ્કોર સાથે સંકળાયેલી છે.જે છોકરા અને છોકરી બંનેમાં સરખું પ્રમાણ જોવા મળેછે

3. ૨૦૦૧, અમીન, એમેલીયા હેરેલ, ઉત્તર પશ્ચિમ યુનિવર્સિટી યુ. એસ. માં આરબ કોલેજના વિદ્યાર્થીઓનો સાંસ્કૃતિક અનુકૂળતા અને મનો વૈજ્ઞાનિક સમયોજન વચ્ચેનો અભ્યાસ કર્યો. તેમાં ગોરા

વિદ્યાર્થીઓ અને આરબ અમેરિકન કોલેજના વિદ્યાર્થીઓનો સમાવેશ કરવામાં આવ્યો હતો. જેમાં અભ્યાસ કર્યા બાદ એવા તારણો જોવા મળ્યા કે આરબ અમેરિકન વિદ્યાર્થીઓ ગોરા વિદ્યાર્થીઓ કરતા સારુ સમાયોજન સાધી શક્યા હતા. જયારે લાગણીશીલતાની બાબતમાં નીચું પ્રમાણ જોવા મળ્યું હતું. કારણકે તેઓ રૂઢિ ચુસ્તતામાં માનતા હતા.

૪. ૨૦૦૭,મિત્સુ વી.જોશી એ નોકરી કરતી અને નોકરી ન કરતી સ્ત્રીઓના અહમ સામર્થ્ય અને સામાજિક સમાયોજનનો તુલનાત્મક અભ્યાસ કર્યો.અભ્યાસ કર્યા બાદ તારણો એ મળ્યા કે નોકરી કરતી અને નોકરી ના કરતી સ્ત્રીઓના અહમ સામર્થ્યમાં સાર્થક તફાવત જોવા મળે છે.અહમ સામર્થ્ય અને સામાજિક સમાયોજન વચ્ચે ૦.૭૩ જેટલો વિધાયક સહસંબંધ જોવા મળેછે.

- હેતુઓ :

  ૧. આર્ટસ કોલેજના છોકરા અને છોકરીઓના સમાયોજનનો તુલનાત્મક અભ્યાસ કરવો .

  ૨. કોમર્સ કોલેજના છોકરા અને છોકરીઓના સમાયોજનનો તુલનાત્મક અભ્યાસ કરવો .

  • ઉત્કલ્પના :

  HO1. આર્ટસ કોલેજના છોકરા અને છોકરીઓના સમાયોજનન વચ્ચે કોઈ સાર્થક તફાવત જોવા મળશે નહિ.

  HO2. કોમર્સ કોલેજના છોકરા અને છોકરીઓના સમાયોજન વચ્ચે કોઈ સાર્થક તફાવત જોવા મળશે નહિ.

- સંશોધન પદ્ધતિ

  ❖ નિદર્શ **:**

પ્રસ્તુત સંશોધનને ધ્યાનમાં રાખીને કોલેજમાં અભ્યાસ કરતા કુલ ૮૦ સમાયોજનના વિદ્યાર્થીઓની પસંદગી કરવામાં આવી હતી.જેમાં પ્રત્યેક જૂથમાં કુલ ૪૦ છોકરા અને ૪૦ છોકરીઓની પસંદગી કરવામાં આવી હતી.

❖ સાધનો :

સમાયોજનની સંશોધનીકાના મૂળ રચિતા આર.કે.ઓઝા છે અને બેલ સમાયોજન સંશોધનીકાનું ગુજરાતીમાં રૂપાંતર ડો.બી.ડી.ઢીલા અને ગુંજન ભટ્ટ કરેલ છે.બેલની સમાયોજન સંશોધનીકાના જે ૨ બિંદુ માપનની બનેલી છે.આ બે બિંદુ “હા” અને “ના” માં આવેલા છે.આ માપન તુલામાં કુલ ૧૪૦ વિધાનો આપેલા છે.પ્રસ્તુત સ્કેલના કુલ ૪ વિભાગ છે.(ઘર,સ્વાસ્થ્ય,સામાજિક,આવેગિક)

- સંશોધન પરીવર્ત્યો :
  1. સ્વતંત્ર પરીવર્ત્યો:
     - જાતિ(છોકરાઓ -છોકરીઓ)
     - શૈક્ષણિક સ્તર (આર્ટસ અને કોમર્સ)
  2. આધારિત પરીવર્ત્યો:
     - સમાયોજનની કસોટી
- સંશોધન ડીઝાઈન

આ સંશોધનનો હેતુ શૈક્ષણિક સ્તરના સંદર્ભમાં કોલેજના વિદ્યાર્થીઓનો સમાયોજનનો અભ્યાસ કરવો.જેમાં કુલ ૪૦ વિદ્યાર્થીઓ જે આર્ટસ કોલેજ ના હતા અને ૪૦ વિદ્યાર્થીઓ જે કોમર્સ કોલેજના હતા એમ થઇ ને કુલ ૮૦ વિદ્યાર્થીઓ લેવામાં આવ્યા.અને ડો.બી.ડી.ઢીલા અને ગુંજન ભટ્ટ ની રચિત સમાયોજન ની સંશોધનીકા ઉપયોગ કરવામાં આવી.જેમાં ‘ટી’ કસોટી દ્વારા ગણતરી કરવામાં આવી.

- પરિણામ અને ચર્ચા

આ સંશોધનનો મુખ્ય હેતુ શૈક્ષણિક સ્તરના સંદર્ભમાં કોલેજના વિદ્યાર્થીઓનું સમાયોજનનો અભ્યાસ કરવાનો હતો.જેમાં આંકડાશાસ્ત્રીયપૃથ્થકરણ ૨× ૨ ફેક્ટોરીયલડીઝાઈન દ્વારા ગણતરી કરવામાં આવેલ છે.આંકડાશાસ્ત્રીય માહિતી ‘ટી’ કસોટી દ્વારા કરવામાં આવેલ છે.જે નીચે મુજબ છે.

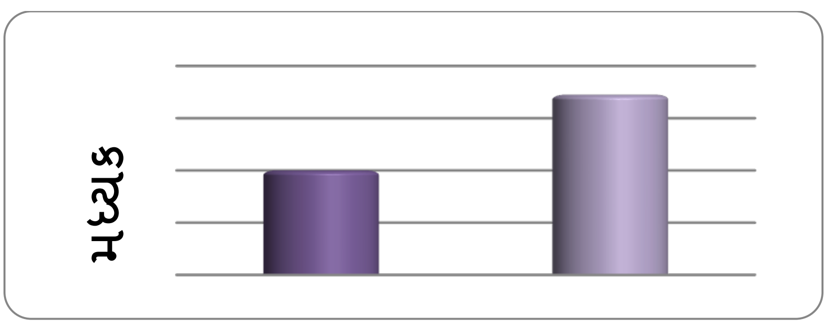
કોષ્ટક ૧ : આર્ટસ કોલેજના છોકરાઓ અને છોકરીઓનું સમાયોજનનું કસોટીના પ્રાપ્તાંકોના મધ્યકો દર્શાવતું કોષ્ટક

HO.1 આર્ટસ કોલેજના છોકરાઓ અને છોકરીઓના સમાયોજન વચ્ચે કોઈ સાર્થક તફાવત જોવા મળતો નથી.

વિદ્યાશાખા આર્ટસ	**N**	**Mean**	**SD**	**T**	**Sing.**
છોકરાઓ	૪૦	૪૦.૦૫	૧૨.૪૩	૬.૮૯૭	૦.૦૧(S)
છોકરીઓ	૪૦	૬૯.૦૦	૨૧.૬૫		

આર્ટસ કોલેજની છોકરીઓમાં વધુ મળેલ મધ્યક ૬૯.૦૦ છે. અને છોકરાઓમાં ૪૦.૦૫ છે. બંને વચ્ચે તફાવત ૨૮.૯૫ છે.જયારે પ્રમાણિત વિચલન છોકરાઓમાં ૧૨.૪૩ અને છોકરી ઓમાં ૨૧.૬૫ છે. 'ટી' ની કીમત ૬.૮૯૭ જોવા મળે છે.તેથી ૦.૦૧ કક્ષા એ સાર્થક જોવા મળે છે.તેથી કોલેજના છોકરાઓ અને છોકરીઓના સમાયોજન વચ્ચે સાર્થક તફાવત જોવા મળે છે. માટે અહી શૂન્ય પરિકલ્પનાનો અસ્વીકાર થાય છે.

<u>ચાર્ટ ૧ : આર્ટસ કોલેજના છોકરાઓ અને છોકરીઓના સમાયોજનનો મધ્યક દર્શાવતો સ્થંભાલેખ.</u>



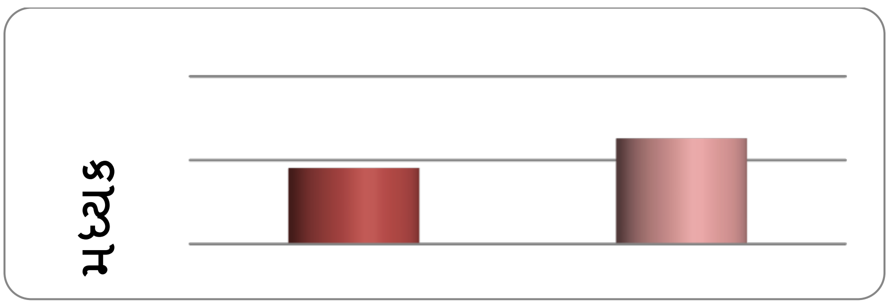
કોષ્ટક ૨ : કોમર્સ કોલેજના છોકરા અને છોકરીઓના સમાયોજન કસોટીના પ્રપ્તાંકોના મધ્યકો દર્શાવતું કોષ્ટક.

HO.2 કોમર્સ કોલેજના છોકરા અને છોકરીઓના સમાયોજન વચ્ચે કોઈ સાર્થક તફાવત જોવા મળતો નથી.

વિદ્યાશાખા કોમર્સ	N	Mean	SD	T	Sing.
છોકરાઓ	૪૦	૪૫.૩૫	૬.૪૮	૫.૯૦	૦.૦૧(S)
છોકરીઓ	૪૦	૬૩.૦૧	૧૬.૩૩		

કોમર્સ કોલેજની છોકરીઓમાં વધુ મળેલ મધ્યક ૬૩.૦૧ છે.અને છોકરાઓમાં ૪૫.૩૫ છે. બંને વચ્ચે તફાવત ૧૭.૬૬ છે.જયારે પ્રમાણિત વિચલન છોકરાઓમાં ૬.૪૮ અને છોકરીઓમાં ૧૬.૩૩ છે. 'ટી' ની કીમત ૫.૯૦ જોવા મળે છે.તેથી ૦.૦૧ કક્ષા એ સાર્થક જોવા મળે છે.તેથી કોમર્સ કોલેજના છોકરા અને છોકરીઓના સમાયોજન વચ્ચે સાર્થક તફાવત જોવા મળે છે. માટે અહી શૂન્ય પરિકલ્પનાનો અસ્વીકાર થાય છે.

ચાર્ટ ૨ : કોમર્સ કોલેજના છોકરા અને છોકરીઓના સમાયોજનનો મધ્યક દર્શાવતો સ્થંભાલેખ.



- તારણ

આર્ટસ અને કોમર્સ વિદ્યાર્થીઓ અને વિધાર્થીનીઓમાં સમાયોજન વચ્ચે સાર્થક તફાવત જોવા મળે છે.જે આર્ટસ ના વિદ્યાર્થીઓ માં ૦.૦૧ લેવલ અને કોમર્સ ના વિદ્યાર્થીઓમાં ૦.૦૧ લેવલ પર સાર્થક તફાવત જોવા મળેછે. તેથી અહી શૂન્ય પરિકલ્પના નો અસ્વીકાર થાય છે.અહી વિદ્યાર્થીઓને માતા પિતાની મદદ,આર્થિકસ્તર,ગરીબી,શિક્ષણ પદ્ધત્તિમાં સુધારા,વિદ્યાર્થીઓને શિક્ષકો દ્વારા વ્યવસ્થિત માર્ગદર્શન,સફળતા મેળવવા માટે ટેકનીક વગેરેનો ઉપયોગ કરવો જરૂરી છે.ત્યાર બાદ વિદ્યાર્થીઓના અંગત પ્રશ્નો પણ હોઈ શકે છે.જેના કારણે તેઓમાં સમાયોજન ના પ્રશ્નો ઉભા થતા હોયછે.

- સંદર્ભ ગ્રંથો

• ચૌધરી બિનય કે.એમ .સિન્હા શીબી (૧૯૯૫) વ્યક્તિગત ઘટકના સંબંધમાં સમાયોજનનો અભ્યાસ.પટણા યુનિવર્સીટી,કોમર્સ કોલેજ,પટણા

• હિમચીલી,ગોમરી,આર.એલ.(૨૦૦૧)કોલેજની ભૂમિકામાં પોતાને અપ્રગટ કરવું અને સમાયોજન.યુનિવર્સીટી મિસોર,મનોવિજ્ઞાન ભવન,યુ.એસ.

• મિત્સુ વી.જોશી (૨૦૦૭)નોકરી કરતી અને નોકરી ના કરતી સ્ત્રીઓના અહમ સામર્થ્ય અને સામાજિક સમાયોજનનો તુલનાત્મક અભ્યાસ.સોરાષ્ટ્ર યુનિવર્સીટી.

• જગજીવન સી.ભોરણીયા(૨૦૧૦) અનાથ આશ્રમમાં રહેતા તરુણોમાં આવેગાત્મક પરિપક્વતા માનસિક સ્વાસ્થ્ય અને સમાયોજન અંગેનો મનોવૈજ્ઞાનિક અભ્યાસ.(પીએચ.ડી સૌરાષ્ટ્ર યુનિવર્સીટી,ગુજરાત.)

• એન. ડી. ઝાલા (2016) શાળામાં અભ્યાસ કરતા વિદ્યાર્થીઓના સામાયોજન અને માનસિક સ્વાસ્થ્ય, એમે.ગુજરાત યુનિવર્સિટી

• અરવિંદ શાહ (૨૦૧૨),સંયોજનનું મનોવિજ્ઞાન,પાશ્વ પ્રકાશન,અમદાવાદ

• WHO (2001) The world health report mental health new understanding new hope, (WHO 2001) Geneva, who

• www.sodhganga.com
• www.google.com
• www.apa.org

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વાર્તાકાર : રામનારાયણ વિશ્વનાથ પાઠક

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વાર્તાકાર : રામનારાયણ વિશ્વનાથ પાઠક

ઈ.સ. ૧૯૨૨ થી ૧૯૫૫ સુધી, લગભગ ૩૪ વર્ષ, અવિરત સાહિત્યસેવા કરનાર રામનારાયણનો જન્મ ધોળા તાલુકાના ગણોલ ગામે, એમના મોશાળમાં, પ્રશ્નોરા નાગર જ્ઞાતિમાં ઈ.સ. ૧૮૮૭ના એપ્રીલની ૮મી તારીખે (ચૈત્ર પૂર્ણિમાએ) થયો હતો. તેમનું મૂળ વતન તો હતું ધોળકા તાલુકાનું ભોળાદ. પિતા વિશ્વનાથ સદારામ પાઠક સંસ્કૃતના વિદ્વાન હતા. અને શ્રીમન્નથુરામ શર્માના શિષ્ય હતા. રામનારાયણ નાનપણમાં 'બટુભાઈ' નામથી ઓળખાતા. તેમણે શાળાનું શિક્ષણ જેતપુર, રાજકોટ, જામખંભાળીયા અને ભાવનગરમાં લીધું. ૧૯૦૮ માં બી.એ.ની પરિક્ષા પ્રથમ વર્ગમાં પાસ કરી. એ પછી ૧૯૧૧માં એલ.એલ.બી. થઇ અમદાવાદમાં વકીલાતની શરૂઆત કરી. ૧૯૧૮માં તેમના પત્ની અવશાન પામ્યા અને એક જ વર્ષમાં એમની એકની એક પુત્રી સરલા અને બહેન સાવિત્રીનું પણ અવશાન થતાં તેમનું મન વાનપ્રસ્થ જેવું થઇ ગયું. ૧૯૧૯માં તેઓ ટાઈફોઈડની ગંભીર બીમારીમાં સપડાયા પણ એમાંથી ઊગર્યા.

૧૧ વર્ષ સુધી તેમણે 'પ્રસ્થાન'નું તંત્રીપદ પણ સંભાળ્યું. એ દરમિયાન તેમના નિબંધો, વાર્તાઓ અને કવિતાઓ છાપવા લાગી. ૧૯૩૫ થી તેમને શિક્ષણ ક્ષેત્રે પ્રવેશ કર્યો. જેમાં ૧૯૩૫ થી ૧૯૩૭ દરમ્યાન મુંબઈની એસ.એન.ડી.ટી. કૉલેજમાં, ૧૯૩૭ થી ૧૯૪૬ સુધી અમદાવાદની એલ.ડી. આર્ટસ કૉલેજમાં, ૧૯૪૬ થી ૧૯૫૦ સુધી ભારતીય વિદ્યાભવન સંસ્થામાં. ૧૯૫૦ થી ૧૯૫૨ સુધી અમદાવાદની ગુજરાત વિદ્યાસભાના અનુસ્નાતક વિભાગમાં અને ત્યારબાદ ૧૯૫૨ થી આયુષ્યના અંતકાળ સુધી ફરીથી મુંબઈની ભારતીય વિદ્યાભવન સંસ્થામાં તેમણે અધ્યાપન સંશોધનનું કાર્ય ચાલુ રાખ્યું. તા. ૨૧/૦૮/૧૯૫૫ના રવિવારના રોજ હૃદયરોગના ત્રીજા હુમલાના કારણે તેઓ અવશાન પામ્યા.

રામનારાયણ એમના નામમાં જ બે ‘ર’ કાર હોવાથી દ્વિરેફ છે. દ્વિરેફ નું વાર્તા લેખન મુખ્ય તો ‘યુગધર્મ’ તથા ‘પ્રસ્થાન’ નિમિત્તે થયું છે. અમુક સંજોગોના દબાણ હેઠળ વાર્તાઓ માંથી કેટલીક તો સર્જનકાળની યાસોદાયીકૃતિઓ પણ બની રહી છે.

દ્વિરેફનું વાર્તાલેખન ૧૯૨૨-‘૨૩થી શરૂ થઈ અને ૧૯૪૧ સુધી વણથંભયું ચાલ્યું. આમ લગભગ બે દાયકામાં ‘દ્વિરેફની વાતો’ ના ત્રણ ભાગમાં ૪૦ (૧૩+૨૦+૧૭) વાર્તાઓ તેમણે આપી છે. આ ઉપરાંત ‘કાં બોલ્યો’ જેવી કેટલીક વાર્તાઓ એમની અગ્રંથસ્થ છે. જે ૪૦ વાર્તાઓ મળે છે તે બધી પાછળ કોઈ નેકોઈ પ્રકારની, કોઈને કોઈ આ રીતની વાસ્તવિક જીવનની આંતરઅનુભૂતિની કોઈ રહસ્યાત્મક ભૂમિકા હોવી જોઈએ એવું પ્રતિત થાય છે.

જીવનની અમુકતમુક વસ્તુ તરફનો લાગણીમય- ભાવમય સબંધ બંધાય તેને તેઓ વાર્તાનું બીજભૂત રહસ્ય મને છે. આ રહસ્યની આસપાસ ઘનીકરણ ના વ્યાપારે વાર્તા બંધાતી હોય છે એમ તેમનું માનવું છે. તેમની વાર્તાકાર તરીકેની એક એકાગ્રતામુલક સક્રિય કેવી ભાવાવસ્થા વાર્તાઓમાંના ઘટનાગુંફન, પાત્રાલેખન, વાતાવરણ આદિ દ્વારા તેનું એક લાઘવપૂર્ણ સુઘડ સ્વરૂપ સિદ્ધ કરવામાં સહાયભૂત થતી હોય છે. જયંતિ દલાલ મને છે તેમ રામનારાયણ, સભાન વાર્તાસર્જક છે. કશુક કહેવા જેવું હોય છે; ત્યારે વાત માંડવા પ્રેરાય છે. વાત માંડતાં, તેમનો વાત કહેવાનો ઉત્સાહ અછતો રહેતો નથી. તેમણે ફિલસુફની નજરે જે કાંઈ જીવન અને જગતમાં જોયું છે. જે કઈ વાસ્તવનું સત્ય તેઓ પામ્યા છે, તેને આકર્ષક રીત રજુ કરવા માટે વાર્તામાં તેઓ ઠીક ઠીક પરિશ્રમ વેઠતા હોય છે. વાર્તાએ-વાર્તાએ વાર્તાકાર તરીકે ક્યાં, કેમ અને ક્યારે ઉપસ્થિત થવું-રહેવું તે તેઓ નક્કી કરી લેતાં હોય છે. એમની વાર્તાઓમાં શ્રોતા તરીકે - સહભાગી તરીકે આપણને માનભેર ઉપસ્થિત રહી શકીએ કે એ માટેનો કાળજીભર્યા અવકાશ લેખક રાખતા હોય છે.

રામનારાયણ વાત શરૂ કર્યા પછી અનેક ચાલ ચાલી તેને જમાવે છે. જરૂર પડ્યે હું તરીકે એ ઉપસ્થિત થઈ આપણને તુરંત વિશ્વાસમાં લઈ લે છે. તેઓ વાર્તા જાણે લખતા નથી, કથે છે. તેમની વાર્તાઓમાં કથનશૈલીના અને રમણીય તત્વો નજરે ચઢે છે. તેમની કેટલીક વાર્તાઓ જેમકે 'દેવી કે રાક્ષસી' , 'કુલાંગાર', 'બે મિત્રોની વાર્તા' દશ્યશૈલીની પણ છે. તેમાંથી બે તો પછી નાટયસંગ્રહમાં લેવાઈ છે. કોઈ વાર્તા સંવાદશૈલી પર જ આધારિત હોય એવુંય પણ બને છે. એમની ‘જમનાનું પુર’

ઊર્મિકાવ્યની વર્ણનશૈલીની અપનાવતી વાર્તા છે. તેઓ વાર્તાઓમાં યથાર્થચિત્રણ તેમ જ અતિચિત્રણનોયે વિનિયોગ કરતા હોય છે. એ રીતે એમની વાર્તાઓમાં રજૂઆત શૈલીનું વૈવિધ્ય ઉલ્લેખનીય છે.

દ્વિરેફ ની વાર્તાઓમાંનું વસ્તુ કાં તો કલ્પનોત્થ છે કે કાં તો વાસ્તવિક - સામાજિક છે. 'છેલ્લો દાંડકય ભોજ', 'ઉત્તરમાર્ગનો લોપ', 'બુદ્ધિવિજય' અને 'બે મિત્રોની વાર્તા' માં પ્રાચીન મધ્યકાલીન વાતાવરણનો વિનિયોગ છે. 'જક્ષણી' જેવી પ્રસન્ન દાંપત્યની, 'નવો જન્મ', 'સૂરદાસ', 'કોદર', 'પોતાનો દાખલો', 'અંતરાય' જેવી મનોવૈજ્ઞાનિક લક્ષણો પર આધારિત 'છેલ્લો દાંડકય ભોજ', 'એક સ્વપ્ન' અને 'સૌભાગ્યવતી' જેવી વાર્તાઓ તત્વોનું આશ્રય લેતી, તો 'જગજીવનનું ધ્યેય' જેવી ગાંધીવિચાર પર અવલંબતી વાર્તાઓ છે. તેમની વાર્તાઓમાં જીવનના વિવિધ પ્રશ્નોનું, ઘટનાવસ્તુનું, તેમ પાત્રોનું વૈવિધ્ય ધ્યાનાર્હ છે. જોકે તેમની ચાળીસમાંથી અઢાર વાર્તાઓ સ્ત્રીપુરુષ સંબંધોના કોઈ ને કોઈ સંદર્ભ લઈને ચાલે છે.

રામનારાયણે વાર્તાઓ દ્વારા મનુષ્યજીવનની કામ, અસુયા, દંભ જેવી મૂળભૂત વૃત્તિઓનું સચોટ આલેખન કર્યું છે. 'સૌભાગ્યવતી' જેવી વાર્તાઓમાં કામવૃત્તિના આક્રમણે સર્જાતી દાંપત્યજીવનની કરુણતાનું બયાન તેનો ભોગ બનેલી સ્ત્રી દ્વારા અન્ય સ્ત્રીની આગળ કરાવવામાં ઔચિત્યની પ્રતીતિ થશે. 'કોદર" ને 'સૂરદાસ' જેવી વાર્તાઓમાં અસુયાના તત્વો ની કામગીરીનો સચોટ ચિતાર છે. દંભનું તત્વ 'મુકુદરાય' અને 'બુદ્ધિ વિજય' માં જોઈ શકાય છે. તેમણે ભંગીથી બ્રાહ્મણ સુધીના ક્રિશ્રીયન, પારસી, હિન્દુ આદિ વિવિધ કોમનાં અને વિવિધ ધર્મો પડતાં પાત્રોનો યાદ રહી જાય એવો મેળો અહીં રચ્યો છે. ખેમી, મુકુંદરાય, બુદ્ધિવિજય, જક્ષણી, કંકુ, કોદર - આવાં તો અનેક પાત્રો છે, જે ગુજરાતી વાર્તા વિશ્વમાં હવે પૂરતાં જાણીતા છે.

લેખકે આ વાર્તાઓમાં સ્થળ કાળનું અને વાતાવરણનુંયે ઘણું વૈવિધ્ય બતાવ્યું છે. ગામડા ને શહેરો તો ખરા જ, પણ કોઈક વાર્તા માટે ટ્રેન ને બસ, તો કોઈ માટે કોર્ટ ને જેલ પણ કામ આવ્યા છે. એમની આ વાર્તાસૃષ્ટિમાં અરેબિયન નાઈટસ ની હવાયે મળે છે ને સાથે અર્વાચીન કાળની સત્યાગ્રહની હવા પણ વળી આ વાર્તાવિશ્વમાં શ્વાનસૃષ્ટિનેય ગૌરવભર્યું સ્થાન મળ્યું છે.

આમ, 'દ્વિરેફ'ની વાર્તાઓમાં વસ્તુ, પાત્ર, સ્વરૂપ, શૈલી વગેરેને અનુલક્ષતાં અનેક કૌતુક-આકર્ષણો છે. લોકકથા, ડિટેક્ટિવકથા, પુરાણકથા, પશુકથા આદિથી માંડીને પરાવાસ્તવવાદી લાગે એવું સ્વપ્ન કથા સુધીના વિવિધ સ્તરો અહીં છે. આ સર્વમાં વાર્તાકારની જીવનના રહસ્યને વળગીને ચાલવાની, વાસ્તવિક રીતે-પ્રતિતિકર સર્જન વૃત્તિનું બળ બરોબર વર્તાય છે, તેમની ફિલસૂફની નજર કરુણ, હાસ્ય, શૃંગારથી માંડી અદભુત, રૌદ્રાદિ અનેક રસોના આ વિશ્વ દ્વારા સમતાપ્રધાન, તત્વનિષ્ઠ શાંત રસના નિગૂઢ વર્ચસ્વ તરફ આપણને પ્રેર્યા વિના રહેતી નથી.

'દ્વિરેફની વાતો' નો પ્રથમ ભાગ આપતા વાર્તાકારનું જીવન પ્રત્યેનું જે દૃષ્ટિબિંદુ હતું તે બીજો ત્રીજો ભાગ આપતી વેળાએ બદલાયું હતું. પ્રથમ વાર્તા શ્રેણીમાં તેઓ કંઈક મુગ્ધ, કંઈક રોમેન્ટિક અભિનીવેશવાળા વાર્તાકાર હતા, બીજા અને ત્રીજા ભાગની વાર્તા શ્રેણીઓ આપતી વેળાએ તેઓ એવા મુગ્ધ રહ્યા નથી. તેઓ જીવનના અસુભ તત્વોને જોવા અને જાણવામાં વધુ ઠરેલ, શાંત, સહિષ્ણુ અને સમભાવ શીલ થયેલાં જણાય છે. એ દ્વિરેફની પહેલા ભાગ પછી ની વાર્તાઓમાં જીવનની કંઈક રુક્ષ, રજોટાયેલો ને કઠોર ચહેરો જોવા પડે છે.

ધૂમકેતુની વાર્તાઓમાં રંગદર્શી ઊર્મિપ્રધાન વાર્તાશૈલી નજરે પડે છે, જ્યારે દ્વિરેફની વાસ્તવનિષ્ઠ, ગહન-સંકુલ છતાં પ્રસાદીક એવી વાર્તાઓ વાતશૈલીની વાર્તાઓ સહેજેય ધ્યાનાકર્ષક બની રહે છે. હીરાબેન 'આ બંનેય વાર્તાકારોએ પરસ્પર પૂરકરૂપે ટૂંકી વાર્તાનું ઘડતર કર્યું છે.' એમ યોગ્ય રીતે જ દર્શાવે છે. ઉમાશંકર દ્વિરેફની વાર્તાઓને ધૂમકેતુશાઈ વાર્તા શૈલીની જે મર્યાદાઓ હતી તેનો પ્રતિકાર કરનાર પરિબળરૂપે વર્ણવે છે. ગુજરાતી વાર્તા સાહિત્યની સમૃદ્ધિ પઢાવવામાં દ્વિરેફની 'જક્ષણી', 'મુકુંદરાય', 'ખેમી', 'છેલ્લો દાંડકય ભોજ', 'સૂરદાસ', 'રેકડીમાં', 'ઉત્તરમાર્ગનું લોપ', 'બુદ્ધિવિજય' અને 'કેશવરામ' જેવી વાર્તાઓનો ફાળો મહત્વનો છે.

રા. વિ. પાઠકે વાર્તાલેખન માટે પોતાના નામનાં આવતા બે 'રેફ'ને કારણે 'દ્વિરેફ' ઉપનામ રાખ્યું હતું. 'યુગધર્મ 'અને 'પ્રસ્થાન' સામયિકોમાં લેખન નિમિત્તે આ વાર્તાઓનું સર્જન થયું છે. ૧૯૨૨-૨૩ના અરસામાં તેમણે વાર્તા લખવી શરૂ કરી. લગભગ બે દાયકા જેટલો સમય તેમનું વાતસિર્જન ચાલ્યું . 'દ્વિરેફની વાર્તાના ત્રણ ભાગમાં બધી મળી ચાલીસ વાર્તાઓ ગ્રંથસ્થ થઈ છે. 'મુકુંદરાય' , 'ખેમી' , 'જક્ષણી' , કોદર' , ' જમનાનું પૂર' , ''સૌભાગ્યવતી' , 'કપિલરાય' , 'નવો જન્મ' , 'બુદ્ધિવિજય' , 'છેલ્લો

દાંડક્ય ભોજ, 'એક પ્રશ્ન' , 'ઉત્તરાપથનોલોપ' , 'કુલાંગાર' , 'દેવી કે રાક્ષસી' , 'અંતરાય' વગેરે તેમની જાણીતી વાર્તાઓ છે.

ટૂંકી વાર્તાના ક્ષેત્રે ધૂમકેતુની જેમ દ્વિરેફને અપૂર્વ સિદ્ધિ મળી છે. ધૂમકેતુની રંગદર્શી ઉર્મિપ્રધાન શૈલીવાળી વાતો પછી આવતી દ્વિરેફની વાસ્તવપ્રધાન વાર્તાઓને ગુજરાતી ટૂંકી વાર્તાસ્વરૂપમાં પૂરકબળ રૂપે જોઈ શકાય. 'દ્વિરેફની વાતો'ના ત્રણ ભાગમાં વાર્તાકલાની દૃષ્ટિએ ઉત્તરોત્તર વિકાસ સધાયેલો જોવા મળે છે. પ્રથમ ભાગમાં કઈક અંશે મુગ્ધ, રોમેન્ટિક અભિનિવેશ તેમની વાર્તાઓમાં જોવા મળે છે. જયારે પછીની વાર્તાઓમાં જીવનની રૂક્ષતા અને કઠોરતાની વાસ્તવિકતા નિરૂપણ પામી છે. દ્વિરેફે વાર્તાનું આકર્ષણ ઊંડાણથી અનુભવ્યું છે. તે વાર્તાઓને 'વાતો કહે છે તે સૂચક છે. વાતરસિયા લેખકની કોઈ વાતરસિયા જીવને જચી જાય તેવી એ વાર્તાઓ છે. વાત કહેવામાં તેઓ પૂરેપૂરા ખીલે છે અને ક્રમશઃ ભલે ધીમી ગતિએ પણ વાતરસનો અનુભવ સરસ રીતે કરાવે છે.

દ્વિરેફની વાર્તાઓનું વસ્તુ કાં તો કલ્પનોત્થ હોય છે અથવા સમાજમાંથી પ્રાપ્ત થયેલું હોય છે. જીવનના વિવિધ પ્રશ્નો, ઘટનાપ્રશ્નો અને પાત્રોનું એમાં ધ્યાનપાત્ર વૈવિધ્ય જોવા મળે છે. માનવજીવનની વિવિધ મૂળભૂત વૃત્તિઓ જેમકે કામ, અસૂયા, દંભ વગેરેને તે સરસ રીતે પ્રગટ કરી આપે છે. જયંતિ દલાલ કહે છે તેમ "દ્વિરેફ સભાન ક્લાસર્જક છે. તેમને વાર્તા નિમિત્તે કશુંક વાચકો સુધી પહોંચાડવાનું છે. કેવળ રંજનાર્થે એમની વાર્તાઓ ઘડાઈ નથી." 'મારી વાર્તાનું ઘડતર' લેખમાં તેમણે સ્પષ્ટ કર્યું જ છે કે વાસ્તવિક જીવનની આંતરઅનુભૂતિની, કોઈ રહસ્યાત્મ અનુભૂતિની અપેક્ષા છે.

તેમની વાર્તાઓમાં ગ્રામજીવન છે અને શહેરીજીવન છે; કોર્ટ અને જેલ જેવાં સ્થળો પણ છે: બ્રાહ્મણથી માંડી પારસી સુધીની કોમોના માનવીઓ પાત્રરૂપે નિરૂપાયા છે. એમણે લોકકથા, ડિટેક્ટિવકથા, મનોવૈજ્ઞાનિક તત્ત્વવાળી કથાથી માંડીને સ્વપ્નકથા સુધી વાર્તાસૃષ્ટિનો વિસ્તાર સાધ્યો છે . કરુણ, હાસ્ય, શૃંગાર, અદભુતાદિ અનેક રસોની વાર્તાઓ પણ તેમણે આપી છે એમ એમની વાર્તાસૃષ્ટિ જોતાં સમજાય છે. વિષયવૈવિધ્ય અને પ્રયોગશીલતા એ એમની વાર્તાનાં મહત્ત્વનાં લક્ષણો છે. દ્વિરેફે સ્ત્રી - પુરુષ સંબંધની વાર્તા અને એ નિમિત્તે જાતીય - જિન્સીતત્ત્વને અવલંબન કરતી વાર્તાઓમાં દામ્પત્યજીવનમાં સર્જાતી કરુણતા કલાના પૂરા ઔચિત્ય સાથે એમાં રજૂ થાય છે. ચુનીલાલ મડિયા નોંધે છે કે " જીવનને નિહાળવાનું અને વાર્તામાં આલેખવાનું ધૂમકેતુનું વલણ લાગણીશીલ હતું

તો દ્વિરેફનું બુદ્ધિપૂત હતું. એક કૌતુકરાગી હતા, તો બીજા સૌષ્ઠવપ્રેમી." રા.વિ. પાઠકના સાહિત્યના એક અભ્યાસી કવિ ડૉ.ચંદ્રકાન્ત શેઠ કહે છે, "દ્વિરેફની વાતો 'વાંચવા કરતાં સાંભળવાની ચીજ વધારે જણાય છે. એની ભાષાગત-નિરૂપણગત, સ્વરૂપગત કેટલીક ખૂબીઓ વાંચવા કરતાં સાંભળવાથી જ વધારે પમાય એમ પણ લાગે."

આમ, રામનારાયણ પાઠકની સમગ્ર વાર્તાસૃષ્ટિ જોતાં આપણને એક અદભુત આનંદ પ્રાપ્તિ થાય છે કોઈપણ સહૃદય ભાવક ને જે અનુભૂતિ થાય તે અનુભૂતિ બધા જ વાચકોને પણ તેમની વાર્તાસૃષ્ટિ માંથી પસાર થતાં થાય છે.

સંદર્ભ સૂચિ :

૧. 'અર્વાચીન ગુજરાતી સાહિત્યનો ઈતિહાસ'. ડૉ. રમેશ એમ. ત્રિવેદી, આદર્શ પ્રકાશન.
આઠમી આવૃત્તિ, ૨૦૧૫.
૨. 'અર્વાચીન ગુજરાતી સાહિત્યનો ઈતિહાસ'. (ગાંધીયુગ અને અનુગાંધીયુગ) પ્રસાદ
ભ્રહ્મભટ્ટ, પાર્શ્વ પબ્લિકેશન : અમદાવાદ, પ્રથમ આવૃત્તિ ૨૦૦૭.
૩. ગુજરાતી ગ્રંથકાર શ્રેણી : ૧૯ 'રામનારાયણ વિશ્વનાથ પાઠક' સંપાદક : રમણલાલ
જોષી, લેખક; ચંદ્રકાંત શેઠ, એમ.એમ.ત્રિપાઠી પ્રા.લિ.મુંબઈ. પ્રથમ આવૃત્તિ ૧૯૭૯
૪. 'ગુજરાતી સાહિત્યનો ઈતિહાસ', ગ્રંથ-૪ (ન્હાનાલાલ થી ઝવેરચંદ મેઘાણી),
ગુજરાતી સાહિત્ય પરિષદ, અમદાવાદ, ચોથી આવૃત્તિ ૨૦૧૭.
૫. "રામનારાયણ વિશ્વનાથ પાઠક 'દ્વિરેફ' ની શ્રેષ્ઠ વાર્તાઓ" સંપાદક : ચંદ્રકાંત શેઠ,
આદર્શ પ્રકાશન, પ્રથમ આવૃત્તિ ૨૦૧૬.

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Educational EuTech Start-ups- a new Venture

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Abstract:

Education has been the most exceptionally impacted industry by Corona virus. Work environments keep on working from a distance, organizations work on the web, and the medical services area is working equivalent to previously. In any case, Educational establishments are one of the profoundly impacted associations. Lockdowns and conclusion of schools worldwide have led to EdTech new companies. While we see colleges/universities move on the web, new companies previously working in that specialty now will provide more development in Instructional strategies and platforms. as of now well informed more current ages need to study on the web, and that is changing numerous ventures. Since, supposing that you change the strategies in the schooling area, it will straightforwardly influence the educational services and business area. Individuals who will join Educational field and start/work for organizations in what's to come are currently in schools. In this way, Education sector is the most significant of all. Education sector will turn into an industry worth $7 trillion by 2025. New companies in this industry will be the most effective and fruitful. For certain, the EdTech startup scene has seen huge development and is loaded up with applications and different internet based devices. This is the way EdTech new businesses are changing the eventual fate of instruction. These organizations will be forming the new ages.

Key Words: - Start-ups Business, EdTech

Introduction

"Education is the key that unlocks the golden door to freedom." – George Washington Carver

The Education business is among the biggest and most significant areas worldwide, yet it has been gaining slow headway towards digitalization and creative learning techniques for quite a long time. In any case, because of the wellbeing emergency, this industry went through a computerized transformation. New businesses started making new web based learning stages and instruments to keep kids occupied with learning. To be sure, they re-imagined standards in instruction utilizing computerized reasoning, AI, digitalization, and computerization, consequently presenting more productive and connecting with schooling conveyance channels.

For certain, the EdTech startup scene has seen huge development and is loaded up with applications and different internet based devices. This is the way EdTech new businesses are changing the eventual fate of instruction.

Concept of Startup

The term startup refers to a company in the first stages of operations. Startups are founded by one or more entrepreneurs who want to develop a product or service for which they believe there is demand. These companies generally start with high costs and limited revenue, which is why they look for capital from a variety of sources such as venture capitalists.

A startup is a company or venture focused exclusively on bringing a single product or service to market. These companies typically do not yet have a fully developed business model and, most importantly, they have no revenue.

In recent years, nearly every sector has been transformed by the advancement of technology and easy access to internet services; and the education sector is no exception.

Often referred to as EdTech or EduTech, Education Technology has brought about a revolution in how far, how deep, and how effectively education is delivered across the country. There is no doubt that the education sector demanded There have been some changes and developments more than ever before. Nevertheless, the situation is improving. Through bridging the gap created by the COPID-19 pandemic, this transformation has been accelerated perception that learning is not exclusive to the classroom institutions.

One of the most prominent reasons for a majority of people is The number of users, funding, and startups in the EdTech sector will rise scale, attracting investors, entrepreneurs and other stakeholders stake holders in unprecedented ways. The term ' EdTech' is trending highly on Google Trends internet searches rose by 60 percent in India between April and May mid-December 2020. According to a BARC India/IEEE joint report Nielsen stated that the time spent waiting was up by 30 percent people spent on education apps during the first three months of the lockdown. Additionally, Edtech funding rose to $2.2 Bn in 2020, from $1.8 Bn in 2010 raised by edtech In the midst of this, not exclusively did the current edtech new businesses turn and persevere, yet in addition a range of new web based learning stages mushroomed to during this stage.

Concept of EdTech

EdTech is a remarkable combination of schooling and innovation. This mix is a significant distinct advantage thinking about that the schooling business is one of the most customary areas across the world.

Today, study halls have become virtual because of innovative headways. There is their acquaintance apparatus with upgrade the understudy opportunity for growth just as open new open doors for the educators. Adventure subsidizing for EdTech has arrived at billions of dollars, and the figure is relied upon to rise going ahead. The majority of these EdTech subsidizing bargains were done in the US, with monster players like Materclass and Skillshare starting to lead the pack. In this way the exhausting twentieth century addresses are being changed by major EdTech organizations into thrilling, lively, and intelligent homeroom encounters. To be sure the exhausting methodology comprising of the excess, dull pen-paper technique is being supplanted by a mix of computer generated realities.

Future of EdTech

The instruction framework has deteriorated for quite a long time. In any case, innovation has upset schooling, and it's accepted that computerized content will involve the spot of reading material just as change the physical homeroom arrangement. Instructive advancements have worked with changes like computer generated experience (VR), more customized learning open doors and gamification.

It's normal that the business will develop and add more innovation empowered practices like automated packs to show students coding, the utilization of miniature coaching or publicly supported mentoring, and computerized testing.

Features of EdTech in Educations

1. Remote, Independent Picking up:

ELearning devices that work with learning at any spot and time. Such innovation will flip homerooms so that the hypothetical piece of learning will be done external the study hall while the functional part will be educated intuitively in an up close and personal arrangement.

2. Individualized Learning:

The innovation will give concentrate on devices adjusted to understudy's capacities. In this manner the better than expected student will have more earnestly errands and inquiries while sub optimal will be permitted to rehearse more and accomplish a specific level.

3. Free Decision:

Student will be permitted to utilize apparatuses that are the most appropriate for their learning interaction. For example, they can have various gadgets, projects, and procedures as per their own inclinations. This change will be portrayed by wordings like Present to Your Own Gadget (BYOD), flipped study hall, and mixed learning.

4. Field Insight:

The educational plans will make space for specific abilities that need eye to eye communication and human information because of the accessibility of innovation that works with more proficiency in explicit areas. Hence learning establishments will offer student chances to acquire true abilities that match their future professions. In reality, the educational plans will furnish student with more space for tutoring projects, satisfy entry level positions and coordinated effort projects.

4. Eye catching illustrations:

In the conventional study hall arrangement, student sit the whole day in class. A big part of them are tuning in while the other number is dreaming. Further, the present student experience a great deal of interruption from a boundless number of devices and exercises all competing for their focus. In any case, making example designs that ate instructive and holding can help their homeroom interest. EdTech is the response since it permits student to cooperate with others across the globe involving video just as present their tasks as web recordings.

6. Project-Based Learning:

Corona virus added to the quick development of the independent economy. EdTech is acquainting the present student with project-based learning and working. All in all, students are being trained how to apply their abilities in different circumstances. Secondary school student are getting cleared to project-based discovering that trains cooperative, authoritative, and time usage abilities. Albeit this is done at the fundamental level, student will require these abilities in their further scholastic vocations.

7. Mentorship:

It's normal that student will have more freedom in their learning interaction as we advance, and mentorship will be key to their prosperity. Hence, instructors will be an imperative component as student explore through the wilderness of data. Likewise, regardless of whether training becomes remote, the students' scholastic execution will rely upon the instructive organization and their educator.

8. Courseware Stages to Access Student:

The customary estimation of student' abilities utilizing question and answer session will change since students pack material for test purposes and fail to remember days after the test. Notwithstanding, giving them ventures to chip away at can assist them with applying their insight in the field while still their verifiable information can be measured during the learning system.

9. Understudy Association:

Students will accept responsibility for instruction as they become more engaged with figuring Aout their educational plans. In reality, uniting adolescents and experts is indispensable in keeping a contemporary, forward-thinking just as accommodating educational plan. A sweeping review program should have student' contribution about the courses' substance and accessibility.

10. Information Investigation:

It is determined that PCs will supplant science later on. They will perform errands like measurable examination, information investigation, just as anticipate future patterns.

Contribution of EdTech to Transforming the Classroom

EdTech is set to develop as per training and learning area specialists since organizations influence innovation to make schooling available to everybody, make exceptionally customized growth opportunities just as scale the area. In conventional homeroom schooling, normal student set the rhythm of learning. Subsequently, a few student battle to make up for lost time, are exhausted and unbiased.

In actuality, EdTech dispenses with such disadvantages and can go where customary schooling can't. This is accomplished through intuitive apparatuses, customized classes, and drawing in media.

EdTech Based Education or instructive innovation is better than ordinary learning.

1. Offers day in and day out Learning Access: EdTech stepped in to save customary study hall schooling when the Corona virus pandemic began. With the assistance of IoT and innovation gadgets, students can get to learning material without venturing into a study hall. Thus, student can keep learning every day whenever it might suit them and speed.

2. Makes Customized Encounters: Training innovation is assisting instructors with building a fitted mastering program as per student' abilities, assets, and interests. Certainly, mentors can't make a customized insight in conventional homeroom educating.

3. Smoothes out Training: An Edtech application assists with smoothing out correspondence between guardians, student, and Teacher. Various schools using different EdTechs which are making school-to-home correspondence application that helps Teachers, school executives, and Support staff reminds student about their tasks and tests. The point of these updates is to assist them with getting ready, register and submit. Additionally, the stage improves understudy commitment, parental contribution and builds scholarly accomplishment.

4. Computerized Reviewing: The utilization of artificial intelligence and AI to dissect, survey and grade student opens up hours for instructors. This assists them with utilizing that additional spare energy with both battling and talented student to further develop their exhibitions.

5. Paperless Homerooms: There is no requirement for instructors and student to invest energy on the copier since tasks and tests are submitted and done on the web. Subsequently, educators have less stress over the security of thousands of schoolwork documents. It likewise brings down the printing financial plans and advances greener arrangements in the schooling business.

Future Trends in EdTech

1. Intuitive Learning:

Instructive foundations can now take figuring out how to another level as a result of the accessibility of the right computerized devices. Considering that, instructors can make a unique intelligent encounter. Students can foster genuine abilities through guidance based mastering, augmented reality, gamification, and reenactment programs. These incorporate abilities, for example, navigation, insightful reasoning, and critical thinking. Further, computer generated experience advancements make learning more critical, in this manner improving student' psychomotor and mental abilities. It's normal that educators and care staff will execute intelligent learning and use it to check students' general inclination. This will permit them to assess their exhibition genuinely to tweak and customize their preparation programs.

2. Evaluations through artificial intelligence:

The customary showing model gives students test scores and participation rates. Notwithstanding, EdTech gives them understanding productivity, how much time taken in examining questions and presenting a response just as the way that quick they handle an idea.

This is accomplished using computer based intelligence. Giving a student their headway report and featuring where they ought to further develop makes EdTech applications the eventual fate of training.

3. Student Permitted to seek after their Interests On the web:

Understudy's consideration is involved by the scholarly community and different abilities like craftsmanship, music, and acting. EdTech applications are intended to assist students with seeking after their interests on the web. For example, Creator Up teaches clients on the way that they make and market their substance on the web, subsequently empowering them to fabricate a vocation in media outlets.

4. Assistive Innovation: There are student for certain handicaps, yet EdTech gives new advances to enable them. That implies the digitalization of training will give students with handicaps more equivalent balance with their friends. Today, student can utilize tablets and PCs with adjusted consoles with bigger cursors or fastens and control with their feet, mouth, or different abilities. Also, discourse to-message innovation is a solid elective that assists students with handicaps and can't work any sort of manual information gadget. Student with dyslexia approach simple to-peruse text styles on account of innovation.

Advantages of EdTech

Trend setting innovations are further developing student' learning capacities. For example, students can now plan their own classes to learn at the right speed. Learning through a task based methodology can assist with fostering student' logical abilities.

1. Learn by Fun; the innovation has made it conceivable to change from a reading material based way to deal with an augmented experience (VR) training that is an impression of genuine abilities. All things considered, VR-based learning is diverse on the grounds that it's intuitive and improves understudy learning capacities.

2. Web based learning conditions center around using time productively, in this manner showing student the significance of time sensitive learning.

3. The inundation of innovation is advancing joint effort and inclusivity. For example, the utilization of cloud-empowered devices stacked with online illustrations and learning games assist kids with tackling issues together. They can likewise transfer their schoolwork and chat with their cohorts carefully.

4. Network: Preceding the presentation of email and the web, student sent letters to their friends through correspondence across the world and trusted that months will hear back from them. Notwithstanding, because of innovation, they can now interface with them utilizing video conferencing devices, web-based media destinations, or send them messages. This is useful in light of the fact that it assists student with finding out with regards to others' thoughts and culture prior to joining the corporate world. Such assets upgrade's how student might interpret such points.

Conclusion

The education industry has influenced peoples' prosperity for a really long period. However, EdTech has gained control in this cutting-edge era to change the conventional homeroom format employing novel approaches to learning and education.

As a result, EdTech startups are using proactive business strategies to determine the future of education. While educational institutions have access to a variety of edtech solutions, choosing ones like D2l's personalized learning platform and high-impact content experiences may make the difference between learning that really is ordinary and learning that has an impact.Change is advancing at a rate that exceeds our expectations.Managing this growth and promoting the transition made possible by ed tech will be necessary for change in the education sector.Education's future is already here.We need to adapt now.

Reference

1.McDonald,J.K.& West, R.E.(2020). Design for Learning: Principles, Processes, and Praxis. EdTech Books. Retrieved from https://edtedhbooks.org/id/introduction

2.Pretty,.BJ.(2019),Illuminate: Technology Enhanced Learning, Dave Burgess Consulting.

3.Soota,A.& Gopalan, S.R.(2016).Entrepreneurship simplified from idea to IPO. Penguin Random House India.

4.Sylvia,L.M.,(2013)Invent to Learn: Making, Thinking, and Engineering in the Classroom, Constructing Modern Knowlwdge Press

6.Bhalla,T.Lead School becomes third unicorn of 2022 after $100 million funding. The Economic Times. Dated 13 Jan. 2022.https://economictimes.com/tech/funding/lead-school-becomes-third-unicorn-of-2022-afeter-100-million-funding-/articleshow/88865154.cms
7.Tawade,L. Year-ender 2021:COVID-19 boosts M&A in India's edtech industry. Wednesday, December 23,2021.The Free Press Journal. https://www.freepressjournal.in/business/ Year-ender-2021-COVID-19-boosts-ma-in-indias-edtech-industry
5.https://www.highereducationdigest.com/top-5-fastest-growing-edtech-startups-in-india/
6. How can edtech help educational institutions transition post-pandemic?
https://www.thehindu.com/brandhub/how-can-edtech-help-educational-institutions-transition-post-pandemic/article65334828.ece ,Retrieved on 01 July 2022
7. EdTech: The new growth catalyst of Indian education industry, https://www.indiatoday.in/education-today/featurephilia/story/edtech-the-new-growth-catalyst-of-indian-education-industry-1912116-2022-02-12, Retrieved on 01 July 2022
8. Hurst Aron,The impact of Edtech in the education sector , https://www.information-age.com/impact-of-edtech-in-education-sector-123499178/, Retrieved on 04 July 2022

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मध्यकालीन भारत में किलो का इतिहास

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शोध सार

भारत में तुर्को की जीत के पश्चात स्थापत्य कला के क्षेत्र में अनेक अति महत्वपूर्ण शैलीगत परिवर्तनों को दिखाया जा सकता है। भारत की जीत से पहले ही तुर्कों ने पश्चिम एशिया और विभिन्न जातियों के सहयोग से स्थापत्य कला की एक ऐसी महत्वपूर्ण शैली का विकास कर लिया था जो कि एक और ट्रांस ऑक्सियाना, ईरान, अफगानिस्तान, इराक, मिस्र, उत्तर अफ्रीका तथा दक्षिणी पश्चिमी यूरोप की स्थानीय शैलियों और दूसरी और अरब की शैलियों के समन्वय से बनी थी। परंतु जब तुर्की आक्रमणकारी भारत आए तो उन्होंने यहां बहुत ही विकसित स्थानीय स्थापत्य शैली पाई जो तेरा ब्रैकेट (Beam Bracket) के सिद्धांत पर लागू होती थी तथा जिनकी विशेषताएं थी; पट्टी हुई छतें, बाहर निकले हुए ब्रैकेट, शेखर छोटे छोटे तथा गोल स्तंभ, चौड़े छज्जे इत्यादि। शुरुआत में भारत में प्रचलित स्थापत्य तुर्की शासक को अधिक आकर्षित नहीं कर पाया इसका कारण यह था कि तुर्की शासन की स्थापना के साथ ने शासक वर्ग की आवश्यकताओं में पहली आवश्यकता थी उनके रहने के लिए आवास(घर) तथा इबादत(प्रार्थना) के लिए इबादत गाह। तुर्की शासकों ने अपने इन्हीं आवश्यकताओं से प्रेरित होकर भारत के अति महत्वपूर्ण स्थापत्य को नष्ट कर उनका पुनःर्निर्माण किया बल्कि तुर्की ने अपनी इच्छाओं के अनुसार महत्वपूर्ण स्थापत्य के निर्माण में दिलचस्पी भी ली। हालांकि भारतीय स्थापत्य की जड़ें इतनी गहरी वह मजबूत थी कि वह उन्हें जड़ से मिटा कर पूर्णतः संपूर्ण भारत में इस्लामी शैली के स्थापत्य को स्थापित नहीं कर पाए। आगे तुर्की शासक की जड़े जैसे जैसे भारतीय जमीन में गहरी होती चली गई वैसे-वैसे वास्तुकला के क्षेत्र में विविधता तथा भारतीय शैली से अनेक क्रमिक समन्वय के चिन्ह स्पष्ट रूप से उभरने लगे।

भूमिका

मध्यकालीन भारतीय इतिहास के दौरान भारत के किले का इतिहास अतीत के साथ अपने सामान्य से पूर्ण रूप से जुड़ा हुआ है। प्राचीन काल में अनेक महत्वपूर्ण निर्मित किलो को लेकर सदियों तक युद्ध लड़े गए तथा उनको अभिग्रह किया, किलो को नष्ट किया तथा उन पर कब्जा किया गया। समय के साथ साथ देश के बदलते परिवेश के अनुसार वास्तु कला के क्षेत्र में भी महत्वपूर्ण परिवर्तन दिखाई पड़ने लगा। 13 वीं व 18 वीं

सदी के दौरान मध्यकालीन युग में हुए विकास के बीच हमें उस युग की उपमहाद्वीप की सैन्य व राजनैतिक इतिहास से गहराई से जुड़े हैं। इस अनुभाग का उद्देश्य इस अवधि के दौरान किलो की व्यापक विशेषताओं पर ध्यान केंद्रित करना है।

दिल्ली सल्तनत का संस्थापक मोहम्मद गोरी वह कुतुबुद्दीन ऐबक को माना जाता है इन दोनों के आगमन के पश्चात ही दिल्ली सल्तनत के बीज बोए गए थे वास्तविक रूप में दिल्ली सल्तनत का संस्थापक अल्तमश इल्तुतमिश को माना गया हैं,जो 13 वीं सदी में सुल्तान बना था। यह वह समय था जब उत्तरी भारत के एक बड़े हिस्से पर राजपूतों ने अपना अधिकार जमा लिया था। उन्होंने राजपूताना के चट्टानी भूभाग और इसके अलावा बाहर भी सैकड़ों इमारतों का निर्माण कर डाला और इसमें मुख्यत: किले थे। ऐसा नहीं था कि दिल्ली शासकों ने भारतीय शैली के अनुसार ही किलो का निर्माण कराया दिल्ली सल्तनत के शासकों ने अपने मूल भूमि से अपनी संस्कृति भी साथ लाए थे। दो प्रमुख शक्तियों के बीच हमें अधिपति के संघर्ष के साथ-साथ दोनों शक्तियों की सांस्कृतिक आदान-प्रदान भी चलता रहा।वास्तुकला शैली, स्वदेशी और मध्य एशियाई परंपराओं के मिश्रण से प्रभावित रहा।

सल्तनत स्थापत्य कला के अंतर्गत हमे मेहराब व गुंबद तकनीक का प्रयोग दिखाई पड़ता है। परंतु यहां तुर्की अविष्कार नहीं था बल्कि तुर्को ने अरब के लोगों से यह तकनीक से की थी।अरबी लोग भी इसे रोम से लाए थे। भारतीय लोग इस तकनीक को जानने से पहले पटिया और शहतीर (स्लैब और बीम) तकनीक का उपयोग करते थे, जिसमें एक पत्थर को दूसरे पत्थर के ऊपर रखा जाता था तथा अंतराल बंद करने के लिए इसे पाटने वाले पत्थर से ढका जाता था।

वास्तुकला की दृष्टि से देखा जाए तो मध्यकालीन भारतीय इतिहास में मुगल काल में बड़े पैमाने पर विकास हुआ है। सांस्कृतिक परिवर्तन में सबसे बड़ा परिवर्तन वास्तुकला क्षेत्र में दिखाई देता है मुगल काल में स्थापत्य कला का श्रेय हुमायूं (नसीरुद्दीन महमूद) को जाता है। हुमायूं जो बाबर का उत्तराधिकारी था वह फारसी परंपरा से प्रभावित था उसने भारत में वास्तुकला की नई विशेषताओं को स्थापित किया।

फिरोज शाह कोटला

फिरोज शाह कोटला, कोटला या (किला गढ़) का किला सल्तनत काल में तुगलक वंश के सबसे महान व शक्तिशाली सुल्तान फिरोजशाह तुगलक ने बनवाया था। फिरोजशाह तुगलक ने यह किला फिरोजाबाद नामक दिल्ली शहर को अपने नियंत्रण में रखने के लिए बनवाया था। कोटला का शाब्दिक अर्थ है किला या

गढ़। फिरोजशाह तुगलक (1351 से 1388) दिल्ली के सुल्तान ने 1354 में गढ़वाल शहर फिरोजाबाद को दिल्ली की नई राजधानी के रूप में स्थानांतरित किया और इसमें वर्तमान फिरोज शाह कोटला की साइट शामिल की। किले के अंदर एक अशोक स्तंभ है जो फिरोजशाह तुगलक ने हरियाणा के अंबाला शहर से मंगवाया था यह अशोक स्तंभ मौर्य काल के महान सम्राट अशोक द्वारा निर्मित स्तंभ है। इसके अतिरिक्त एक जामा मस्जिद है एक बावली और एक बड़ा उद्यान परिसर भी किले के अंदर मौजूद है। किला का निर्माण ग्रेनाइट पत्थर छूने से किया गया था।

आमेर किला

आमेर किले को आमेर दुर्ग, अंबेर का किला के नाम से भी जाना जाता है। यह किला भारत के राजस्थान राज्य की राजधानी जयपुर के आमेर क्षेत्र के अंतर्गत एक पहाड़ी पर बना हुआ है। आमेर क्षेत्र बसने से पहले यहां मीणा जाति के लोग रहते थे परंतु कुछ समय पश्चात कछुआ राजपूतों ने इन पर अपना अधिकार कर इनको अपने अधीन कर लिया जिसके पश्चात कछवाहा राजपूत शासक मानसिंह प्रथम ने 1592 में आमेर दुर्ग का निर्माण कराया। दुर्ग के अंतर्गत दीवान ए आम, जो साधारण लोगों के लिए बनाया गया था तथा दीवान ए खास जो विशिष्ट लोगों के लिए था। इसके अतिरिक्त शीशमहल, जय मंदिर, एवं सुख निवास आदि भाग शामिल है। यह महल कछवाहा राजपूत महाराजाओं एवं उनके परिवारों का निवास स्थान होता था। आमेर के किले को जून 13 में यूनेस्को ने विश्व धरोहर स्थल की सूची में शामिल किया था।

आगरा किला

आगरा का किला भारतीय किलो में सबसे प्रसिद्ध किला माना जाता है। यह किला भी अन्य किलो की भांति यूनेस्को की विश्व धरोहर सूची में शामिल होता है। आगरा किला भारत के उत्तर प्रदेश के आगरा शहर में स्थित है। इसके लगभग पश्चिमी में 2.5 किलोमीटर दूरी पर ही एक विश्व प्रसिद्ध स्थापत्य स्मारक ताजमहल स्थित है। भारत के मुगल बादशाह बाबर हुमायूं अकबर जहांगीर शाहजहां औरंगजेब सब यहीं रह करते थे। यही से अपना शासन किया करते थे। समय-समय पर आगरा किले का इतिहास व शासक बदलते रहे हैं। आगरा किला मूर्तियों का किला था जो एक बार वंश के राजपूतों के पास था। इसका प्रथम उल्लेख 1080 ईसवी में मिलता है। यह वह समय था जब महमूद गजनवी की सेना ने इस किले पर कब्जा कर लिया था।

सिकंदर लोदी 1487 से 1517 दिल्ली सल्तनत का ऐसा सुल्तान हुआ जिसने आगरा की यात्रा की तथा 1504 ईसवी में किले की मरम्मत कराई तथा इसी किले में रहा सिकंदर लोदी ने 1506 में इसे अपनी राजधानी बनाया तथा यहीं पर शासन किया और मरते दम तक इसी किले में रहा।

पानीपत के युद्ध के पश्चात आगरा किले पर मुगलों का अधिकार हो गया तथा किले की अकूत संपत्ति पर भी अधिकार कर लिया गया। अकबर ने अपने समय में किले की केंद्रीय स्थिति को देखते हुए इसे अपनी राजधानी बनाने का निश्चय किया। वह 1558 में यहां आया। अबुल फजल जो अकबर का इतिहासकार था लिखता है कि यह किला ईटों से बनाया गया था जिस का प्राचीन नाम बादलगढ़ था तब यह खस्ता व जर्जर हालत में पड़ा था। अकबर को इसे दोबारा बनवाना पड़ा जो कि अकबर ने इसे लाल बलुआ पत्थर से निर्मित कराया। कहा जाता है कि आगरा किले को बनाने में 1444000 कारीगर व मजदूरों ने 8 साल तक लगातार मेहनत की तब 1573 में यह किला बनकर तैयार हुआ। देखा जाए तो उस समय आगरा का किला सुरक्षा की दृष्टि से बहुत ही महत्त्वपूर्ण किला था। आगरा किले के अंतर्गत हमे अंगूरी बाग, दीवान ए आम, दीवान ए खास, स्वर्ण मंडप, जहांगीरी महल, खास महल, मछली भवन, मीणा बाजार, मोती मस्जिद, मुसम्मन बुर्ज, नगीना मस्जिद, मीना मस्जिद, नौबत खाना, रंग महल, शीश महल, शाहजहां महल, इत्यादि दिखाई देते हैं।

लाल क़िला

लाल किले का निर्माण मुगल बादशाह शाहजहां ने कराया था। शाहजहां ने किले का निर्माण 12 मई 1638 को कराया। यह वह समय था जब शाहजहां ने अपनी राजधानी आगरा से दिल्ली स्थान राज्य करने का फैसला किया था। शाहजहां के काल को मुगल काल में स्वर्ण काल कहा जाता है। लाल किला पूरा लाल रंग से बना हुआ है इसका प्रमुख कारण यह था कि शाहजहां को लाल व सफेद रंग बहुत ही पसंद थे। लाल किले का डिजाइन उस्ताद अहमद लाहौरी ने किया था जिन्होंने आगरा में ताजमहल का भी निर्माण किया था। लाल किला यमुना नदी के किनारे बना है किले के चारों और बड़ी-बड़ी प्राचीर दीवारे बनी है जो सुरक्षा की दृष्टि से बनाई गई थी। लाल किला 6 अप्रैल 1648 को बनकर तैयार हुआ। लाल किला शाहजानाबाद शहर का केंद्र बिंदु था जो वर्तमान में पुरानी दिल्ली में पड़ता है। लाल किले के अंदर मोती मस्जिद भी है जिसका निर्माण शाहजहां के उत्तराधिकारी औरंगजेब ने कराया था।

लाल किले का क्षेत्रफल 254.5 67 है, जो 2.41 किलोमीटर रक्षात्मक दीवारों से घिरा है। किले की कलाकृति फारसी, यूरोपीय और भारतीय कला को दर्शाता है। लाहौरी व दिल्ली द्वार साधारण जनता के द्वारा उपयोग

किए जाते थे। लाहोरी गेट मुख्य प्रवेश द्वार है। लाल किले के अंतर्गत दीवान ए आम, दीवान ए खास, रंग महल, मुमताज महल, खास महल, हम्माम, छत्ता चौक, मीना बाजार, नौबत खाना, इत्यादि बना हुआ है।

निष्कर्ष

मध्यकालीन भारतीय इतिहास में किलो का बहुत ही महत्वपूर्ण स्थान रहा है। सभी किले सुरक्षा की दृष्टि ,बाहरी आक्रमण से बचाव के लिए उपयोगी थे। तमाम शासक वर्ग जैसे सल्तनत काल, (गुलाम वंश, खिलजी वंश, तुगलक वंश, सैयद वंश, लोदी वंश,) मुगल काल, राजपूत काल, आदि सभी किलो के अंतर्गत ही अपना शासन व्यवस्था संभालते थे। इसके अतिरिक्त किलो में ही दरबार लगाया करते थे । सुरक्षा की दृष्टि से अगर देखा जाए तो मध्यकालीन भारतीय इतिहास में किलो के बिना शासन करना संभव ही नहीं था। 16 वीं 17 वीं शताब्दी में औपनिवेशिक शक्तियों के आने के साथ ही किलो को व्यवसाय के उद्देश्यों के लिए व्यापार के रूप में भी बनाए जाने लगा कुछ समय में घेराबंदी और विद्रोह के दौरान लोगों के लिए संस्थान के रूप में भी कार्य करते थे।

संदर्भ सूची

https://en.m.wikipedia.org/wiki/Feroz_Shah_Kotla
https://hi.m.wikipedia.org/wiki/%E0%A4%86%E0%A4%97%E0%A4%B0%E0%A4%BE_%E0%A4%95%E0%A4%BE_%E0%A4%95%E0%A4%BF%E0%A4%B2%E0%A4%BE
https://en.m.wikipedia.org/wiki/Red_Fort
https://en.m.wikipedia.org/wiki/Amber_Fort

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श्रीमद्भगवद्गीता अध्याय ७ज्ञान वज्ञान योग
श्लोक:-८(भगवान के स्वरूप की व्यापकता)

बारड वजूभाई पी.
पी.एचडी स्टूडेंट,
सौराष्ट्र यूनी. राजकोट.

"रसोऽहमप्सु कौन्तेय"

(शब्दार्थ)

कौन्तेय = हे अर्जुन; अप्सु = जल में; अहम् = मैं; रस: = रस हूं

(सरलार्थ)

हे अर्जुन ! मैं जल में रस हूँ,

➡ Δ षड (छह) रस क्या है?

कोई भी चीज जब जीभ के संपर्क में आती है तो उससे हमें जो अनुभव होता है उसे आयुर्वेद में रस कहा गया है। आम भाषा में इसे समझे तो कुछ भी चीज खाने पर हमें तो स्वाद महसूस होता है वही रस है। आयुर्वेद में खाने पीने की किसी भी चीज के फायदे इन रसों के आधार पर ही निर्धारित किये हैं। जिन चीजों में रसों की तीव्रता काफी ज्यादा होती है उन्हें ही औषधि के रूप में इस्तेमाल किया जाता है। खाद्य पदार्थों की तासीर भी इन्हीं रसों के आधार पर तय की जाती है। जैसे मधुर रस वाली चीजों की तासीर ठंडी और अम्ल या कटु रस वाले खाद्य पदार्थों की तासीर गर्म मानी जाती है।

➡ Δ रस के प्रकार:-

आयुर्वेद में 6 प्रकार के रसों के बारे में बताया गया है। रसों का ये प्रकार मूलतः स्वाद के आधार पर ही निर्धारित किये गए हैं। आयुर्वेद में निम्न 6 रस बताए गए हैं।

मधुर (मीठा) अम्ल (खट्टा) लवण (नमकीन) कटु (चरपरा)

तिक्त (कड़वा, नीम जैसा) कषाय (कसैला)

1- मधुर रस

जिस रस को खाने पर संतुष्टि, ख़ुशी और मुंह में चिपचिपापन महसूस होता है। साथ ही जो रस पोषण प्रदान करता है और कफ बढ़ाता है उसे ही आयुर्वेद में मीठा या मधुर रस कहा गया है।

➡ मधुर रस के गुण

मधुर रस से युक्त पदार्थ (औषधि और आहार द्रव्य) जन्म से ही अनुकूल होते हैं। अतः ये रस से शुक्र तक सभी धातुओं की वृद्धि करके व्यक्ति को बलवान बनाते हैं और उम्र बढ़ाते हैं। इनके सेवन से त्वचा का रंग में निखार आता है एवं पित्त और वात दोष शान्त होते हैं।

मधुर रस वाली चीजें खाने से नाक, गला, मुंह, जीभ और होंठ चिकने और मुलायम होते हैं। ये शरीर को स्थिरता, लचीलापन, शक्ति और सजीवता प्रदान करते हैं। आमतौर पर मधुर रस वाले पदार्थ चिकनाई युक्त, ठंडे और भारी होते हैं। ये बालों, इन्द्रियों और ओज के लिए उत्तम होते हैं।

दुबले-पतले कमजोर लोगों या और किसी बीमारी आदि से पीड़ित लोगों को विशेष रूप से मधुर रस युक्त आहार खाने की सलाह दी जाती है।

➡ मधुर रस के अधिक सेवन से होने वाले नुकसान:

कई गुणों से युक्त होने पर भी मधुर रस वाली चीजों के सेवन से शरीर में कफ दोष बढ़ने लगता है। कफ बढ़ने के कारण निम्न रोगों की संभावना बढ़ जाती है :

मोटापा,आलस, सुस्ती,अधिक नींद आना

शरीर में भारीपन,भूख ना लगना,पाचन-शक्ति की कमी

प्रमेह (मूत्र सम्बन्धी रोग, मधुमेह आदि)

मुंह और गर्दन आदि में मांस का बढ़ना

मूत्रकृच्छ्र (मूत्र का रुक-रुक कर या कठिनाई से आना)

खाँसी, जुकाम, जुकाम के साथ बुखार,मुँह का मीठा स्वाद,संवेदना (sensation) की कमी

आवाज में कमजोरी, गले में सूजन व चिपचिपाहट

कंजक्टीवाइटिस (आंख आना)

इसलिए मोटे, अधिक चर्बी वाले, मधुमेह से पीड़ित व्यक्ति को मधुर रस का सेवन कम से कम करना चाहिए तथा पेट में कीड़े होने पर भी इससे बचना चाहिए।

➡ मधुर रस वाले खाद्य पदार्थ:-

आयुर्वेद में वर्णित- घी, सुवर्णि, गुड़, अखरोट, केला, नारियल, फालसा, शतावरी, नागबला, मेदा, महामेदा, शालपर्णी, पृश्नपर्णी, मुद्गपर्णी, माषपर्णी, जीवन्ती, महुआ, मुलेठी, विदारी, वंशलोचन, दूध, गम्भारी, गोखरू, मधु और द्राक्षा, ये सब मधुर द्रव्यों में मुख्य हैं।

➡ अपवाद

पुराना चावल, पुराने जौ, मूँग, गेंहूँ, शहद, मधुर रस वाले होने पर भी कफ को नहीं बढ़ाते। अतः आयुर्वेद में अन्न पुराना तथा घी नया खाने का विधान है।

2- अम्ल रस

जिस रस का सेवन करने से मुंह से स्राव होता है। जिसे खाने पर आंखें और भौहें सिकुड़ती हैं और दांतों में खट्टापन महसूस होता है वो अम्ल रस होता है।

➡️ अम्ल रस के गुण

यह रस पदार्थ़ों को स्वादिष्ठ और रुचिकर बनाता है एवं भूख को बढ़ाता है। छूने पर यह ठंडा महसूस होता है। इसके सेवन से शरीर की ताकत बढ़ती है। अम्ल रस वाली चीजों के सेवन से मस्तिष्क अधिक सक्रिय होता है। यह ज्ञानेन्द्रियों को सशक्त बनाते हैं और शरीर को उर्जा देते हैं।

अम्ल रस, भोजन को निगलने और उसे गीला करने में सहायक होता है और गति बढ़ाकर भोजन को नीचे की ओर ले जाकर भी पाचन क्रिया को बढ़ाता है। ज्यादातर कच्चे फलों में अम्ल रस पाया जाता है।

➡️ अम्ल रस के अधिक सेवन से नुकसान:

अम्ल रस का अधिक सेवन करने से पित्तदोष में वृद्धि हो जाती है। जिसके परिणामस्वरूप निम्नलिखित समस्याएं होने की आंशका बढ़ जाती है :

अधिक प्यास लगना,दाँतों का खट्टा होना

कफ का पिघलना,माँसपेशियों की टूट-फूट

दुर्बल शरीर वालों में सूजन,शरीर में कमजोरी

आँखों के सामने अन्धेरा छाना,चक्कर,खुजली

त्वचा के रोग,चोट या कटने आदि से होने वाले घावों का पक जाना व उनमें पस भर जाना,हड्डी का टूटना

गले, हृदय और छाती में जलन,बुखार।

➡️ अम्ल रस युक्त खाद्य पदार्थ

आंवला, इमली, नींबू, अनार, चाँदी, छाछ, दही, आम, कमरख, कैथ और करौंदा आदि में अम्ल रस अधिक मात्रा में होता है।

➡️ अपवाद

अनार या अनारदाना और आंवला, ये अम्ल रस वाले होते हुए भी अम्ल रस से होने वाली किसी प्रकार की हानि नहीं पहुँचाते हैं।

3- लवण रस

जो रस, सेवन करने पर मुख से लार टपकाता है तथा गले और कपोल में जलन पैदा करता है, वह लवण रस कहलाता है।

➡ लवण रस के गुण

लवण रस युक्त पदार्थ वात की गति नीचे करने वाले, चिपचिपाहट पैदा करने वाले और तीक्ष्ण पाचक होते हैं। ये अंगों की जकड़न, शरीर के स्रोतों (बॉडी चैनल) की रुकावट, जमी हुई चर्बी और मल पदार्थों के अधिक संचय को दूर करते हैं। लवण रस वाले पदार्थ न बहुत अधिक चिकने, न अधिक गर्म होते हैं और न अधिक भारी होते हैं। लवण रस अन्य रसों के प्रभाव को कम कर देता है।

लवण रस के अधिक सेवन से होने वाले नुकसान

अधिक मात्रा में लवण रस युक्त खाद्य पदार्थों का सेवन करने से पित्त दोष के साथ रक्त भी असंतुलित हो जाता है। इस वजह से निम्न समस्याएँ होने की संभावना बढ़ जाती है। अधिक प्यास और गर्मी लगना,जलन,बेहोशी

कुष्ठ या अन्य चर्म रोग से पीड़ित स्थान की त्वचा का गलना- सड़ना,मुंह पकना,नेत्रपाक,सूजन,त्वचा के रंग में विकार,शरीर के अंगों से रक्तस्राव,दाँतों का हिलना

विषैले लक्षण,पौरुषता में कमी,गंजापन,बालों का सफेद होना,झुर्रियां पड़ना,,विसर्प (Erysipelas- एक प्रकार का चर्म रोग),दाद,गठिया (gout),अम्लपित्त (hyperacidity),घाव बढ़ना,बल और ओज का नाश।

➡ लवण रस युक्त खाद्य पदार्थ

सेंधानमक, सौर्वचल नमक, कृष्ण, बिड, सामुद्र और औद्भिद नमक, रोमक, पांशुज, सीसा और क्षार, ये लवण रस वाले मुख्य द्रव्य हैं।

4- कटु रस

इस रस का सेवन करने पर मुंह में सुई चुभने जैसा दर्द महसूस होता है और जीभ के अगले हिस्से को उत्तेजित करता है। इसके अलावा यह आंख, नाक और मुंह से स्राव कराता है और कपोलों को जलाता है।

➡ कटु रस के गुण

कटु रस वाले पदार्थ मुंह को स्वच्छ रखते हैं और शरीर में भोजन के अवशोषण में सहायक होते हैं। इनके सेवन से भूख और पाचन शक्ति बढ़ती है। ये आंख, कान आदि ज्ञानेन्द्रियों को ठीक प्रकार से कार्य करने योग्य बनाते हैं।

कटु रस वाली चीजों के नियमित सेवन से नाक व आंखों से मल पदार्थों का स्राव और स्रोतों (बॉडी चैनल्स) से चिपचिपे मल पदार्थों का निकास ठीक तरह से होता है।

➡ कटु रस का सेवन इन रोगों में है फायदेमंद :

मोटापा,शीतपित्त,आँतों की शिथिलता,कंजक्टीवाइटिस (Conjunctivitis),खुजली,घाव,पेट के कीड़े,जोड़ों की जकड़न,गले के रोग,कुष्ठ,उदर्द।

➡ कटु रस युक्त खाद्य पदार्थ

हींग, मरिच, पंचकोल (पिप्पली, पिप्पलीमूल, चव्य, चित्रक और शुण्ठी) तथा सभी प्रकार के पित्त, मूत्र और भिलावा आदि कटु रस वाले खाद्य पदार्थ हैं।

➡ अपवाद

सोंठ, पिप्पली और लहसुन, कटु रस के अन्य पदार्थों के समान ज्यादा हानिकारक नहीं होते।

5- तिक्त (कड़वा) रस

यह रस मुंह से लिसलिसेपन को हटाता है और जीभ को जड़ बनाता है।

➡ तिक्त रस के गुण

तिक्त रस का स्वाद भले ही बुरा हो लेकिन यह अन्य पदार्थों को स्वादिष्ट और रुचिकर बनाता है। इससे भोजन में रूचि बढ़ती है। तिक्त रस वाले पदार्थ विषैले प्रभाव, पेट के कीड़ों, कुष्ठ, खुजली, बेहोशी, जलन, प्यास, त्वचा के रोगों, मोटापे व मधुमेह आदि को दूर करते हैं। ये वात का अनुलोमन (नीचे की ओर गति) करते हैं शरीर में रूखापन लाते हैं। अतः शरीर की नमी, चर्बी, मोटापा, मज्जा, पसीना, मूत्र तथा पुरीष को सुखाते हैं। इसके अलावा गले और यकृत् को शुद्ध करते हैं और कार्य करने में समर्थ बनाते हैं।

➡ तिक्त रस से नुकसान

अधिक मात्रा में सेवन करने से तिक्तरस युक्त पदार्थ शरीर में रस (plasma), रक्त, वसा, मज्जा तथा शुक्र की मात्रा को कम कर देते हैं। इनसे स्रोतों में खुरदरापन और मुँह में शुष्कता, शक्ति में कमी, दुर्बलता, थकावट, चक्कर, बेहोशी, वातज रोग उत्पन्न होते हैं।

➡ तिक्त रस युक्त खाद्य पदार्थ

पटोल, जयन्ती, सुगन्धबाला, खस, चन्दन, चिरायता, नीम, करेला, गिलोय, धमासा, महापंचमूल, छोटी और बड़ी कटेरी, इद्रायण, अतीस और वच : ये सब तिक्त रस वाले पदार्थ हैं।

➡ अपवाद

गिलोय व पटोल तिक्त रस वाले होने पर भी हानिकारक नहीं होते।

6- कषाय (कसैला) रस

यह रस जिह्वा को जड़ (सुन्न कर देना) बनाता है और गले एवं स्रोतों को अवरुद्ध करता है।

➡ कषाय रस के गुण

यह रस पित्त और कफ दोष को कम करता है। इसके अलावा यह अंगों से स्राव को कम करता है, घाव को जल्दी भरता है और हड्डियों को जोड़े रखने में मदद करता है। इसमें धातुओं और मूत्र आदि को सुखाने वाले गुण भी होते हैं। यही कारण है कि कषाय रस युक्त पदार्थों के सेवन से कब्ज़ की समस्या हो जाती है। कषाय युक्त पदार्थ त्वचा को स्वच्छ बनाते हैं। ये शरीर की नमी को सोख लेते हैं। आयुर्वेद के अनुसार कषाय रस सूखा, ठंडा और भारी होता है।

कषाय रस के अधिक सेवन से होने वाले नुकसान

कषाय रस वात को प्रकुपित करता है। अगर आप कषाय रस वाली चीजों का अधिक मात्रा में सेवन करते हैं तो आपको निम्न समस्याएँ होने की आशंका बढ़ जाती है। मुँह सूखना,हृदय में दर्द,पेट फूलना,बोलने में रुकावट,रंग का काला होना,पौरुष का नाश,

अधिकप्यासलगना शरीर में कमजोरी, थकावट,पक्षाघात,लकवा

➡ कषाय रस वाले खाद्य पदार्थ :

हरड़, बहेड़ा, शिरीष, खैर, शहद, कदम्ब, गूलर, कच्ची खांड, कमल-ककड़ी, पद्म, मुक्ता (मोती), प्रवाल, अञ्जन और गेरू इत्यादि कषाय रस वाले खाद्य पदार्थ हैं।

➡ अपवाद

कषाय रस युक्त होने पर भी हरड़ अन्य कषाय द्रव्यों के समान शीतल और स्तम्भक (मल आदि को रोकने वाली) नहीं होती।

संदर्भ ग्रंथ :- श्रीमद्भगवद्गीता
आयुर्वेद संहिता
चरक संहिता
अथर्ववेद संहिता

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ડિજિટલ લાઇબ્રેરીના યુગમાં ગુજરાતી કોશનું (ડિક્શનરી) સ્થાન

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આજના અદ્યતન યુગમાં વિજ્ઞાન અને ટેકનોલોજીના કારણે વિશ્વ હરણફાળ દોડ લગાવી રહ્યું છે ત્યારે આજે ડિજિટલાઇઝેશનનું મહત્ત્વ વધ્યું છે. નાનામાં નાની દરેક બાબતનું આજે ડિજિટલાઇઝેશન થઈ રહ્યું છે, અને વાતે વાતે આ શબ્દ પણ સાંભળવા મળે છે. આજનો આ યુગ ડિજિટલાઇઝેશનનો છે ત્યારે આપણે જે પણ માહિતી જોઈતી હોય છે તે ક્ષણમાત્રમાં ઇન્ટરનેટની મદદથી મળી રહે છે. એ પછી કોઈ પુસ્તક વિષેની માહિતી હોય, કોઈ પ્રદેશ વિશે, કોઈ શબ્દ વિશે કે પછી અન્ય કોઈપણ માહિતી કેમ ન હોય, તે હવે આંગળીના ટેરવે આવી ગઈ છે. એક ક્લિક કરો અને બધી માહિતી આપણી સામે હાજર થઈ જાય છે.

આ ડિજિટલાઇઝેશનના યુગમાં જ ડિજિટલ લાઇબ્રેરી (ઇ-ગ્રંથાલય)નો મહિમા હમણાં હમણાં ખૂબ વધ્યો છે. મોટાભાગનો વાચક વર્ગ ડિજિટલ લાઇબ્રેરી તરફ વળ્યો છે. કેમ કે, વ્યક્તિ માત્રની આદત છે કે જે વસ્તુ સરળતાથી મળી જાય તેની પાછળ ખોટો શ્રમ શું કરવો. અને આજ કારણ છે કે આજના વાચકોને લાઇબ્રેરી સુધી જઈ ને જે પુસ્તક જોઈએ છે તે શોધવામાં કંટાળો આવે છે. આથી વાચકોના રસ ને રુચિને ધ્યાનમાં રાખી અનેક એવી ડિજિટલ લાઇબ્રેરીઓ ઊભી કરવામાં આવી છે. દરેક ભાષામાં સ્વતંત્ર એવી ડિજિટલ લાઇબ્રેરી આપણને જોવા મળે છે. જેમકે; અંગ્રેજી ભાષા છે તો તેમાં ઝેડલિબ, પીડીએફ ડ્રાઈવ વગેરે જેવી ડિજિટલ લાઇબ્રેરીઓ મળે છે. જ્યારે ગુજરાતી ભાષામાં પબ્લિક ગુજરાતી લાઇબ્રેરી, રીડગુજરાતી.કોમ, ગુજલિટ, પ્રતિલિપિ, માતૃભારતી વગેરે જેવી ડિજિટલ લાઇબ્રેરીઓ મળે છે. આ એક સારી બાબત ગણાય કે અન્ય ભાષાની જેમ ગુજરાતી ભાષામાં ડિજિટલ લાઇબ્રેરી પ્રાપ્ત થાય છે, પણ એક બાબત વિચારવા જેવી છે કે આજે જે પણ ગુજરાતી ડિજિટલ લાઇબ્રેરી મળે છે તેમાં ગુજરાતી સાહિત્યના એટલે કે નવલકથા, નવલિકા, કવિતા, વિવેચન, નિબંધ, ગીત, ગઝલ વગેરેના પુસ્તકો વધુ જોવા મળે છે. જ્યારે ગુજરાતી ભાષાના કોશશાસ્ત્રના પુસ્તકો નહિવત્ માત્રામાં પ્રાપ્ત થાય છે.

ઘણી એવી ગુજરાતી ડિજિટલ લાઇબ્રેરીઓ જેમકે; રીડગુજરાતી.કોમ, ગુજલિટ, પ્રતિલિપિ વગેરેની મુલાકાત લીધી ત્યારે જાણવા તથા જોવા મળ્યું છે કે ગુજરાતી ભાષા કે જેના પર આપણો વ્યવહાર ટકેલો છે અને જેના થકી જ આપણે આપણા વાણી-વર્તન, આચાર-વિચાર વગેરેનું પ્રત્યાયન કરી શકીએ છીએ. આવી અમૂલ્ય માતૃભાષા વિશેના અનેક ગ્રંથો આપણે ત્યાં રચાયા છે. આ ઉપરાંત અનેકવિધ એવા માહિતી કોશો (ડિક્શનરી) પણ મળે છે કે જેમાં આપણી ભાષાની અમૂલ્ય એવી માહિતીઓ સચવાયેલી છે. જેમકે; શબ્દકોશ, કથાકોશ, કહેવતકોશ, રૂઢિપ્રયોગકોશ, સાહિત્યકોશ, પર્યાયણકોશ, સંજ્ઞાકોશ, વિરુદ્ધાર્થીકોશ વગેરે મળે છે. આ દરેક કોશોમાં ગુજરાતી ભાષાની અમૂલ્ય એવી માહિતી સંકલિત કરવામાં આવી છે. આમાના ઘણાં કોશો તો એવા છે કે જે અત્યારે પ્રાપ્ત પણ થતા નથી. અને આમાના ઘણાં ગ્રંથો એવા છે કે જે ખરેખર સાચવવા જોઈએ પણ તેની જાળવણી થઈ નથી. પણ હજુ એટલું મોડું નથી થયું. હજુ પણ જે કોશ મળે છે તેને ડિજિટલ લાઇબ્રેરીમાં સ્થાન આપવું જોઈએ. જેથી ભાષા ક્ષેત્રે સંશોધન કરનાર શોધાર્થીઓ અને ભાષા વિશે જાણવા ઈચ્છતા જિજ્ઞાસુઓને માહિતી મેળવવા અહીંથી ત્યાં ફાંફાં મારવા ન પડે. અને જે માહિતી જોઈએ છે તે ઘરે રહીને પણ સરળતાથી મેળવી શકાય.

ગુજરાતી ભાષાની ધરોહર સમા જે આ ગ્રંથો કે કોશો છે તેમાં વિષય પ્રમાણે ખૂબ જ ઉપયોગી એવી માહિતી સંકલિત કરીને સંપાદકો દ્વારા આપવામાં આવી છે. દા.ત., આપણે શબ્દકોશની જ વાત કરીએ, તો શબ્દકોશમાં આપણને 'સાર્થ જોડણીકોશ', 'ભગવદ્ગોમંડલ', 'નર્મકોશ', 'લોકસાહિત્ય શબ્દકોશ', 'બૃહદ ગુજરાતીકોશ' વગેરે જેવા કોશ મળે છે. આ દરેકમાં શબ્દ અને તેના અર્થો તો મળે છે. સાથે સાથે શબ્દ કઈ ભાષાનો છે? સ્ત્રીલિંગ છે, પુલિંગ છે કે નપુંસકલિંગ, એકવચન છે કે બહુવચન વગેરે જેવી બાબતો પણ દર્શાવવામાં આવી છે. આ શબ્દકોશમાં તો 'ભગવદ્ગોમંડલ' ને 'સાર્થ જોડણીકોશ' આ બેની એપ્લિકેશન અત્યારે ઉપલબ્ધ છે. પણ હજુ બીજા શબ્દકોશો કે જે હજુ એમનેમ ગ્રંથાલયોમાં છે કાં તો લુપ્ત થવાના આરે છે તેમનો ડિજિટલ લાઇબ્રેરીમાં સમાવેશ કરવો આવશ્યક છે.

હવે, કથાકોશની વાત કરીએ તો કથાકોશમાં પણ આપણે ભિન્ન ભિન્ન પ્રકારના કોશો મળે છે, જેમકે; ડૉ. હરિવલ્લભ ભાયાણી પાસેથી 'મધ્યકાલીન ગુજરાતી કથાકોશ' ખંડ ૧ અને ૨', ડાહ્યાભાઈ દેરાસરી પાસેથી 'પૌરાણિક કથાકોશ' ભાગ ૧ અને ૨', અને નર્મદ પાસેથી 'નર્મકથાકોશ'. એમ

કથા વિષયક અનેકવિધ કોશ મળે છે, પણ આજે પ્રશ્ન એ ઊભો થાય છે કે ડૉ. હરિવલ્લભ ભાયાણી સંપાદિત 'મધ્યકાલીન ગુજરાતી કથાકોશ' ખંડ ૧ અને ૨માંથી માત્ર દ્વિતીય ખંડ જ ઉપલબ્ધ છે. જ્યારે પ્રથમ ખંડ અપ્રાપ્ય છે. જો આ ગ્રંથને ડિજિટલ લાઈબ્રેરીમાં સ્થાન મળે તો મધ્યકાળ વિશે અથવા તો મધ્યકાળની કથાઓ વિશે જાણવા ઇચ્છુક અભ્યાસીઓ તથા જિજ્ઞાસુને માત્ર આ બે ગ્રંથો જ પૂરતા છે. કેમકે, આ બંને ગ્રંથોમાં મધ્યકાળની નાનામાં નાની જે પણ કથા મળે છે તેને સંકલિત કરવામાં આવી છે. એ પણ આધાર સંદર્ભ સાથે. જેથી આ ગ્રંથ ઉપરાંત પણ વધારે માહિતી ભાવકને જોઈતી હોય તો સંદર્ભ દ્વારા મળી રહે છે. આ ઉપરાંત 'પૌરાણિક કથાકોશ' તો ઉપલબ્ધ છે છતાં પણ જો તેનું ડિજિટલાઇઝેશન કરવામાં આવશે તો તે આવનારી પેઢી માટે, સંશોધકો, સંપાદકો અને અભ્યાસીઓ માટે આશીર્વાદ રૂપ બાબત કહેવાશે. કેમકે, આ ગ્રંથો એવા છે કે જેમાં આપણા તમામ પૌરાણિક ગ્રંથોને કેન્દ્રમાં રાખી તેની રચના કરવામાં આવી છે. આ ગ્રંથમાં આપણા પૌરાણિક પાત્રો, સ્થળો, પ્રદેશો વગેરે વિશે વિસ્લતારથી સમજ આપવામાં આવી છે. આથી આવા ગ્રંથો ડિજિટલાઇઝેશનની રાહમાં હજુ ગ્રંથાલયોમાં અકબંધ પડ્યા છે.

આપણા લોકજીવનનું પ્રતિબિંબ જેમાં સીધું જિલાય એવી માહિતી જો કોઈમાંથી મળતી હોય તો તે કહેવત છે. કહેવત એ વ્યાવહારિકતાનો નિચોડ છે. એટલે કે આપણા રોજબરોજના જીવનમાં જે ઘટના, પ્રસંગ કે બનાવ બને છે તેના પરથી કોઈને કોઈ કહેવત નિર્માણ પામે છે. આવી જ આપણી ભાષાની અમૂલ્ય એવી અનેકવિધ કહેવતો અંગે અનેકવિધ કોશો પ્રાપ્ત થાય છે. જેમ કે દલપતરામ સંપાદિત 'કથન સપ્તશતી', મગનલાલ વખતચંદ સંપાદિત 'કથનાવળી' જમશેદજી પીતીત કૃત 'કહેવત- માળા' ભાગ ૧ અને ૨, રતિલાલ સાં. નાયક કૃત 'કહેવતકોશ' વગેરે જેવા કોશો કહેવત અંગે મળે છે. આવા કોશને પણ ડિજિટલ લાઇબ્રેરીમાં સ્થાનની જરૂર છે. કારણ કે કહેવત એ એવી ઉક્તિઓ છે કે જે આપણા વ્યાવહારિક જીવન સાથે જોડાયેલી છે. આથી કોઈપણ સમાજના આચાર-વિચાર, વાણી-વર્તન, રીત-રિવાજ જો જાણવા હોય તો કહેવતો દ્વારા જાણી શકાય છે. અને આ ગ્રંથો જો ડિજિટલ લાઈબ્રેરીમાં સચવાશે તો આવનારી ભાવી પેઢી કે જે હવે આપણા રીત-રિવાજ, પરંપરાથી વિમુખ થઈ રહી છે. ત્યારે તે આવા ગ્રંથો દ્વારા આપણી સંસ્કૃતિ અને આપણા સમાજને જાણી શકશે. આ દરેક કહેવતકોશમાંથી પસાર થતાં આપણને આપણી લોકસંસ્કૃતિ, આપણી રીત-ભાત, પરંપરા, સામાજિક સમય વગેરેનો પરિચય મળીરહે છે. આ બધાં વિશે જાણવું હોય તો શરત એક જ છે કે, આવા ગ્રંથો સુધી આપણે જવું પડે ને જોવું પડે.

આ સિવાય સાહિત્યકોશ વિશે જોઈએ તો ગુજરાતી સાહિત્ય પરિષદ દ્વારા 'ગુજરાતી સાહિત્યકોશ' ખંડ ૧ થી ૩ મળે છે. જેનો પ્રથમ ભાગ મધ્યકાળ, બીજો ભાગ- અર્વાચીન અને ત્રીજો ભાગ- પ્રકીર્ણ એવો છે. જો કોઈને માત્ર ને માત્ર મધ્યકાલીન સાહિત્યને જાણવું છે તો પ્રથમ ભાગ જ જોવો રહ્યો. એ પ્રથમ ભાગમાં મધ્યકાલીન સાહિત્યની કૃતિ અને કર્તા વિશે નાનામાં નાની બાબતોની નોંધ થઈ છે. જ્યારે અર્વાચીન સાહિત્ય વિશે જાણવું હોય તો બીજો ભાગ જોવો રહ્યો. આ બીજા વિભાગમાં અર્વાચીન સાહિત્યના સર્જકો, એમની કૃતિઓ અને કૃતિઓના અમર પાત્રો વિશે સમજ આપવામાં આવી છે. જ્યારે ત્રીજો વિભાગ એ પ્રકીર્ણ એવો છે, જેમાં સાહિત્યની સાથે જોડાયેલી તમામ બાબતો જેવી કે, સાહિત્ય કૃતિઓ, કર્તાઓ, સાહિત્ય સ્વરૂપો, સાહિત્યિક સંસ્થાઓ, સામયિકો, સાહિત્યિક વાદો વગેરે અંગે વિસ્તારથી સમજ આપવામાં આવી છે. આવી ઉમદા માહિતી ધરાવતા આ ગ્રંથો હાલમાં ઉપલબ્ધ નથી. રીપ્રિન્ટની પ્રોસેસમાં છે. પણ જો આ ગ્રંથને ડિજિટલ લાઈબ્રેરીમાં સ્થાન મળ્યું હોત તો અત્યારે જ્યારે તેની આવૃત્તિઓ ઉપલબ્ધ નથી ત્યારે અભ્યાસીઓ ડિજિટલ લાઇબ્રેરીના માધ્યમથી તેનો અભ્યાસ કરી શકત. કેમકે ગુજરાતી સાહિત્યને જાણવા માટે આ ત્રણ ગ્રંથો ખૂબ જ ઉપયોગી પૂરવાર થાય એવા છે. આથી હવે પછી આ ગ્રંથોને ડિજિટલ લાઇબ્રેરીમાં સ્થાન મળશે એવી આશા સેવી શકીએ.

'સંજ્ઞાકોશ' એ પ્રકારના પણ કોશ ગુજરાતી કોશશાસ્ત્રમાં મળે છે. જેમાં જોઈએ તો ચંદ્રકાન્ત ટોપીવાળા અને અન્ય પાસેથી 'આધુનિક સાહિત્ય સંજ્ઞાકોશ', જયંત ગાડીત પાસેથી 'અનુઆધુનિક સાહિત્ય સંજ્ઞાકોશ', અભિજિત વ્યાસ પાસેથી 'લલિતકળા સંજ્ઞાકોશ' એમ વિભિન્ન સંજ્ઞાકોશો આપણને કોશશાસ્ત્રમાં મળે છે. જેમાંથી ચંદ્રકાન્ત ટોપીવાળા સંપાદિત 'આધુનિક સાહિત્ય સંજ્ઞાકોશ' હાલમાં અપ્રાપ્ય છે. ખરેખર આ કોશ સાહિત્યના અભ્યાસીઓ માટે ઉપયોગી એવો સંદર્ભ ગ્રંથ છે. કેમકે, પ્રસ્તુત ગ્રંથમાં આધુનિક સમયમાં સાહિત્યક્ષેત્રે તેમજ લોકજીવનમાં જે જે અંગ્રેજી સંજ્ઞાઓ પ્રયોજાય છે અને વ્યવહારમાં પણ ખપમાં લેવામાં આવે છે એવી અનેકવિધ પ્રકારની સંજ્ઞાઓ સંપાદકો દ્વારા અહીં ગ્રંથસ્થ કરવામાં આવી છે. આ ગ્રંથ પણ હાલ અપ્રાપ્ય છે. આથી તેને પણ પુનઃમુદ્રિત કરી ડિજિટલ લાઈબ્રેરીમાં સ્થાન આપવાની આવશ્યકતા છે.

આ અને આવા અનેક કોશો છે કે જે માહિતીથી સભર અને સંદર્ભગ્રંથ તરીકે ઉપયોગી નીવડે તેમ છે. જેને ડિજિટલ લાઈબ્રેરીમાં સ્થાન મળવું જોઈએ. કેમકે, આજના ડિજિટલયુગમાં કોઇપણ વ્યક્તિને જે

પણ પુસ્તકની આવશ્યકતા ઊભી થાય તેને તેઓ તરત જ ઇન્ટરનેટ પર શોધે છે. આથી ગુજરાતી ભાષાના આવા જે જે નહિવત્ પુસ્તકો છે તેને ડિજિટલ લાઇબ્રેરીમાં સાચવવા જોઈએ, પણ સચવાયા નથી. આપણે અન્ય ભાષામાં જોઈશું તો ખ્યાલ આવશે કે તેમના જે પણ ગ્રંથની આપણે જરૂર હોય તે મોટાભાગે ડિજિટલ લાઇબ્રેરીમાંથી પ્રાપ્ત થશે જ. આવી જ સજાગતાની જરૂર ગુજરાતી ભાષાના કોશ પ્રત્યે પણ છે. ગુજરાતી ભાષાના ગ્રંથોનું ડિજિટલ લાઇબ્રેરીમાં સ્થાન નથી એવું પણ નથી. ગુજરાતી સાહિત્યના નવલકથા, નવલિકા, કવિતા, ગીત, ગઝલ, નિબંધ વગેરે જેવા ગ્રંથો ડિજિટલ લાઇબ્રેરીમાં મળે છે. પણ કોશ વિશેના ગ્રંથો નથી મળતા. જ્યારે આજે ઘણાં વિદ્વાનો આ તરફ વળ્યા છે. જેના ફળ સ્વરૂપે 'સાર્થ જોડણીકોશ' અને 'ભગવદ્ગોમંડલ' જેવા કોશો આપણને ઓનલાઈન (ડિજિટલ) સ્વરૂપે પ્રાપ્ત થાય છે.

ગ્રંથોની જાળવણી અંગે આમ જુવો તો છેક સૈકાઓથી કહેવાતું આવ્યું અને હાલમાં પણ કહેવાતું રહે છે તેની પાછળનું કારણ એક જ છે આપણે પુસ્તકોની જાળવણી પ્રત્યે એટલા સભાન નથી જેટલા અન્ય બાબતોમાં છીએ. ‘ભગવદ્ગોમંડલ’ના આરંભે જ પુસ્તકોની જાળવણી અને મહત્ત્વ અંગે વાત કરતાં ગોપાલ એમ. માકડિયા નોંધે છે કે;

“સમાજ માણસોથી બને છે, આપણા થકી બને છે. અત્યારે જે સમાજનું સર્જન થયું છે તે આપણે કર્યું છે. તેમાં ઘણી બાબતો આપણને ગમતી હોય છે. બીજી અણગમતી પણ હોય છે. સમાજને ઘડવામાં આપણી સંસ્કૃતિ સારો ફાળો આપે છે. બીજું પરિબળ સાહિત્ય છે, જે સમાજના બૌદ્ધિક સ્તર દ્વારા રચાય છે અને તેના પર અસર કરે છે. પુસ્તકો પરથી સમાજનું ચિત્ર મળી શકે છે. સમાજના ઇતિહાસને જોઈ, તેને વર્તમાનમાં મૂલવી, તેમાંથી ઉન્નત ભાવિ તરફનો માર્ગ ઉત્તમ ગ્રંથો દર્શાવે છે. સમાજ જો તેનો સારો વારસો જાળવી રાખવા માગતો હોય તો પ્રાચીન ગ્રંથોની જાળવણી અનિવાર્ય છે. પૂર્વજોની પ્રતિભા, જ્ઞાન, સામર્થ્યનો ઉપયોગ કરવો હોય તો આપણે જૂના ગ્રંથો તરફ જવું પડશે. તેમને જાળવવા પડશે, તેમનું પુનઃપ્રકાશન કરવું પડશે. આપણો ભવ્ય વારસો, આપણી શ્રેષ્ઠ સંસ્કૃતિ નાશ ન પામે, તે માટે તેમને જાળવવા જોઈએ. વેદ, પુરાણ, ઉપનિષદો જેવા ગ્રંથોમાં અપાર જ્ઞાન છે. તેનો પરિચય વર્તમાન પેઢીને મળે તો આ વારસો સચવાય, જળવાય અને તેનું સંવર્ધન થાય. વર્તમાન સંજોગોમાં ટી.વી., કમ્પ્યૂટર જેવાં સાધનો, યુવક - યુવતીઓની વાચન તરફથી વિમુખ થવાની વૃત્તિ, મોંઘવારી જેવા કારણોને લીધે

પુસ્તક-પ્રેમ ઘટતો જતો હોય તેવું લાગે છે. પરંતુ એ નિર્વિવાદ હકીકત છે કે પુસ્તકોનો કોઈ વિકલ્પ નથી, ન હોઈ શકે."

આમ, પુસ્તક જાળવણી અંગે કોઈને કોઈ પ્રકારે ચર્ચાઓ થઈ છે અને આજે પણ આ ચર્ચાઓ શરૂ છે. ત્યારે એટલું જ કહેવાનું કે, અનેકવિધ પ્રકારની ડિક્શનરીઓ ગુજરાતી ભાષામાં સર્જાઈ છે. જેમાંથી અમુક હવે અપ્રાપ્ય છે, તો અમુકને હવે રિપ્રિન્ટ કરવાની આવશ્યકતા છે. પણ ખરેખર તો મારી દૃષ્ટિએ આજે જ્યારે ડિજિટલ લાઇબ્રેરીનો યુગ છે ત્યારે આવા નહિવત્ અને જે અપ્રાપ્ય થવાના આરે ઊભા છે એવા ગ્રંથોને ડિજિટલ લાઇબ્રેરીમાં સ્થાન આપવું જોઇએ. જેથી આપણી ભાષામાંથી લુપ્ત થતાં અમૂલ્ય વારસાને જાળવી શકાશે. અને આવી અમૂલ્ય માહિતી આવનારી ભાવી પેઢી માટે આશીર્વાદ રૂપ બની રહેશે.

- **સંદર્ભ સામગ્રી :**

૧. www.readgujarati.com

૨. public.Guajarati Library

3. www.gujarati.pratilipi.com

૪. www.gujlit.com

૫. 'ભગવદ્ગોમંડલ' ભાગ ૧લો, કર્તા- ભગવતસિંહજી, પ્રકાશન- પ્રવીણ પ્રકાશન, દ્વિતીય પુનઃ મુદ્રણ-૨૦૦૭

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ભારતમાં પશુપાલન ભેંસની આંકડાકીય માહિતીનો અભ્યાસ

વિદિતા સુભાષભાઈ પરમાર[1] અને ડૉ. રાજાભાઈ એસ. જીંજાળા[2]
[1]સંશોધક, અર્થશાસ્ત્ર વિભાગ, ભક્ત કવિ નરસિંહ મહેતા યુનિવર્સિટી, જુનાગઢ.
[2]માર્ગદર્શક, એસો. પ્રોફેસર, આર્ટસ & કોમર્સ કોલેજ, માણાવદર.

સારાંશ

પૃથ્વી પર મનુષ્યનો જન્મ થયો ત્યારથી જ તેને પોતાના ખોરાક માટેની જરૂરીયાતો ઉકેલવાનો પ્રશ્નો ઊભા થયેલા અને આ માટે શરૂઆતમાં તે પશુઓનો શિકાર કરીને ખોરાક મેળવતો અને પછીથી પશુઓ મારફત પોતાની જરૂરિયાત સંતોષવા પશુઓને ઉછેરવા લાગ્યો જમીન પર ઉગતી વિવિધ વનસ્પતિઓનો ઉપયોગ પશુના ખોરાકમાં કરીને તે રીતે પશુઓ દ્વારા વધારે પોષક સામગ્રી મેળવી શકવાનું જ્ઞાન થયું. આમ ખેતી અને પશુપાલનનાં સમન્વય સધાયો. જીવનનિર્વાહ માટે પશુપાલન એ માણસો દ્વારા કરવામાં આવતી પ્રવૃત્તિ છે જેમાં ગાય - ભેંસ, ઘેટા - બકરા, મરઘા - બટકા તેમજ ઘોડા જેવા પ્રાણીઓને ઉછેરી તેમને વેચીને અથવા તેમના દ્વારા મળેલ દૂધના ઉત્પાદનમાંથી જેવા કે દૂધ, દહીં અને દૂધની બનાવતો ઇત્યાદિના વેચાણમાંથી આવક મેળવી પોતાનું ગુજરાન ચલાવવાના અર્થતંત્રમાં પશુપાલનનો ફાળો મહત્વનો રહ્યો છે. આ સંશોધન પેપરમાં ભારતના પશુપાલનમાં ભેંસોની સંખ્યાનો અભ્યાસ હાથ ધર્યો છે. તેમજ ગુજરાતના ભેંસોની આંકડાઓનો પણ અભ્યાસ કરવામાં આવ્યો છે.

ચાવીરૂપ શબ્દો : પશુપાલન, ભેંસ

1. પ્રસ્તાવના :

ખેતી અને પશુપાલન દેશને આર્થિક રીતે ઉપયોગી છે. અને દેશના વિકાસ માટે પણ મહત્વનું છે. ભારતમાં પશુઓ પૈકી ગાય અને ભેંસ મુખ્યત્વે બે હેતુ માટે ઉપયોગી છે. દૂધ ઉત્પાદન માટે અને ખેતીને ચાલકબળ પૂરું પાડવા અને પશ્ચિમ દેશમાં ગાયોનો ઉપયોગ ખાસ માંસ માટે પણ કરવામાં આવે છે. ભારતમાં ઢોરનો ઉછેર માત્ર માંસ માટે કરવાનું પરવડી શકે તેમ ન હોવાથી દૂધ ઉત્પાદન અને કાર્યશક્તિ માટે નકામા જાનવરોનું માંસ પૂરું પાડવા માટે ઉપયોગમાં લેવાય છે. તેથી ભારતમાં

પશુપાલનમાં દ્રી-અર્થી ઢોર એટલે દૂધ ઉત્પાદન અને કાર્ય શક્તિ એમ બે હેતુ ગણાય છે. જ્યારે પશ્ચિમના દેશોમાં દુધ ઉત્તપન્ન કરવા સાથે સાથે માંસ પણ ઠીક-ઠીક પ્રમાણમાં પેદા કરે તેવા ઢોર દ્વિ-અર્થી ગણાય છે. ઢોરએ ખેતીના ઉત્પાદન કાર્યમાં અનિવાર્ય સાધન છે. તેથી તેને દેશની મૂડી અથવા દેશની સંપત્તિ ગણવામાં આવે છે. પશુધન ઉદ્યોગમાંથી દૂધ, માંસ, ઈંડા જેવી ખાદ્ય ચીજો અને અન્ય વપરાશી અને ઔદ્યોગિક વસ્તુઓ પ્રાપ્ત થાય છે. ભારતમાં ખેતી અને પશુપાલન પરસ્પર ગાઢ રીતે સંકળાયેલ છે. ખેતી અને પશુપાલન એકબીજાના પૂરક છે. અને પરસ્પર અવલંબિત છે. ભારત માટે એમ કહેવાય છે કે **"ખેતીએ ભારતનો પાયો છે અને પશુપાલન એ ખેતીનો પાયો છે."** ભારતમાં પશુપાલન માટે ભેંસનુ મહત્વ દિવસે - દિવસે વધતું જાય છે. તેથી જ આજે ભારતમાં ભેંસને સંખ્યા ૧૯૫૧માં ૪૩.૪ મિલિયન હતી. તે વધીને ૨૦૧૯માં ૧૦૯.૮૫ થઈ ગઈ હતી. ગુજરાતમાં ભેંસોની ૨૦૧૨માં ૧૦૩૮૫.૫૭ હજાર હતી જે વધીને ૨૦૧૯માં ૧૦૫૪૩.૨૫ હજારમાં થઈ ગઈ.

2. સંશોધનના હેતુઓ :

-> ભારતમાં ભેંસની ઓલાદો વિશે જાણકારી મેળવવી.

-> ભારતમાં પશુપાલન ભેંસોની સંખ્યાની જાણકારી મેળવવી.

-> ગુજરાતમાં પશુપાલન ભેંસોની સંખ્યાનો અભ્યાસ કરવો.

-> ભેંસની સંખ્યામાં થયેલા પરિવર્તનનો આંકડાકીય માહિતી તપાસવી.

3. સંશોધન પદ્ધતિ

પ્રસ્તુત સંશોધનમાં ગોણ માહિતી સ્ત્રોતનો ઉપયોગ કરવામાં આવ્યો છે. સંશોધન માટે ભારતમાં ભેંસોની સંખ્યાની આંકડાકીય માહિતી માટે વર્ષ ૧૯૫૧ થી ૨૦૧૯ સુધીના આંકડાઓનો અભ્યાસ કરવામાં આવ્યો છે. માહિતીની પ્રાપ્યતા માટે વિવિધ સંશોધનનો સામાયિકો, પુસ્તકો અને વેબસાઈટનો ઉપયોગ કરવામાં આવ્યો છે.

4. સંદર્ભ સાહિત્યની સમીક્ષા :

4.1. 20 Livestock census in India 2018

20 Livestock census in India 2018માં રિપોર્ટ રજૂ કરવામાં આવ્યો હતો. જેમાં મુખ્યત્વે પશુધન વિશે માહિતી આપવામાં આવી છે. 20મી પશુધન ગણતરી ૨૦૧૮માં શરૂ થયેલ તેના તારણો ૧૭

ઓક્ટોબર ૨૦૧૯ના રોજ બહાર પાડવામાં આવ્યા હતા. તેના તારણો દર્શાવે છે કે ભારતીય પશુધનની સંખ્યામાં વધારો થયો છે. ૨૦૦૯માં પશુધનની સંખ્યા ૫૨૮.૬૯ મિલિયન હતી. જે ઘટીને ૨૦૧૨માં ૫૧૨ મિલિયન થવા પામી હતી. જે વધીને ૨૦૧૮માં ૫૩૫.૭૮ મિલિયન થઈ ગઈ હતી. 20મી પશુધન વસ્તી ગણતરી અનુસાર ગુજરાતમાં ૧૦૫૪૩.૨૫ હજારમાં ભેંસોની સંખ્યા દર્શાવી છે.

4.2. BASIC ANIMAL HUSBANDRY STATISTICA 2019

BASIC ANIMAL HUSBANDRY STATISTICA 2019માં રિપોર્ટ રજૂ કરવામાં આવ્યો હતો. જેમાં મુખ્યત્વે એશિયામાં પશુપાલનની આંકડાકીય માહિતી આપવામાં આવી છે. ૨૦૧૧માં એશિયામાં લગભગ ૧૮૪૭૫૯૬૨૯ સંખ્યામાં ભેંસો હતી. તેની સંખ્યા વધીને વર્ષ ૨૦૧૩માં ૧૮૭૩૮૮૬૦૬ જેટલી થઈ. ૨૦૧૫માં ભેંસોની સંખ્યાનું પ્રમાણ વધીને ૧૯૦૮૮૧૩૮૨ થયું. ૨૦૧૭માં ભેંસની સંખ્યા ૧૯૫૭૭૨૯૦૭ જોવા મળે છે. ૨૦૧૧થી લઈને ૨૦૧૭ સુધી ભેંસોની સંખ્યામાં વધારો થયેલ જોવા મળે છે.

4.3. BEHAKE ROY H. (૨૦૦૮) THE ECONOMIC CONTRIBUTION OF PASTORALISM: CASE STUDIES FROM THE HORN OF AFRICA AND SOUTHERN AFRICA

આ સંશોધન પેપર સાત દેશોની રાષ્ટ્રીય અર્થવ્યવસ્થામાં પશુપાલનના આર્થિક યોગદાન પરના સાહિત્યની સમીક્ષા કરે છે. બે હોર્ન ઓફ આફ્રિકામાં અને પાંચ દક્ષિણ આફ્રિકામાં અહીં આવરી લેવામાં આવેલા તમામ દેશો માટે, રાષ્ટ્રીય સ્તરે પશુધનમાંથી પશુધનના આર્થિક આઉટપુટને વધુ સામાન્ય રીતે અલગ પાડવું મુશ્કેલ છે. તેમ છતાં પશુપાલનની આર્થિક ભૂમિકા સમાન પ્રદેશમાં રાષ્ટ્રીય અર્થતંત્રો માટે પણ તદ્દન અલગ હોઈ શકે છે. હોર્ન વચ્ચે વ્યાપક પ્રાદેશિક તફાવતો પણ છે, જ્યાં પશુપાલકો નિકાસ માટે જીવંત પ્રાણીઓના ઉત્પાદનમાં ભારે સામેલ છે, અને દક્ષિણ આફ્રિકા, જ્યાંના ટોળાઓને મુખ્યત્વે વ્યપારી વેચાણ સિવાયના હેતુઓ માટે રાખવામાં આવે છે. ઓછામાં ઓછી ત્રણ પદ્ધતિસરની ખામીઓ પશુપાલકો દ્વારા રાષ્ટ્રીય અર્થ વ્યવસ્થામાં આપેલા યોગદાનને માપવાની ક્ષમતાને મર્યાદિત કરે છે.

4.4. દેસાઈ એમ. એમ.૧૯૭૪ અર્થશાસ્ત્ર અને પશુ-બજાર વ્યવસ્થા અમદાવાદ, યુનિવર્સિટી ગ્રંથનિર્માણ બોર્ડ.

પ્રસ્તુત પુસ્તકમાં લેખકે પશુપાલનનાં કેટલાંક આર્થિક પાસાઓ જેવા કે, પશુપાલનના ભૌગોલિક વિભાગો, પશુ – વસ્તીગણતરી અને તેના આંકડાઓ, પશુપાલન પદ્ધતિ, ખેતી અને પશુપાલનનું મહત્વ, પશુ અને પશુપેદાશોનો આર્થિક હિસ્સો, ખેતી અને પશુપાલનનો સમન્વય, ભારતમાં ધંધા તરીકે પશુપાલન પશુપાલનમાં ઉત્પાદનનું ધોરણ વિશે માહિતી આપી છે. પશુ-પેદાશોની બજાર – વ્યવસ્થા વિશે માહિતી જેવી કે, બજારની સેવાઓ, વેચાણ પદ્ધતિઓ, વિક્રયપાત્ર શેષ, બજારની એજન્સીઓ, વેચાણના માધ્યમ અથવા વેચાણની આડતો, કિંમત--વિસ્તાર, પશુ, દૂધ, બ્રિસલ્સ, ઊન જેવી પશુ અને પશુ – પેદાશની બજાર વ્યવસ્થા અને બજાર વ્યવસ્થા સુધારવા જરૂરી પગલાંની માહિતી આપી છે. બજાર વ્યવસ્થામાં સહકારી વ્યવસ્થાનો ફાયદાઓ અને નિયંત્રિત બજારોનો બજાર–વ્યવસ્થાના ફાયદાઓ વિશે જાણકારી આપી છે. પશુ પેદાશ વર્ગીકરણ અને પ્રમાણોની પણ વાત કરવામાં આવી છે. ખેતી અને પશુપાલન ક્ષેત્રમાં રાજ્યનો હસ્તક્ષેપ બે પ્રકારે છે હકારાત્મક અને નકારાત્મક હોય છે. ખેતી અને પશુપાલન ક્ષેત્રમાં રાજયે આપેલ ફાળા વિશે માહિતી આપી છે. પંચવર્ષીય યોજનામાં પશુપાલન ક્ષેત્રે જે આયોજન કરવામાં આવ્યું તેની માહિતી આપવામાં આવી છે. પશુપાલન ક્ષેત્ર માટેના અગત્યના કાયદાઓ અને વિવિધ અધિનિયમની જાણકારીની પણ વાત કરી છે.

5. ભારતમાં ભેંસની ઓલાદો :

ભારતમાં સુરતી, મહેસાણા, જાફરાબાદી, નાગપુરી (પંઢરપુરી), મુરાહ (દિલ્હી), નીલી, રાવી, ટોડા (મૈસુર), પારલાકીમીડી (ઓરિસ્સા) બળવરી (ઉત્તર પ્રદેશ)

6. માહિતીનું પૃથ્વીકરણ અને અર્થઘટન :

કોષ્ટક નં. - 1

ભારતમાં ભેસોની સંખ્યા ૧૯૫૬ થી ૨૦૧૯ (મિલિયનમાં)

વર્ષ	ભારતમાં ભેંસની સંખ્યા
૧૯૫૧	૪૩.૪
૧૯૫૬	૪૪.૯૦
૧૯૬૧	૫૧.૨૦
૧૯૬૬	૫૩.૦૦
૧૯૭૨	૫૭.૪૦
૧૯૭૭	૬૨.૦૦
૧૯૮૨	૬૯.૭૮
૧૯૮૭	૭૫.૯૭
૧૯૯૨	૮૪.૨૧
૧૯૯૭	૮૯.૯૨
૨૦03	૯૭.૯૨
૨૦૦૭	૧૦૫.૩૪
૨૦૧૨	૧૦૮.૭૦
૨૦૧૯	૧૦૯.૮૫

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અર્થઘટન :

-> કોષ્ટક - નં-1માં વર્ષ ૧૯૫૧ થી ૨૦૧૯ સુધીના ભારતમાં ભેસોની સંખ્યા દર્શાવવામાં આવી છે. કોષ્ટક પરથી જોઈ શકાય છે કે ભારતમાં ભેંસોની સંખ્યામાં સતત વધારો થતો જોવા મળે છે.

-> ૧૯૫૧માં ભેસોની સંખ્યા ૪૩.૪ મિલિયન હતી. જે ૨૦૧૯માં ભેંસોની સંખ્યા ૧૦૯.૮૫ મિલિયન થઈ ગઈ છે જે દર્શાવે છે ભારતમાં ભેંસોની સંખ્યામાં સારો એવો વધારો થયેલો જોવા મળે છે.

કોષ્ટક નં - 2

ભારતમાં ભેંસની સંખ્યામાં ટકાવારી ફેરફાર

વર્ષ	**ભારતમાં ભેંસોની સંખ્યામાં ટકાવારી ફેરફાર**
૧૯૫૬-૬૧	૧૪.03
૧૯૬૧-૬૬	3.૫૨
૧૯૬૬-૭૨	૮.30
૧૯૭૨-૭૭	૮.0૧
૧૯૭૭-૮૨	૧૨.૫૫
૧૯૮૨-૮૭	૮.૮૭
૧૯૮૭-૯૨	૧૦.૮૫
૧૯૯૨-૯૭	૬.૭૮
૧૯૯૭-૨003	૮.૯૦
૨003-0૭	૭.૫૮
૨00૭-૧૨	3.૧૯
૨0૧૨-૧૯	૧.0૬

સ્રોત : BASIC ANIMAL HUSBANDRY STATISTICS -2019

અર્થઘટન :

-> કોષ્ટક - નં-2 માં વર્ષ ૧૯૫૬-૬૧ થી ૨૦૧૨-૧૯ સુધી ભારતમાં ભેંસોની સંખ્યામાં ટકાવારી ફેરફાર દર્શાવવામાં આવ્યો છે.

-> વર્ષ ૧૯૬૫-૬૧માં ભેસોની સંખ્યામાં ટકાવારી ફેરફાર ૧૪.03 જે ૬ વર્ષમાં ભેંસોની સંખ્યામાં થયેલ ફેરફાર દર્શાવેલ છે. ઉપરોક્ત કોષ્ટકમાં ૧૯૫૬-૬૧ થી ૨૦૦૭-૧૨ સુધી ૬-૬ વર્ષનો સમયગાળો દર્શાવેલ છે.

કોષ્ટક નં - 3

ગુજરાત રાજ્યમાં ભેંસોની સંખ્યા ૧૯૫૧ થી ૨૦૧૨ (હજારમાં)

વર્ષ	ગુજરાતમાં ભેંસોની સંખ્યા (હજારમાં)	વૃદ્ધિદર (%)
૧૯૫૧	૨૫૧૪	-
૧૯૫૬	૨૬૪૦	૫.૦૧
૧૯૬૧	૨૯૧૭	૧૦.૪૯
૧૯૬૬	૩૧૪૦	૭.૬૪
૧૯૭૨	૩૪૬૮	૧૦.૪૫
૧૯૭૭	૩૪૭૩	૦.૧૪
૧૯૮૨	૪૪૪૩	૨૭.૯૩
૧૯૮૮	૪૫૦૨	૧.૩૩
૧૯૯૨	૫૨૬૮	૧૭.૦૧
૧૯૯૭	૬૨૮૫	૧૯.૩૧
૨૦૦૩	૭૧૪૦	૧૩.૬૧
૨૦૦૭	૮૭૭૪	૨૨.૮૮
૨૦૧૨	૧૦૩૮૫	૧૮.૩૬

સ્ત્રોત: BULLETIN OF ANIMAL HUSBANDRY AND DAIRYING STATISTICS 2015-2016

અર્થઘટન :

-> ઉપરોક્ત કોષ્ટકમાં વર્ષ ૧૯૫૧ થી ૨૦૧૨ના સમયગાળા દરમિયાન ગુજરાતમાં ભેંસોની સંખ્યા હજારમાં દર્શાવવામાં આવી છે.

-> વર્ષ ૧૯૫૧ થી ૨૦૧૨ના સમયગાળા દરમિયાન ગુજરાતમાં ભેસોની સંખ્યાનો વૃદ્ધિદર ટકાવારીમાં દર્શાવવામાં આવ્યો છે.

-> વર્ષ ૧૯૫૧માં ગુજરાતમાં ભેંસોની સંખ્યા ૨૫૧૪ હજાર હતી. જે વધીને ૨૦૧૨માં ભેસોની સંખ્યા ૧૦૩૮૫ હજાર થઇ છે.

7. તારણો :

-> પ્રસ્તુત સંશોધન પરથી તારણ કાઢી શકાય છે કે ભારતમાં ભેંસોની સંખ્યામાં સારા એવા પ્રમાણમાં વધારો જોવા મળ્યો છે. ૧૯૫૧ થી ૨૦૧૯ સુધી સંખ્યામાં સતત વધારો જોવા મળે છે.

-> સંશોધન પરથી જોઈ શકાય છે કે ગુજરાતમાં ભેંસની સંખ્યામાં સારો એવા પ્રમાણમાં વધારો જોવા મળ્યો છે.

8.સંદર્ભ સૂચિ :

-> Faostat production data, WWW. Faostat. Org
-> 19 & 20 livestock census, department of animal husbandry & dairying
-> પશુપાલન અને ડેરી વિષયક આંકડાકીય અહેવાલ ૨૦૧૫-૧૬, P.-૨૦
-> BASIC ANIMAL HUSBANDRY STATISTICS - 2019, P.-81
-> 20 livestock census in India - 2018
-> Government of India minister of fisheries animal husbandry & dairying department of animal husbandry & dairying krishi bhawan, New Delhi
-> BEHAKE ROY H. (૨૦૦૮) THE ECONOMIC CONTRIBUTION OF PASTORALISM: CASE STUDIES FROM THE HORN OF AFRICA AND SOUTHERN AFRICA
-> દેસાઈ એમ. એમ.૧૯૭૪ અર્થશાસ્ત્ર અને પશુ-બજાર વ્યવસ્થા અમદાવાદ, યુનિવર્સિટી ગ્રંથનિર્માણ બોર્ડ.

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ગુજરાતની અમૂલ ડેરી: એક આર્થિક અભ્યાસ

પુષ્પા કે. નંદાણીયા
પીએચ.ડી. રીસર્ચ સ્કોલર,
અર્થશાસ્ત્ર ભવન, સૌરાષ્ટ્ર યુનિવર્સિટી, રાજકોટ.

સારાંશ

પ્રસ્તુત પેપર પરંપરાગત સમયમાં ભારતમાં પશુપાલન પ્રવૃત્તિ અને ત્યારબાદ ભારતમાં જુદા-જુદા રાજ્યોમાં ડેરી ઉદ્યોગ કેવી રીતે વિકસ્યો તેના ઉપર પ્રકાશ પાડે છે. અહી લેખક દ્વારા ગુજરાતમાં સહાકરી પ્રવૃત્તિ અંતર્ગત ડેરી ઉદ્યોગના વિકાસને સમજવાનો પ્રયાસ કરવામાં આવ્યો છે. ઉપરાંત પ્રસ્તુત લેખમાં ભારત તથા ગુજરાતમાં દૂધ ઉત્પાદન સહકારી પ્રવૃત્તિનો વિકાસ ઉપર પ્રકાશ પાડવાનો હેતુ પણ રહેલો છે. સાથે-સાથે ગુજરાત રાજ્યની જાણીતી ડેરી આણંદની અમૂલ ડેરીના ઈતિહાસને જાણવાનો પ્રયાસ કરવામાં આવેલો છે.

Key Words: ગુજરાતની+અમૂલ+ડેરી+આર્થિક+અભ્યાસ+ઉત્પાદન

પ્રસ્તાવના

પરંપરાથી ભારત દેશની લગભગ પોણા ભાગ જેટલી વસતિ ગ્રામીણ વિસ્તારમાં વસવાટ કરે છે. ભારત ગામડાઓનો બનેલો દેશ હોવાથી મુખ્ય વ્યવસાય તરીકે ખેતી અને પશુપાલન વ્યવસાય વિકાસ પામ્યો છે. રામાયણ કાળમાં ગોવાળો લોકોની ગાયો ભેગી કરીને ચરાવવા લઈ જતા. ગાયો અને અન્ય પશુઓ માટે અલગ મેદાનો રહેતા. શ્રી કૃષ્ણના સમયમાં દૂધ, દહીં અને માખણ જાણીતા થયા. ભગવાન શ્રી કૃષ્ણે ઇન્દ્રની પૂજા બંધ કરાવીને ગોવર્ધન પર્વતની પૂજા પ્રચલિત કરી. આ પછી ગાયોની પુણ્ય આપનારી શક્તિને નવું પરિમાંણ મળ્યું. આર્યોનો મુખ્ય વ્યવસાય પશુપાલન હતો. તેઓ ભારતમાં આવ્યા ત્યારે ગંગા યમુનાના વિશાળ સપાટ મેદાનોમાં વસવાટ કરી ઠરીઠામ થયા હતા. ગુપ્ત કાળમાં પશુપાલન ઉત્તમ પ્રકારે થયું હતુ. મહાવીર સ્વામીના સમયમાં કોટપતિ શ્રાવકો પાસે હજારના હિસાબે ગાયો હતી. ગાયોનુ એકમ 'ગોકુલ' કહેવાતું.

ઈસ. 2018-19 દરમ્યાન સહકારી ક્ષેત્રે ડેરી પેદાશોની બનાવટ (MT) 22 જેટલી છે. છેલ્લા 60 વર્ષમાં ભારતના દૂધ ઉત્પાદનમાં વૃદ્ધિ દર 4.57 રહી છે.

આણંદ કૃષિ યુનિવર્સિટી ખાતે એગ્રો એન્ડ ફૂડ પ્રોસેસિંગ ઉપર યોજાયેલ ત્રી-દિવસીય પ્રી-વાઇબ્રન્ટ ગુજરાત સમીટ 2021 ના ત્રીજા દિવસે વર્તમાન સમયમાં ડેરી ક્ષેત્રમાં આવી રહેલા પરિવર્તનો તેમજ ગુજરાતમાં ડેરી પદાર્થોના નિકાસની શક્યતાઓ અને નવીન તકો ઉપરના જ્ઞાનસત્રમાં રાજ્યના પશુપાલન નિયામક ડૉ. ફાલ્ગુની ઠાકરે જણાવ્યું કે, દેશમાં કુલ 198 મિલિયન ટન દૂધનું ઉત્પાદન થાય છે. વિશ્વમાં દૂધ ઉત્પાદનમાં હિસ્સો 21 ટકા છે. જે અમેરિકા પછી બીજા ક્રમે આવે છે.

શ્રી ત્રિભુવનદાસ પટેલ તથા અન્ય સહકારી આગેવાનોના પ્રયાસોથી તારીખ ૧૪ ડીસેમ્બર, ૧૯૪૬ના રોજ ‘ખેડા જિલ્લા સહકારી દૂધ ઉત્પાદક સંઘ’ રજીસ્ટર્ડ થયો. જોકે, અગાઉ પણ ભારતના સહકારી ધોરણે દૂધના વ્યવસાયની શરૂઆત થઈ હોવાનો ઉલ્લેખ મળેલ છે. જેમ કે, લખનૌ તથા ગુજરાતમાં સુરત જીલ્લાના ચોર્યાશી તાલુકામાં ઈસન ૧૯૩૯માં આવી મંડળીઓં શરૂ થયેલી.

ખેડા જિલ્લામાં સહકારી દૂધ ઉત્પાદક સંઘ શરૂ થયા બાદ ખેડા જીલ્લાના નાના નાના ગામોમાં પણ દૂધ ઉત્પાદક સહકારી મંડળીઓની સ્થાપના થવા લાગી. આવી મંડળીઓમાં દૂધ એકત્ર થવા લાગ્યું. આથી સંઘને દૂધ એકત્ર કરવાની તથા એકત્ર થયેલ દૂધ લોકો સુધી પહોચાડવાની સમસ્યા ઊભી થવા પામી. આમ છતાં, સહકારીતાને સમર્પિત કાર્યકરો આવી મુસીબતથી ડર્યા વિના જેમ-જેમ પ્રશ્નો ઊભા થતા ગયા તેમ-તેમ તેનો ઉકેલ લાવતા ગયા.

સંદર્ભ

1) ભાવના પટેલ. (2019) સહકારી ડેરી પ્રવૃત્તિ નો ઇતિહાસ

ભાવના પટેલ દ્વારા 31-8-2019 ના વિશ્વમાં સહકારી ડેરી પ્રવૃત્તિ નો ઇતિહાસ લેખ પ્રકાશિત કરવામાં આવ્યો હતો. તેઓએ પોતાના લેખમાં વિશ્વના જુદા જુદા દેશોમાં દૂધ સહકારી મંડળીઓની સંખ્યા વસ્તી ઉત્પાદન અને વ્યક્તિત્વ પ્રાપ્ત થતું દૂધ ની વિગત જણાવી છે. તે ઉપરાંત વિશ્વના જુદા જુદા દેશોમાં દૂધનું ક્રમ જણાવવામાં આવ્યા છે. જેના દ્વારા જાણવા મળે છે કે ભારત પ્રથમ ક્રમે સ્થાન ધરાવે છે વિશ્વમાં ભારતના સહકારી મંડળીના ઇતિહાસ અને અમૂલ ની સ્થાપના વિશે જણાવવામાં આવ્યું છે. વિશ્વમા ડેનમાર્ક સૌ પ્રથમ સહકારી મંડળી ની શરૂઆત થઇ હતી અને ગુજરાતમાં સૌપ્રથમ દૂધ મંડળી

રચવાનું ગૌરવ સુરત જિલ્લાની જાય છે અમૂલ ની સ્થાપના ખેડા જિલ્લામાં 14/12/1946ના રોજ ખેડા જિલ્લા સહકારી દૂધ ઉત્પાદક સંઘ લી. ની સ્થાપના કરવામાં આવી .

આમ પ્રસ્તુત લેખમાં વિશ્વ ભારત અને ગુજરાતમાં ડેરી સહકારી પ્રવૃત્તિ નો ઇતિહાસ અને સહકારી પ્રવૃત્તિનો વિકાસ વિગતે દર્શાવવામાં આવ્યો છે.

2) શાહ દિલીપ (1992) "સહકારી ડેરીની ગ્રામવિકાસ પરની અસરો" નો અભ્યાસ (સુરત ચોર્યાશી) દ્વારા સુરત જિલ્લાના ચોર્યાસી તાલુકામાં સહકારી ડેરી ની ગ્રામ વિકાસ પરની અસરો નો અભ્યાસ બતાવે છે કે આદિવાસી વિસ્તારમાં રૂઢિગત સરકારી ડેરી અને આણંદ પેટર્નની સહકારી ડેરીઓ કામ કરે છે. દૈનિક 4 થી 6 કિલોગ્રામ દૂધ પશુ દીઠ ઉત્પાદન થાય છે.10 એકરથી વધુ જમીન ધરાવતા ખેડૂતો 11.3 કિલોગ્રામ દૂધ ઉત્પાદન કરે છે દૂધની પશુ દીઠ ઉત્પાદકતા ઘણી નીચી છે. અભ્યાસ હેઠળના કુટુંબોમાં સરેરાશ દૂધનો વપરાશ 117 કિલોગ્રામ હતો. 26 ટકા ઉત્તરદાતા કાયમી બેકાર અને 40% અર્ધ બેકાર જોવા મળ્યા ડેરી ઉદ્યોગ દૈનિક પાંચ કલાકની રોજગારી આપે છે ૫૦ ટકા કરતા વધુ ઉત્તરદાતાના બાળકો આ વ્યવસાયમાં દૈનિક 2 થી 5 કલાકની રોજગારી મળે છે.

હેતુઓ

1 ભારત અને ગુજરાતમાં દૂધ ઉત્પાદન જાણવું

2 ભારતમાં સહકારી પ્રવૃત્તિનો વિકાસ જણવો.

સંસોધન પદ્ધતિ

પ્રસ્તુત અભ્યાસમાં સંસોધન પદ્ધતિ તરીકે વર્ણનાત્મક પદ્ધતિનો ઉપયોગ કરવામાં આવેલ છે.

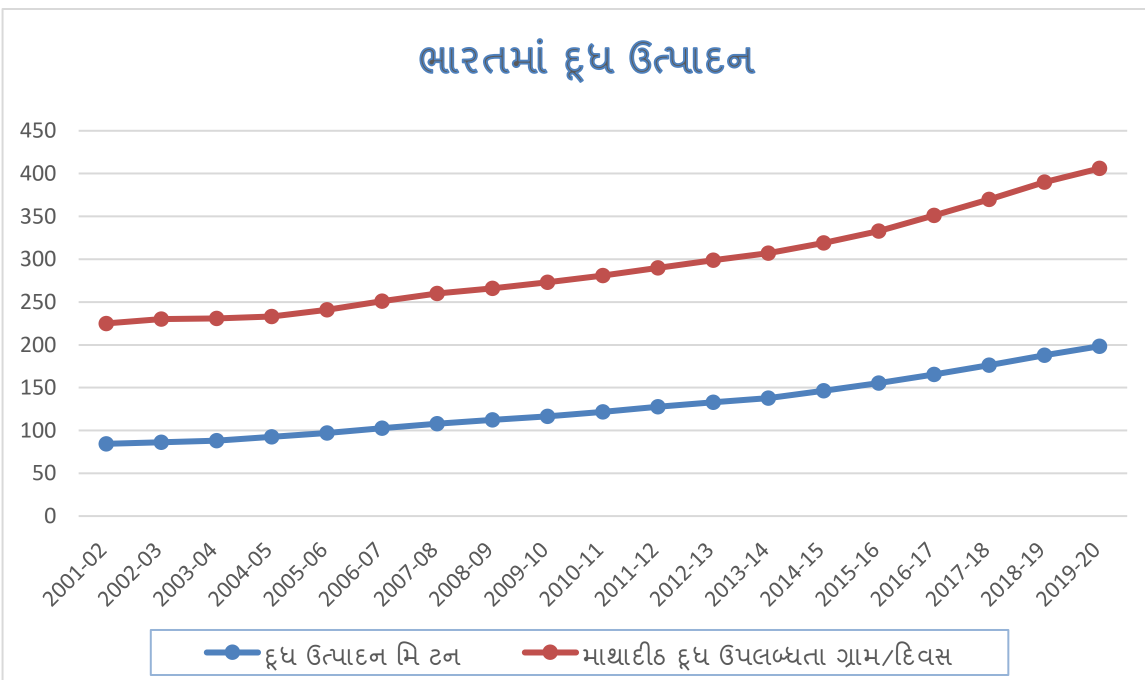
- **માહિતી એકત્રીકરણની પદ્ધતિ**

વર્ષ	દૂધ ઉત્પાદન (મિ.ટન)	માથાદીઠ દૂધની ઉપલબ્ધતા ગ્રામ/દિવસ
2001-02	84.4	225
2002-03	86.2	230
2003-04	88.1	231
2004-05	92.5	233
2005-06	97.1	241
2006-07	102.6	251

2007-08	107.9	260
2008-09	112.2	266
2009-10	116.4	273
2010-11	121.8	281
2011-12	127.8	290
2012-13	132.4	299
2013-14	137.7	307
2014-15	146.3	319
2015-16	155.5	333
2016-17	165.4	351
2017-18	176.3	370
2018-19	187.7	390
2019-20	198.4	406

પ્રસ્તુત અભ્યાસમાં માહિતી પ્રાપ્ત કરવામાટે ગૌણમાહિતી મેળવવામાં આવેલ છે.

source: State/UT Animal Husbandry Departments

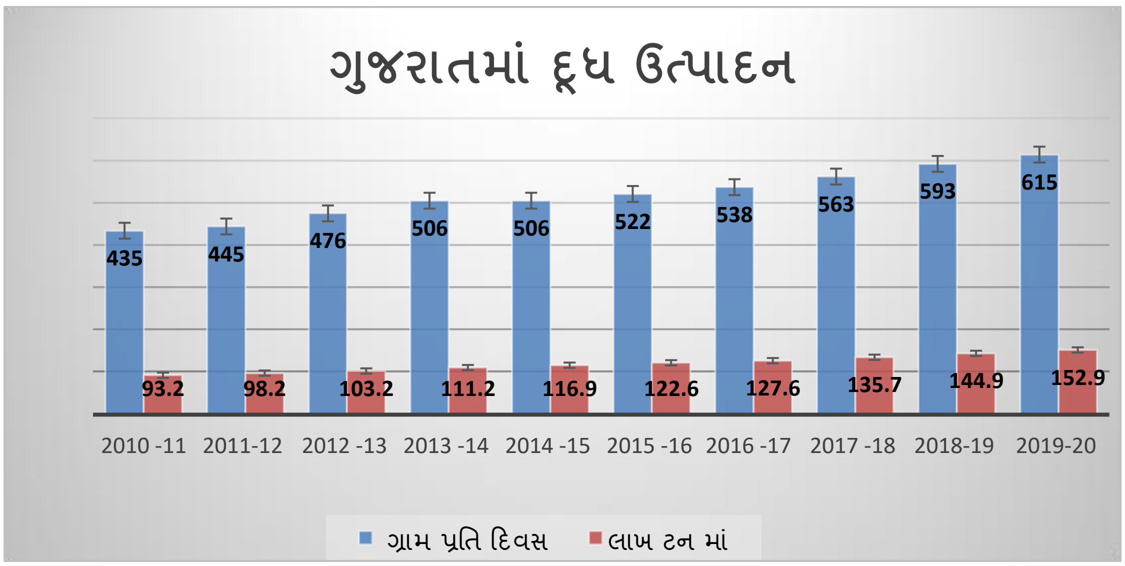


ભારતમાં દૂધ ઉત્પાદન 2001 થી 2019-20 સુથી સતત વધવા પામ્યું છે.ભારતમાં દૂધનું ઉત્પાદન 2001-02 માં 84 મિ.ટન થી વધીને 198 મિ.ટન થવા પામ્યું છે માથાદીઠ દૂધ ની ઉપલબ્ધતા 225 ગ્રામ/દિવસ થી વધીને 406 ગ્રામ/દિવસ થવા પામી છે આમ બમણો વધારો કહી શકાય.

ગુજરાતમાં દૂધ ઉત્પાદન

ગુજરાત ડેરી રાજ્ય છે. તેથી તેને ભારતનું ડેન્માર્ક કહે છે.

ગુજરાતમાં દૂધના ઉત્પાદન પ્રથમ ક્રમે 2681.95 ટન સાથે બનાસકાંઠા જિલ્લાની 'બનાસ ડેરી' આવે છે. જ્યારે બીજા ક્રમે 858.20 ટન દૂધ ઉત્પાદન સાથે મેહસાણા જિલ્લો છે. જયારે 34.ટન દૂધ ઉત્પાદન સાથે સૌથી છેલ્લા નંબરે ડાંગ જિલ્લો છે.



ગુજરાતમાં દૂધ ઉત્પાદન છેલ્લા 10 વર્ષમાં દૂધ ઉત્પાદન વધવા પામ્યું છે.2010-11 માં દૂધનું ઉત્પાદન 435 ગ્રામ/પ્રતિ દિવસ હતુ જે 2019-20 માં 615 ગ્રામ/પ્રતિ દિવસ થવા પામ્યું છે. 2010-11 માં ગુજરાતમાં દૂધ ઉત્પાદન 93.2 લાખ ટન હતુ. જે વધીને 2019-20 માં 152.9 લાખ ટન થવા પામ્યું છે.

2020-21 ના અંતે 158 લાખ મિ. ટન થવા પામ્યું છે.

ભારત તથા ગુજરાતમાં દૂધ ઉત્પાદન સહકારી પ્રવૃત્તિનો વિકાસ

દેશમાં સૌ પ્રથમ સહકારી ડેરી "દૂધ ઉત્પાદક સહકારી સંઘ" લખનૌ (ઉત્તરપ્રદેશમાં) ઈ.સ. 1937 માં સ્થપાઈ. ગુજરાતમાં 1938 માં સુરતમાં "સુરત દૂધ ઉત્પાદક સહકારી મંડળી" રચાઈ. અને 1940 માં ચાર્યાસી તાલુકા દૂધ વેચાણ કરનારી સહકારી મંડળીનો જન્મ થયો. ત્યારબાદ આણંદ જિલ્લામાં

ઈ.સ.1929 પોલસન ડેરી શરૂ થઈ. તેમાં શોષણનો પ્રશ્ન વિકટ બનતો જતો હતો. આવા સમયે તા. 4 જાન્યુ 1946 ના રોજ સહકારી ધોરણે ડેરીની સ્થાપના કરવાનો નિર્ણય લેવામાં આવ્યો અને આણંદ નજીક સામરખા ગામમાં મિટિંગ ભરવામાં આવી. આ મિટિંગમાં પાયાના કાર્યકરોમાં સરદાર વલ્લભભાઈ પટેલ, મોરારજી દેસાઈ, આણંદ તાલુકા સહકારી ખરીદ વેચાણ સંઘના ત્રિભુવનદાસ પટેલની મહત્વની ભૂમિકા હતી. ત્યારબાદ તા. 14-12-1946 ના રોજ "કૈરા ડ્રિસ્ટીક મિલ્ક યુનિયન લિમિટેડ"નો જન્મ થયો. બાદમાં તેનું નામ અમૂલ રાખવામાં આવ્યું. ભારત વાર્ષિક દૂધ ઉત્પાદન ક્ષેત્રે અગ્રીમ સ્થાન ધરાવે છે. તેવી જ રીતે ગુજરાત રાજ્ય એ દેશનું દૂધ ઉત્પાદન માટેનું પ્રમુખ રાજ્ય છે. જે દેશ અને વિદેશમાં પણ પ્રચલિત છે.

ભારત સને 1904 માં સહકારી મંડળીઓ માટેનો કાયદો પસાર થયા બાદ કૃષિ ક્ષેત્રે શરૂ થયેલી આધુનિક સ્વરૂપની સહકારી પ્રવૃત્તિ ધીમે-ધીમે અર્થતંત્રના અન્ય ક્ષેત્રોમાં પણ વિકાસ પામી રહી હતી. લોકોમાં ધીમે ધીમે સહકારી પ્રવૃત્તિઓની ઉપયોગિતા વિષે સમજ કેળવાતી જતી હતી. દૂધ ઉત્પાદનના વ્યવસાયમાં જોડાયેલા ખેડૂતો તથા પશુપાલકોને સંગઠિત બનવા તરફ લઈ જતી કેટલીક ઘટનાઓ બનતા દૂધ ઉત્પાદન સહકારી પ્રવૃત્તિના વિકાસ માટેનું વાતાવરણ તૈયાર થયુ.

ભારતમાં ઈસ. 1945 સુધીમા સમયગાળામાં ખાનગી ક્ષેત્રે ડેરી ઉદ્યોગ વિકાસ પામી રહ્યો હતો. સને 1886માં સ્થપાયેલ મીલીટરી ડેરી ફાર્મ, સને 1918 થી 1920 દરમ્યાન અમદાવાદમાં મિલ ઉદ્યોગનો વિકાસ થતા શહેરીકરણને વેગ મળતા વધેલી દૂધની માંગ, સીવ્સ દ્વારા એકમે ડેરીની સ્થાપના, કોલ્હર તથા સુંદરજી દ્વારા ક્રીમ કાઢી લીધા પછીના સેપરેટ ઉપયોગ વડે કેસીન બનાવવાની શરૂઆત, પ્રથમ વિશ્વયુદ્ધની શરૂઆત અને દૂધ અને દૂધની બનાવટોની માંગમાં થયેલો વધારો, અમદાવાદ ખાતે સરકાર દ્વારા શરૂ કરવામાં આવેલ સેન્ટ્રલ ક્રીમરી, સને 1929માં થયેલ ઈમ્પીરીયલ ઇન્સ્ટીટયુટ ઓફ એનિમલ હસબન્ડ્રીની સ્થાપના, નેશનલ ડેરી રીસર્ચ ઇન્સ્ટીટ્યુટની કરનાલ (હરિયાણા)ખાતે થયેલી સ્થાપના, અસલાલી ગામના શંકરભાઈ અને બાબુભાઈ દ્વારા મુંબઈ ઈંગ્લીશ ડેરી ફાર્મની સ્થાપના, પેસ્તનજી પોલ્સન દ્વારા આણંદમાં આધુનિક ડેરીની સ્થાપના, બીજા વિશ્વયુદ્ધ પછી ડેરી ઉદ્યોગના વિકાસને મળેલો વેગ, આણંદ ખાતે ઈસ. 1940માં થયેલ કૃષિ મહાવિદ્યાલયની સ્થાપના વગેરે જેવી ઘટનાઓએ દેશમાં ડેરી ઉદ્યોગના વિકાસમાં નોધપાત્ર ફાળો આપેલો.

આમ છતાં, સહકારી ધોરણે ડેરી ઉદ્યોગના વિકાસ માટેની સંભાવના સને 1945માં મુંબઈમાં સર્જાયેલી

દૂધની તંગીને પહોચી વળવાના આશયથી એક યોજના સરકાર દ્વારા અમલમાં મુકવામાં આવેલી. આ યોજના હેઠળ આણંદમાં ડેરી ચલાવતા પોલ્સનને મુંબઈની દૂધ તથા માખણની જરૂરિયાત પૂરી પાડવાનો કોન્ટ્રકટ આપવામાં આવ્યો. આથી પોલ્સનને ખેડા જિલ્લામાં દૂધ ખરીદવાનો એકહથ્થુ ઈજારો પ્રાપ્ત થયો. પોલ્સનને મળેલા ઈજારાનું પરિણામ ખેડૂતોના શોષણમાં આવ્યું. દૂધના ધંધામાં દાખલ થયેલા વચેટિયાઓ પણ ખેડૂતોનું શોષણ કરવા લાગ્યા. ખેડૂતો માટે દૂધનો વ્યવસાય હવે ખોટનો બનતો જતો હતો. આવા સંજોગોમાં ખેડૂતોના પ્રશ્નો હલ કરવા તે સમયના ખેડૂતો તથા કાર્યકરો ચિંતિત બન્યા હતા.

ઉપસંહાર

દેશમાં સૌ પ્રથમ સહકારી ડેરી "દૂધ ઉત્પાદક સહકારી સંઘ" લખનૌ (ઉત્તરપ્રદેશમાં) ઈસ. 1937માં સ્થપાઈ. ગુજરાતમાં 1938માં સુરતમાં "સુરત દૂધ ઉત્પાદક સહકારી મંડળી" રચાઈ

સહકારી દૂધ મંડળી અમૂલની સ્થાપના ડીસેમ્બર 1946માં થયા બાદ ગ્રામીણ કક્ષાએ પણ પ્રાથમિક દૂધ ઉત્પાદક સહકારી મંડળીઓની રચના કરવાની કામગીરી અમૂલના તે વખતના ચેરમન શ્રી ત્રિભુવનદાસ પટેલે ઉપાડી લીધી. તેઓ ગામડે-ગામડે જઈ ખેડૂતોની સભાઓ યોજતા અને ખેડૂતોને દૂધ મંડળીઓનો લાભ સમજાવતા. આમ, ગામડાઅઓમાં લોકજાગૃતિ કેળવાયા બાદ અમૂલની અધિકારીઓની મદદથી આ અંગેની કામગીરીનો વ્યવસ્થિત પ્રારંભ થયો. ખેડા જીલ્લા સહકારી દૂધ ઉત્પાદક સંઘ દ્વારા જૂન 1948 થી દૈનિક 250 લીટર દૂધથી રૂપાંતરની કામગીરી શરૂ કરવામાં આવી. ગુજરાતનું દૂધ ઉત્પાદન 2020-21ના અંતે 158 મિ.ટન થવા પામ્યું છે

<u>સંદર્ભ સૂચિ</u>

1. જગદીશચંદ્ર એમ મુલાણી (1993)સહકાર દર્શન, પ્રમુખ પ્રકાશન ૨ સંસ્કારભારતી અંકુર રોડ,નારણપુરા,અમદાવાદ-380013
2. પ્રિ.આર વી શાસ્ત્રી અને પ્રા.એસ બી પંચોલી (2007) સહકાર: સિધ્ધાંત અને વ્યવહાર, *newpopularprakashan* ,ટાવર રોડ,સુરત-395 003
3. ડૉ.જે.પી.પ્રજાપતિ,પ્રો કૃણાલ. એસ. કડિયા અને અન્ય (2018)ડેરી ઉદ્યોગ , વિસ્તરણ શિક્ષણ નિયામકશ્રીની કચેરી પ્રકાશન,યુનિવર્સીટી ભવન આણંદ કૃષિ યુનિવર્સીટી, આણંદ-388 110
4. હસમુખ દેસાઈ (2009) 'દુગ્ધ પર્વ' ગુર્જર ગ્રંથરત્ન કાર્યાલય અમદાવાદ-1
5. *Bulletin of animal husbandry and Dairying staststics 2020-21*
6. WWW.AMUL.com
7. https://doah.gujratgov.in
8. WWW.nddb.coop

બૌદ્ધ ધર્મ અને તેનો વારસો

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પ્રસ્તાવના :

પ્રાચીન ભારતના ઈતિહાસમાં ઈ.સ.પૂર્વે સાતમી સદીના મધ્યભાગથી ઈ.સ.પૂર્વે છઠ્ઠી સદી સુધીના ઈતિહાસને મૌર્ય સામ્રાજ્યના ઉદય પૂર્વેનો યુગ કહે છે. આ સમય દરમિયાન ભારતમાં બે મહાન ધર્મો- જૈન અને બૌદ્ધ- નો ઉદય થયો. આથી કેટલાક તેને 'મહાવીર અને બુધ્ધનો યુગ' કહે છે. આ બંને- જૈન અને બૌધ્ધ ધર્મો વૈદિક ધર્મ (બ્રાહ્મણ ધર્મ) સામેની ક્રાંતિરૂપે હતા. આ સમયનો વેદધર્મ લોકોની ધાર્મિક જરૂરિયાતો સંતોષવામાં નિષ્ફળ ગયો હતો. યજ્ઞો, ધાર્મિક વિધિઓ અને ક્રિયાકાંડો અટપટા અને ખર્ચાળ બન્યાં હતાં. યજ્ઞોમાં પશુઓનાં બલિદાનો પણ વધ્યાં હતાં અને તે સામે વિરોધ પણ જાગ્યો હતો. ઉપનિષદોએ પણ યજ્ઞયાગાદિ અને ધાર્મિક ક્રિયાકાંડોની મોક્ષ પ્રાપ્તિ માટે નિર્થક્તા સમજાવી હતી. એ સિવાય વર્ણવ્યવસ્થા જન્મ આધારિત બની હતી અને જ્ઞાતિપ્રથાનો ઉદય થયો હતો. તેનાથી ઊંચ-નીચના ભેદભાવો વધ્યા હતાં. શૂદ્રોની સ્થિતિ દયાજનક બની હતી. અન્ય વર્ણના લોકો માટે તેઓ અસ્પૃશ્ય ગણાતા થયા હતાં. આ સ્થિતિમાં ધાર્મિક ક્રાંતિ-નવજાગૃતિ આવશ્યક બની હતી. નવા ધર્મની જરૂર ઊભી થઈ હતી અને તે જૈન તેમજ બૌધ્ધ ધર્મે સંતોષી હતી.

ગૌતમ બુદ્ધનું જીવન :

બૌદ્ધ ધર્મના સ્થાપક ગોતમ બુદ્ધ હતા. તેમનો જન્મ મોટા ભાગના વિદ્વાનોની માન્યતા અનુસાર ઈ.સ.પૂર્વે 563 માં ઉત્તર બિહારમાં આવેલા કપિલવસ્તુ નામે નગરની સમીપ નેપાળની તળેટીના લુમ્બિની નામે વનમાં એક વૈશાખી પૂર્ણિમાના દિવસે થયો હતો. તેમના પિતા શુદ્ધોદન શાક્ય જાતિ (કુળ) ના વડા હતા. તેમને મહામાયાદેવી અને મહાપ્રજાપતિ ગૌતમી નામે બે રાણીઓ હતી. આ પૈકી મહામાયાદેવી બુદ્ધને જન્મ આપી થોડા દિવસમાં જ અવસાન પામ્યાં. આથી મહાપ્રજાપતિ ગૌતમીએ બાળ બુદ્ધનો ઉછેર કર્યો.

પિતા શુદ્ધોદનની પુત્રજન્મની ઇચ્છા પૂર્ણ થઈ હતી તેથી બાળક બુદ્ધનું નામ સિદ્ધાર્થ રાખવામાં આવ્યું. ગૌતમ એવા ગોત્રના નામ ઉપરથી તેઓ ગૌતમ પણ કહેવાયા. શાક્ય જાતિના હોવાથી તેઓ શાક્યસિંહ કે શાક્યમુનિ પણ કહેવાયા. બોધિ (જ્ઞાન) પ્રાપ્ત થતાં તેઓ જગતમાં ‘બૌદ્ધ’ તરીકે પ્રસિદ્ધ થયા.

પુત્રજન્મ પછીના થોડા સમયમાં જ પિતા શુદ્ધોદને બાળ સિદ્ધાર્થનું ભવિષ્ય જાણવા આઠ જેટલા બ્રાહ્મણોને બોલાવ્યા હોવાનું કહેવાય છે. તે પૈકી સાત બ્રાહ્મણોએ ‘આ બાળક સંસારમાં રહેશે તો ચક્રવર્તી રાજા થશે અને સંસારનો ત્યાગ કરશે તો જગદ્દ્ધારક થશે’ તેવું ભાવિકથન કર્યું. એક કૌન્ડિન્ય નામના બ્રાહ્મણે ‘ આ બાળક નિઃશંક સમ્યક્ બુદ્ધ થશે’ એમ કહ્યું. સિદ્ધાર્થ વિશેનું આ ભાવિકથન પિતા માટે વ્યથા આપનારું નીવડ્યું. સિદ્ધાર્થનું ચિત્ત સંસારમાં જ રહે એવી તેમની પ્રબળ ઇચ્છા હતી. આથી તેમણે બાળ સિદ્ધાર્થને અતિ લાડકોડ અને વૈભવ આપ્યાં. એક રાજકુમારને છાજે તેવી કેળવણી પણ આપી. આમ છતાં સિદ્ધાર્થ બાળપણથી જ પ્રકૃતિએ ચિંતનશીલ અને સંસારના વૈભવ પ્રતિ વિરક્ત જેવા જ રહ્યા. સમય જતાં સિદ્ધાર્થ યુવાન થતાં તેમનાં યશોધરા નામે એક સ્વરૂપવાન યુવતી સાથે લગ્ન થયાં. તેનાથી તેમને રાહુલ નામે પુત્રની પ્રાપ્તિ પણ થઈ. આવા સુખ - વૈભવમાં ઉછરતા હોવા છતાં સિદ્ધાર્થનું મન સંસારમાં યોગ્ય રીતે લાગતું ન હતું. તેમને સંસારમાં અનુભવાતાં રોગ, વૃદ્ધાવસ્થા અને મૃત્યુનાં દુઃખો વિશે સતત વિચારો આવતા અને દુઃખોને દૂર કરવાના ઉપાય વિશે ચિંતન કરતા. પુત્રજન્મ પછી સિદ્ધાર્થ આ દિશામાં વધુ ચિંતન કરવા લાગ્યા અને એક રાતે માનવજાતને સંસારનાં દુઃખોમાંથી મુક્ત કરવા ગૃહત્યાગ કરી ચાલી નીકળ્યા.બૌદ્ધ ધર્મમાં સિદ્ધાર્થના આ ગૃહત્યાગના પ્રસંગને ‘મહાભિનિષ્ક્રમણ’ (મહાપ્રસ્થાન) કહે છે. આ સમયે સિદ્ધાર્થની ઉંમર કેવળ 29 વર્ષની હતી.

સિદ્ધાર્થ ગૃહત્યાગ કરી આલાર કાલામનામે યોગીના આશ્રમે ગયા. આલારકલામે તેમને ધ્યાનની સાત ભૂમિકાઓ શીખવી. પરંતુ તેટલાથી સિદ્ધાર્થને સંતોષ થયો નહિ. આથી ત્યાંથી તેઓ રુદ્રક રામપુત્રના આશ્રમે ગયા. રુદ્રકે તેમને ધ્યાનની આઠમી ભૂમિકા શીખવી. આમ છતાં એમાં પણ સિદ્ધાર્થને દુઃખમુક્તિનો કે નિર્વાણપ્રાપ્તિનો કોઈ માર્ગ દેખાયો નહિ। આ પછી રુદ્રકના આશ્રમમાંથી પાંચ બ્રાહ્મણોને સાથે લઈ તેઓ સત્યની શોધમાં આગળ વધ્યા. આખરે તેઓ ઉરુવેલા (હાલનું બોધિગયા) ગામે પહોંચ્યા. અહીં તેમણે પેલા પાંચ બ્રાહ્મણો સહિત ઉગ્ર તપશ્ચર્યા આદરી. પરિણામે તેમનું શરીર અત્યંત

કૃશ થઈ ગયું. હાથપગ સળી જેવા થઈ ગયા. આંખની કીકીઓ ઊંડી ઉતરી ગઈ અને પીઠ અને પેટ ચોંટીને એક થઈ ગયાં. પોતાની તપશ્ચર્યાનું સારિપુત્ત નામના શિષ્યને વર્ણન કરતાં બુદ્ધે કહ્યું હતું.

"હું નાગો હેતો હતો. લૌકિક આચાર પાળતો ન હતો. હાથમાં ભિક્ષા લઈ ખાતો હતો. ...હું મારાં દાઢી-મૂછ અને કેશ ખેંચી કાઢતો હતો. ... સ્મશાનમાં માણસોનાં હાડકાંનું ઓશીકું બનાવીને સૂઈ જતો હતો ... ગામડાના લોકો આવી મારા ઉપર થૂંકતા હતા, ધૂળ ફેંકતા હતા અથવા મારા કાનમાં સળીઓ નાખતા હતા."

સિદ્ધાર્થની આવી ઉગ્ર તપશ્ચર્યા હતી.પરંતુ તે ઉગ્ર તપશ્ચર્યાથી પણ જ્યારે તેમને જ્ઞાનપ્રાપ્તિ ન થઈ ત્યારે તે માટે તેમણે બીજો કોઈ માર્ગ શોધવાનું વિચાર્યું. એ માટે દેહને ટકાવી રાખવાની જરૂર હતી. તેથી તેમણે પુનઃઅન્ન લેવાની શરૂઆત કરી. આ જોઈ પેલા પાંચ તપસ્વી બ્રાહ્મણો તેમને છોડી ચાલ્યા ગયા. ઉગ્ર તપશ્ચર્યાનો માર્ગ છોડી એક દિવસ ભિક્ષાર્થે ફરતાં તેઓ નિરંજરા નદીના કિનારે આવ્યા-અહીં પીપળાનું એક વૃક્ષ હતું. સિદ્ધાર્થને હવે સમજાયું હતું કે જ્ઞાનપ્રાપ્તિ માટે દેહદમન કરતાં ચિત્તની શુદ્ધિ અને એકાગ્રતા જરૂરી હતાં° આથી સુજાતા નામે એક કન્યાએ પ્રેમથી પીરસેલી ખીરનું તેમણે ભોજન કર્યું અને તે પછી શરીર-મનના સર્વ વિકારો છોડી ચિત્તની એકાગ્રતા કેળવવા તેઓ વૃક્ષ નીચે ધ્યાનમાં બેસી ગયા. તેમણે નિશ્ચય કર્યો કે હવે જ્ઞાનની-સત્યની પ્રાપ્તિ ન થાય ત્યાં સુધી અહીંથી ઊઠવું નથી અને સિદ્ધાર્થને આખરે એક વૈશાખી પૂર્ણિમાની રાત્રે સમાધિ અવસ્થામાં પોતે જેની શોધમાં વર્ષો વિતાવ્યાં હતાં તે સમ્યક્ સંબોધી (સંપૂર્ણ જ્ઞાન)ની પ્રાપ્તિ થઈ. હવે તેઓ સિદ્ધાર્થ મટીને 'બૌદ્ધ'(જેમને 'બોધિ'ની પ્રાપ્તિ થઈ છે તે) કહેવાયા. પીપળાનું એ વૃક્ષ પણ 'બોધિવૃક્ષ' નામે સુપ્રસિદ્ધ થયું.

'બોધિ' પ્રાપ્ત થવાથી બુદ્ધને સંસારનાં દુઃખોનું કારણ અને દુઃખનિવારણનો માર્ગ પણ લાધ્યો હતો. હૃદયને અપૂર્વ શાંતિ મળી હતી અને એવી શાંતિ જગત આખાને મળે તેવા શુભ આશયથી હવે બુદ્ધે ધર્મસંદેશનું કાર્ય આરંભ્યું. આ માટે સૌપ્રથમ તેઓ વારાણસી નજીક આવેલા ઋષિપત્તન (સારનાથ) માં ગયા. અહીં સિદ્ધાર્થનો ત્યાગ કરીને ચાલી નીકળેલા પેલા પાંચ બ્રાહ્મણ તપસ્વીઓ રહેતા હતા. સિદ્ધાર્થે સૌપ્રથમ તેમને પોતાનો દિવ્ય સંદેશ - ઉપદેશ આપ્યો. તેનું શ્રવણ કરીને પાંચેય બ્રહ્મણો બુદ્ધના શિષ્યો બન્યા. અહીંથી ધર્મરૂપી ચક્ર ફરવાનો આરંભ થયો, તેથી બુદ્ધનો આ પ્રથમ ઉપદેશ ' ધર્મચક્ર પ્રવર્તન ' નામે ઓળખાયો.

આ પછી જીવનમાં 45 વર્ષ સુધી રાજગૃહ, નાલંદા, ગયા, શ્રાવસ્તી, કપિલવસ્તુ, વૈશાલી, કોશામ્બી, ચંપા વગેરે સ્થળે પરિભ્રમણ કરીને ધર્મોપદેશનું કાર્ય કરતા રહ્યા. આ દરમિયાન તેમના શિષ્યોની, અનુયાયીઓની સંખ્યા વધતી ગઈ. ધર્મના પ્રચારઅર્થે તેમણે ભિક્ષુ - ભિક્ષુણીઓના અલગ અલગ સંઘની (બૌદ્ધ સંઘ) સ્થાપના કરી. આમ કરીને તેમણે ધર્મનું એક સુંદર વ્યવસ્થાતંત્ર સ્થાપ્યું. જીવનપર્યંત તેઓ ધર્મોપદેશનું કાર્ય કરતા રહ્યા. આમ કરતાં કુશીનારા (કુશીનગર:ગોરખપુર જિલ્લો) માં બુદ્ધ અતિસાર (ડાયેરિયા) નામે રોગની બિમારીના અંતે ૮0 વર્ષની વયે પરિનિર્વાણ પામ્યા. તેમણે સ્થાપેલો ધર્મ બૌદ્ધધર્મ તરીકે જગતમાં ઓળખાયો. તેમણે ઉપદેશલાં વચનો બૌદ્ધ ધર્મના ' ત્રિપિટક ' નામે ધર્મગ્રંથમાં સચવાયેલાં છે.

ચાર આર્યસત્યો : બુદ્ધે માનવજગતને ચાર આર્યસત્યોનો અમર સંદેશ આપ્યો જે નીચે પ્રમાણે છે.

(1) દુઃખ : તેમણે કહ્યું કે જીવનમાં જન્મ, જરા, વ્યાધિ, મરણ, પ્રિયનો વિયોગ અને અપ્રિયનો યોગ એ અનિવાર્ય દુઃખો છે. માણસે આ દુઃખો ભોગવવાનાં જ છે અને તેથી તેનો તિરસ્કાર ન કરતાં, સ્વીકાર કરી દુઃખોને સહન કરવાની ટેવ કેળવવી જોઈએ.

(2) દુઃખસમુચ્ચય : દુઃખોની વાત કરી બુદ્ધ બેસી ન રહ્યા - તેમણે શોધી કાઢ્યું કે જગતમાં સુખો ભોગવવાની તૃષ્ણા (કામતૃષ્ણા), મૃત્યુ પછીના સ્વર્ગની તૃષ્ણા (ભવતૃષ્ણા) અને આત્મનાશની તૃષ્ણા (વિનાશ તૃષ્ણા) એમ મુખ્ય ત્રણ પ્રકારની તૃષ્ણા એ બધાં દુઃખોનું મૂળ કારણ છે.

(3) દુઃખનિરોધ : દુઃખોનું મૂળ કારણ તૃષ્ણા છે. તૃષ્ણાનો નિરોધ એટલે કે નાશ થાય તો જીવન દુઃખરહિત બને। બુદ્ધે સમજાવેલી આ વાતને પચાવી આપણે ઇચ્છાઓ કે તૃષ્ણાઓ ઉપર નિયંત્રણ મૂકીએ તો કેવું સારું ?

(4) દુઃખનિરોધગામિની – પ્રતિપદા : આનો અર્થ દુઃખમાંથી છૂટવાનો માર્ગ એવો થાય છે. દુઃખમાંથી છૂટવા બુદ્ધે આઠ પ્રકારનો માર્ગ સૂચવ્યો, જે અષ્ટાંગમાર્ગ તરીકે જાણીતો છે.

અષ્ટાંગ માર્ગ : જીવન પ્રત્યે બુદ્ધની વૈજ્ઞાનિક દૃષ્ટિ હતી. તેમણે ઉગ્ર તપશ્ચર્યા આદરી, આકરી કષ્ટ સાધના કરી અને શોધી કાઢ્યું કે અત્યંત ભોગવિલાસ અને ઇન્દ્રિઓનું અતિદમન એ બન્ને માર્ગ જીવનને કેવળ દુઃખી બનાવવાના માર્ગ છે. જીવનને સુખમય બનાવવાનો સાચો માર્ગ તો એ બન્નેની મધ્યમાં

રહેલો છે. બૌદ્ધો, આને ‘ મધ્યમ માર્ગ ’ કહે છે. આ માર્ગનાં આઠ અંગો હોવાથી તેને અષ્ટાંગ માર્ગ પણ કહેવાય છે, જે નીચે પ્રમાણે છે.

અષ્ટાંગ માર્ગ	
સમ્યક્ જ્ઞાન	ચાર આર્યસત્યોનું યથાર્થ જ્ઞાન પ્રાપ્ત કરવું તે
સમ્યક્ સંકલ્પ	શુભ વિચાર કે નિશ્ચય કરવો તે
સમ્યક્ વાણી	સત્ય, પ્રિય અને હિતકર વાણી બોલવી તે
સમ્યક્ કર્મ	સારાં કર્મ કરવાં તે
સમ્યક્ આજીવ	પ્રમાણિક રીતે આજીવિકા મેળવવી તે
સમ્યક્ સ્મૃતિ	વાણી, વિચાર અને વર્તન પ્રત્યે સભાન રહેવું તે
સમ્યક્ વ્યાયામ	યોગ્ય અને શુભ દિશામાં પુરુષાર્થ કરવો તે
સમ્યક્ સમાધિ	યોગ્ય અને શુભ દિશામાં પુરુષાર્થ કરવો તે

બૌદ્ધ ધર્મની ચાર ધર્મપરિષદો :

પહેલી પરિષદ મગધના રાજા અજાતશત્રુના સમયમાં રાજધાની રાજગૃહમાં મહાકાશ્યપના પ્રમુખપદે યોજાઈ હતી. તેમાં બુદ્ધના ઉપદેશોનું સંકલન કરવાનો નિર્ણય થયો. પરંતુ મતભેદો નિવારી શકાયા નહિ. બીજી પરિષદ બુદ્ધના નિર્વાણ પછીના 100 વર્ષે વૈશાલી ખાતે યોજાઈ હતી. આ પરિષદ મગધના રાજા શિશુનાગના પુત્ર રાજા કાલાશોક (કાકવર્ણ) ના સમયમાં (ઈ.સ. પૂર્વે 383) સર્વકામિનીના અધ્યક્ષપદે યોજાઈ હતી. આ પરિષદે બૌદ્ધ સંઘમાં ઊભી થયેલ અશિસ્ત અંગે કડક પગલાં લેવાના નિર્ણયો લીધા હતા. ત્રીજી પરિષદ સમ્રાટ અશોકના સમયમાં પાટલીપુત્રમાં યોજાઈ હતી. તેનું પ્રમુખસ્થાન બૌદ્ધ વિદ્વાન તિષ્યએ લીધું હતું. આ પરિષદમાં બૌદ્ધ તત્ત્વજ્ઞાન વિશે ઘણી ચર્ચાઓ થઈ. છતાં મતભેદો નિવારી શકાયા નહિ. ચોથી પરિષદ કુષાણ રાજા કનિષ્ઠે કશ્મીરમાં ઈસુની પહેલી સદીમાં બોલાવી. આ પરિષદના પ્રમુખ તરીકે મહાન બૌદ્ધ આચાર્ય વસુમિત્ર હતા; જ્યારે ઉપપ્રમુખ તરીકે મહાકવિ અશ્વઘોષ હતા. આ પરિષદમાં બૌદ્ધ ધર્મ અને સાધુઓ વચ્ચેનો વિવાદ ઘેરો બન્યો. એના પરિણામે બૌદ્ધ ધર્મના બે ભાગ પડ્યા : એક ભાગ હિનયાન નામે ઓળખાયો; જ્યારે બીજો ભાગ મહાયાન નામે ઓળખાયો. હીનયાન પંથના અનુયાયીઓ બૌદ્ધ ધર્મના મૂળ સિદ્ધાંતોને વળગી રહ્યા; જ્યારે મહાયાન પંથના

અનુયાયીઓએ બૌદ્ધ ધર્મમાં મૂર્તિપૂજા અને મંદિરોની રચના વગેરેને સ્થાન આપ્યું। એમણે આ ઉપરાંત ધૂપ - દીપ, નૈવેદ્ય, આરતી, ગીત - સંગીત વગેરેને પણ સ્થાન આપ્યું. આને પરિણામે બૌદ્ધ ધર્મનો મહાયાન પંથ વધુ વિકાસ પામ્યો. આમ ચોથી ધર્મપરિષદ અનેક રીતે મહત્વની પુરવાર થઈ.

બૌદ્ધ ધર્મની લોકપ્રિયતાનાં કારણો :

(1) બુદ્ધનું વ્યક્તિત્વ: બૌદ્ધ ધર્મના ફેલાવાનું મુખ્ય કારણ બુદ્ધનું વ્યક્તિત્વ હતું. તેમનું વ્યક્તિત્વ મૈત્રી અને કરુણાથી ભરેલું હતું, ઉમદા અને પ્રભાવશાળી હતું.

(2) બ્રાહ્મણ ધર્મ સામેનો અસંતોષ : બુદ્ધના જીવન દરમિયાન બ્રાહ્મણ ધર્મમાં રહેલી અટપટી ધાર્મિક વિધિઓ, ક્રિયાકાંડો, યજ્ઞોમાં પશુઓનાં બલિદાનો અને બ્રાહ્મણોના વર્ચસ્વને કારણે તે ધર્મ પ્રત્યે સામાન્ય પ્રજાનો અસંતોષ વધી પડ્યો હતો. તેમને કોઈ નવા ધર્મની જરૂરિયાત હતી અને તે બૌદ્ધ ધર્મે સંતોષી હતી.

(3) બુદ્ધનો સરળ ઉપદેશ : બુદ્ધ અને બૌદ્ધ ધર્મ ઉપદેશ સરળ અને સાદો હતો. તેમાં મોક્ષપ્રાપ્તિ માટે સંસારનો ત્યાગ કરવાની કે કઠિન તપશ્ચર્યાની વાત ન હતી.

(4) લોકભાષામાં ઉપદેશ : બુદ્ધે લોકોને તેમની ભાષા પાલી - માં ઉપદેશ આપ્યો હતો અને પાલી ભાષા લોકોની બોલચાલની ભાષા હતી.

(5) માનવમાત્રની સમાનતા : ભગવાન બુદ્ધ સમાજમાં ઊંચ - નીચના ભેદભાવના કટ્ટર વિરોધી હતા. તેમને મન બધા માનવો સમાન હતા. બુદ્ધના શિષ્યવૃંદમાં બ્રાહ્મણ, ક્ષત્રિય અને સમાજની પ્રતિષ્ઠિત વ્યક્તિઓ ઉપરાંત શૂદ્ર, ચાંડાળ અને ગણિકાઓનો પમ સમાવેશ થતો હતો. આમ્રપાલી ગણિકા હતી અને બુદ્ધનો સંપર્ક થતાં ગણિકાજીવનનો ત્યાગ કરી તેણે પોતાનું સર્વસ્વ બુદ્ધને ચરણે ધર્યું હતું. આમ બૌદ્ધ ધર્મમાં ઊંચનીચના ભેદભાવ ન હોવાને કારણે સમાજના નીચલા વર્ણોમાં પણ આ ધર્મ લોકપ્રિય બન્યો હતો.

(6) **રાજ્યાશ્રય** : બુદ્ધના જીવન દરમિયાન અને નિર્વાણ બાદ બૌદ્ધ ધર્મને રાજ્યાશ્રય પ્રાપ્ત થયો હતો. બુદ્ધના જીવન દરમિયાન મગધના રાજા બિંબિસારે બૌદ્ધ સંઘને વેળુવન નામે ઉપવન અર્પણ કર્યું હતું.

બિંબિસારના પુત્ર અજાતશત્રુ પણ બૌદ્ધ ધર્મ પ્રત્યે અનુરાગી હતો. બુદ્ધના નિર્વાણ બાદ મૌર્ય રાજા અશોકે બૌદ્ધ ધર્મનો અંગીકાર કર્યો હતો, એટલું જ નહિ તેણે પોતાના પુત્ર મહેન્દ્ર અને પુત્રી સંઘમિત્રાને બૌદ્ધ ધર્મના પ્રચાર અર્થે શ્રીલંકા પણ મોકલ્યાં હતાં.

(7) બૌદ્ધસંઘ : ભગવાન બુદ્ધે ધર્મપ્રચારને વ્યવસ્થિત સ્વરૂપ મળે તે માટે ભિક્ષુઓ અને ભિક્ષુણીઓના સંઘની સ્થાપના કરી હતી। આ સંઘનું વ્યવસ્થાતંત્ર તત્કાલીન ગણરાજ્યોની પદ્ધતિ ઉપર રચાયેલું હતું. તેનાથી સંઘ મજબૂત બન્યો હતો.

બૌદ્ધ ધર્મનો વારસો :

(1) સામાજિક : બુદ્ધ પોતે માનવતાવાદી હતા. તેમણે અહિંસા, કરુણા અને મૈત્રી દ્વારા જગતને માનવતાનો અદ્ભુત સંદેશ આપ્યો. એક સામાજિક ક્રાંતિકાર તરીકે તેમણે સમાજમાં બ્રાહ્મણોના વર્ચસ્વને તથા તેમના મહત્ત્વ અને પ્રભાવને ઓછાં કર્યાં. તેમણે પોતાના ધર્મમાં રાજાઓ, બ્રાહ્મણો અને શ્રેષ્ઠીઓ ઉપરાંત સમાજના નીચલા થરના લોકોને પણ આવકાર્યા. એનાથી જ્ઞાતિવાદ અને ઊંચ - નીચના ભેદભાવો ઓછા થયા. એમણે સમાજમાં હડધૂત થયેલાઓને પણ પોતાના ધર્મમાં સ્થાન આપ્યું, જેમ કે, અંગુલિમાલ જેવા લૂંટારુને કે આમ્રપાલિ જેવી ગણિકાને પણ તેમણે પોતાના ધર્મમાં સ્થાન આપ્યું હતું. તેમણે પોતાના ઉપદેશ દ્વારા યજ્ઞોમાં થતાં પશુ બલિદાનો, ધાર્મિક અંધશ્રદ્ધા અને વહેમો વગેરે દૂર કર્યા હતાં.

(2) શિક્ષણ : બૌદ્ધ ધર્મનો શિક્ષણના ક્ષેત્રે પણ અમૂલ્ય ફાળો હતો. નાલંદા (બિહાર), તક્ષશિલા (વાયવ્ય સરહદે હાલ પાકિસ્તાનમાં), વલભી (સૌરાષ્ટ્ર) અને વિક્રમશીલા (બિહાર) વિદ્યાપીઠો બૌદ્ધધર્મનાં શિક્ષણકેન્દ્રો બન્યાં હતાં. આ વિદ્યાપીઠો બૌદ્ધ ધર્મ અને તત્વજ્ઞાનના અભ્યાસ માટે દેશવિદેશોમાં જાણીતી હતી. સાતમી સદીમાં ચીની મુસાફર હ્યુએનત્સાંગે નાલંદા અને વલભી વિદ્યાપીઠની મુલાકાત લઈ એ વિદ્યાપીઠોની ઘણી પ્રશંસા કરી હતી.

(3) સાહિત્ય : સાહિત્યના ક્ષેત્રે બૌદ્ધ ધર્મે ' ત્રિપિટક ' નામે ધર્મગ્રંથનો અમૂલ્ય વારસો આપ્યો છે. એ ત્રણ વિભાગો એટલે વિનયપિટક, સુત્તપિટક અને અભિધમ્મપિટક. એ પૈકી વિનય પિટકમાં બૌદ્ધ સાધુ - સાધ્વીઓએ પાળવાના સદાચારો આપેલા છે. સૂત્તપિટકમાં બુદ્ધનાં વ્યાખ્યાનો - ઉપદેશોનો તેમજ

શિષ્યો સાથેના તેમના વાર્તાલાપોનો સંગ્રહ કરવામાં આવ્યો છે. અભિધમ્મપિટકમાં બૌદ્ધ ધર્મના સિદ્ધાંતો અંગેની ચર્ચા કરવામાં આવી છે.

(4) સ્થાપત્ય : બૌદ્ધ ધર્મે સ્થાપત્યના ક્ષેત્રે સ્તૂપો, ચૈત્યો અને ગુફાઓની ભેટ આપી છે. ગુફાઓમાં બિહારમાં આવેલી અને સમ્રાટ અશોકે બંધાવેલી બર્બર ટેકરીઓ સુપ્રસિદ્ધ છે. સ્તૂપ એ બૌદ્ધ સ્થાપત્યની વિશેષતા છે. બુદ્ધના પરિનિર્વાણ બાદ તેમના અનુયાયીઓએ બુદ્ધના અવશેષો વાળ, દાંત, અસ્થિ, રાખ વગેરેની સ્મૃતિ અને પૂજા માટે તે અવશેષોને એક ધાતુપાત્રમાં મૂકી તે ઉપર અંડાકાર ઈમારત રચવાનો આરંભ કર્યો. એવી ઈમારતો સ્તૂપ તરીકે ઓળખાય છે. સ્તૂપોમાં સાંચી (મધ્યપ્રદેશ) નો સ્તૂપ વિશેષ જાણીતો છે. વિદેશોમાં ઈન્ડોનેશિયાના જાવા ટાપુમાં આવેલો બોરોબુદરનો સ્તૂપ વિશ્વભરમાં જાણીતો છે. ચૈત્યો એ બૌદ્ધ ધર્મનાં પ્રાર્થનાગૃહો હતાં અને ગુફા સ્થાપત્યના જ એક ભાગ તરીકે તે બંધાતાં હતાં.

સમાપન (બૌધ્ધ ધર્મનું પતન) :

બૌદ્ધ ધર્મમાં પડેલા મતભેદો અને પંથો, બૌદ્ધ સંઘમાં સાધ્વીઓના આગમનને લીધે પેડેલો માનવ સડો, તેમાં મધ્યસ્થ સમિતિનો અભાવ, મહાયાન પંથે હિંદુ ધર્મની ક્રિયાકાંડની કરેલી શરૂઆત, પાછળથી રાજ્ય - આશ્રયનો અભાવ અને હિંદુ ધર્મના પુનરુદ્ધાર માટેના શંકરાચાર્યના પ્રયત્નો, હુણોના આક્રમણો તેમજ વિદેશી આક્રમણોને લીધે બૌદ્ધ ધર્મની હિંદમાં પડતી થઈ અને તેનું પતન થયું.

સંદર્ભ સૂચિ :

1. ભારતનો ઇતિહાસ - સ્વ. એન. ડી. શેલત
2. પ્રાચીન ભારતનો ઇતિહાસ - આર. કે. ધારૈયા
3. બુધ્ધકાલીન ભારત – પ્રાગમલ રાઠોડ
4. પ્રાચીન ભારત ભાગ 1 અને 2 - હરિપ્રસાદ શાસ્ત્રી
5. પ્રાચીન ભારત કા ઇતિહાસ - વી. ડી. મહાજન

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ધ્યાનકેન્દ્રિતતા સંશોધિનીની સંરચના

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સારાંશ

પ્રસ્તુત અભ્યાસમાં પ્રયોજકે ધ્યાનકેન્દ્રિતતા સંશોધિનીની સંરચના કરી હતી. આ ધ્યાનકેન્દ્રિતતા સંશોધિનીની સંરચના માટે આયોજનબદ્ધ કાર્ય કરેલું હતુ. જેમા ધ્યાનકેન્દ્રિતતા સંશોધિનીની સંરચના માટે પ્રયોજકે ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપની સંરચના કરી હતી. જેમા વિષયવસ્તુનું વિશ્લેષણ ધ્યાનકેન્દ્રિતતા સંશોધિનીને લગતા સંદર્ભ સાહિત્યનો ગહન અભ્યાસ કરી કર્યું હતું. વિષયવસ્તુનું વિશ્લેષણ કર્યા પછી કલમ રચના કરી હતી. કલમ રચના કર્યા પછી કલમનું સંપાદન કર્યું અને તેના આધારે ૭૦ વિધાનો ધરાવતી પૂર્વ પ્રાથમિક સ્વરૂપની ધ્યાનકેન્દ્રિતતા સંશોધિની તૈયાર કરી હતી. ત્યાર બાદ ધ્યાનકેન્દ્રિતતા સંશોધિનીના પ્રાથમિક સ્વરૂપની સંરચના કરી હતી. તેમા પૂર્વ પ્રાથમિક સ્વરૂપ અંગે નિષ્ણાંતોના અભિપ્રાયો મેળવ્યા હતા. પૂર્વ પ્રાથમિક સ્વરૂપની અજમાયશ ઉચ્ચપ્રાથમિક શાળાના ૨૦ પાત્રો પર કરી હતી. તેમા તજજ્ઞો એ કેટલાક સુચનો આપ્યા હતા તેમના આધારે તેમાં સુધારા-વધારા કરવામાં આવ્યા હતા અને અંતે ૫૮ વિધાનો ધરાવતી પ્રાથમિક સ્વરૂપની ધ્યાનકેન્દ્રિતતા સંશોધિની તૈયાર થઈ હતી. આમ પ્રયોજકે ધ્યાનકેન્દ્રિતતા સંશોધિની તૈયાર કરી હતી. જેમાં કુલ ચાર વિભાગ હતા. આ ચારેય વિભાગમાં ૧૬ ૧૪ ૧૪ ૧૪ વિધાનો હતા. કુલ ૫૮ વિધાનો વાળી ધ્યાનકેન્દ્રિતતા સંશોધિની તૈયાર થઈ હતી. દરેક વિધાન હા – ના એમ દ્વિ બિંદુ સ્કેલમાં માપન પણ કરતા હતા.

પ્રસ્તાવના

કોઈપણ ક્રિયા કરતી વખતે વ્યક્તિનું મન અથવા સમગ્ર ચિત તે અને માત્ર તે જ વસ્તુ માં એક ચિત થાય તેને આપણે ધ્યાનકેન્દ્રિતતા કહીશું. પ્રસ્તુત અભ્યાસમાં પ્રયોજકે ધ્યાનકેન્દ્રિતતા એટલે કોઈપણ કાર્યમાં તરબોળ થઈ જવું અને કાર્યમાં સંપૂર્ણ એકાકાર થઈ જવું. પ્રસ્તુત અભ્યાસમાં પ્રયોજકે

ધ્યાનકેન્દ્રિતતા વર્ગકાર્ય ના સંદર્ભમાં, વાંચનના સંદર્ભમાં, સ્મૃતિશક્તિના સંદર્ભમાં અને પરીક્ષાના સંદર્ભમાં સ્વીકારેલ છે. ધ્યાનકેન્દ્રિતતા સંશોધિની પ્રસ્તુત અભ્યાસમાં સ્વીકારેલ ચાર પાસાઓનુ માપન કરતી સંશોધિની એટલે ધ્યાનકેન્દ્રિતતા સંશોધનની. બાળકો કેવી રીતે શીખે છે, શીખવાના કયા સિદ્ધાંતો છે, શીખવા માટેની પ્રેરણા કોણ પૂરી પાડે છે, સ્મૃતિ દ્રઢ કરવા શું કરવું જોઈએ આવા અનેક પ્રશ્નોના ઉકેલ માટે શૈક્ષણિક સંશોધનો હાથ ધરવામાં આવતા હોય છે. અહીં વિદ્યાર્થીઓમાં રહેલી ધ્યાનકેન્દ્રિતતા શક્તિ જાણવાના હેતુથી સંશોધકે ધ્યાનકેન્દ્રિતતા સંશોધિનીની રચના કરવાનું પસંદ કર્યું હતું.

ધ્યાનકેન્દ્રિતતા સંશોધિનીની સંરચનાના સોપાનો

સોપાન- ૧ ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપની સંરચના

(અ) વિષયવસ્તુ વિશ્લેષણ

(બ) કલમ રચના

(ક) કલમ સંપાદન

સોપાન- ૨ ધ્યાનકેન્દ્રિતતા સંશોધિનીના પ્રાથમિક સ્વરૂપની રચના

(અ) પૂર્વ પ્રાથમિક સ્વરૂપ અંગે નિષ્ણાતોના અભિપ્રાયો

(બ) પૂર્વ પ્રાથમિક સ્વરૂપની અજમાયશ

સોપાન- ૧ ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપની સંરચના

પ્રસ્તુત અભ્યાસમાં પ્રયોજકે ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપની સંરચના માટે આયોજનબદ્ધ કાર્ય કરેલું હતું તે અનુસાર

(અ) વિષયવસ્તુ વિશ્લેષણ

(બ) કલમ રચના

(ક) કલમ સંપાદન

(અ) વિષયવસ્તુ વિશ્લેષણ પ્રસ્તુત અભ્યાસના હેતુ અનુસાર ઉચ્ચપ્રાથમિક શાળાના વિદ્યાર્થીઓ પર ધ્યાનકેન્દ્રતા સ્વરૂપે અસર પામતી શક્તિના માપન માટે પ્રયોજકે ધ્યાનકેન્દ્રતતા સંશોધિની રચના કરવાનું સ્વીકારી અને તેને લગતા સંદર્ભ સાહિત્ય એકત્ર કરી તેનો ગહન અભ્યાસ કર્યો જે આ મુજબ દર્શાવેલ છે.

ધ્યાનકેન્દ્રિતતા સંશોધિની માટે પ્રયોજકે અભ્યાસ કરેલ પુસ્તકોની યાદી

ક્રમ	**પુસ્તકનું નામ**	**લેખક / સંપાદક / પ્રકાશ**	**પ્રકાશન વર્ષ**
૧	એકાગ્રતા સફળતાની ચાવી	સ્વેટ માર્ટન	૨૦૦૦
૨	મનની અગાધ શક્તિ	લીલી જેમ્સ એલન	૨૦૦૨
૩	ચારિત્ર્ય નિર્માણ કેવી રીતે કરવું	સ્વામી બુધાનંદ	૨૦૦૦
૪	યોગાસન માર્ગદર્શિકા	સ્વામી ચિદાનંદ સરસ્વતી	૧૯૮૫
૫	વધારે ગુણ મેળવો	ગિજુભાઈ ભરાડ	૨૦૦૪

દર્શાવેલ પુસ્તકોના અભ્યાસ બાદ પ્રયોજક આ ધ્યાનકેન્દ્રિતતા સંશોધિનીના પ્રાથમિક સ્વરૂપ માટે સ્પષ્ટ થયા હતા

-ધ્યાનકેન્દ્રિતતા પર અસર કરતા વિવિધ પરિબળો

- ધ્યાન કેન્દ્રિતતા વધારવાના પ્રયાસો

- ધ્યાન કેન્દ્રિતતા માપન માટેની શરતો

આમ વિષયવસ્તુ વિશ્લેષણ મુદ્દા અંતર્ગત પ્રયોજક વિષયવસ્તુના વિવિધ વિભાગોથી માહિતગાર થયા હતા

(બ) કલમ રચના ઉપરોક્ત મુદ્દાઓને ધ્યાને લઇને પ્રયોજકે પોતાના વિચારોને વિધાન સ્વરૂપે અર્થાત્ માપન કરી શકાય તેવા સ્વરૂપમાં ઢાળવા ખુબ જ જરૂરી બને માટે અહીં પ્રયોજકે પ્રત્યેક મુદ્દા સંદર્ભ માત્ર માપન હેતુને ધ્યાને લઇને શક્ય એટલા વિધાનું તૈયાર કરેલ હતા. આમ કુલ ૭૮ વિધાનનો ધરાવતી સંશોધનની તૈયાર થઈ હતી

(ક) કલમ સંપાદન પ્રયોજકે સંદર્ભ સાહિત્યના અભ્યાસના આધારે કુલ ૭૮ વિધાનોની રચના કરી તેમાંથી તજજ્ઞોની મુલાકાત લીધેલ, પાત્રના ખૂબ નાના નમુના પાસેથી પ્રતિચારો મેળવી અને વિધાનોની ગોઠવણી કરી તેને યોગ્ય ઓપ આપ્યો અને બીજા જરૂરી કે પુનરાવર્તન પામતા વિધાનોને દૂર કરી સુધારવા યોગ્ય વિધાનોમાં સુધારો કરી ગોઠવ્યા હતા

આમ વિષયવસ્તુ વિશ્લેષણ વિધાન રચના અને વિધાન સંપાદન કાર્ય પૂર્ણ થતાં 70 વિધાનો ધરાવતી ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપની રચના થઈ હતી. જેમાં હકારાત્મક અને નકારાત્મક વિધાનો હતા આ સ્વરૂપમાં કુલ ૭૦ વિધાનો હતા.

વિભાગ-1: વર્ગકાર્યના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	શિક્ષક ભણાવે ત્યારે માત્ર તેમના ધ્યાન આપો છો		
૨	ઘરના અમુક પ્રશ્નો વર્ગ કાર્યમાં ખલેલ પહોંચાડે છે		
૩	સ્વાસ્થ્ય સારું ન હોય તો અધ્યયન કરવું ગમે		
૪	ચાલુ વર્ગે અન્ય પ્રવૃત્તિ કરવાનું મન થાય		
૫	મન સતત બીજા વિચારો માં ભટક્યા કરે છે		
૬	બધા શિક્ષકોના વર્ગો ભરવા ગમે		
૭	ચાલુ વર્ગે અન્ય વિદ્યાર્થીઓ અવાજ કરે તો ગમે		
૮	સર કરતા ટીચર ના વર્ગો ભરવા ગમે છે		
૯	રસ વગર ના વિષયો ભણવા ગમે છે		
૧૦	વર્ગ શિક્ષણ દરમિયાન એકલતા અનુભવો છો		
૧૧	સતત વર્ગો ચાલુ હોય તેવું શિક્ષણ કાર્ય ગમે		
૧૨	ઘરની પરિસ્થિતિના કારણે વર્ગમાં ધ્યાન દેવું ન ગમે		
૧૩	વર્ગમાં શ્યામ ફલક પર લખેલું લખવું ગમે છે		
૧૪	વર્ગ શિક્ષણ ઉપરાંત શિક્ષણ કાર્ય કરવું ગમે		
૧૫	શિક્ષણમાં રસ લેવો ગમે છે		
૧૬	વર્ગમાં શિક્ષક ગુસ્સે થાય તો વર્ગ માં ધ્યાન રહે છે		
૧૭	શિક્ષક વર્ગમાં પ્રશ્ન પૂછે તો જવાબ આપવા ગમે		
૧૮	ચાલુ વર્ગમાં બીજા વિષય તરફ ધ્યાન રહે છે		
૧૯	વર્ગ કાર્ય દરમિયાન સતત તણાવ અનુભવતા હોવ તેવું લાગે છે		

વિભાગ – ૨: વાંચનના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	એકાંતમાં વાંચવું ગમે છે		
૨	એક જ જગ્યાએ લાંબો સમય વાંચવું ગમે છે		
૩	વાંચતી વખતે રસપ્રદ રીતે વાંચવું ગમે છે		

૪	ઘરનો પ્રસંગ કે પાર્ટી હોય તો પણ વાંચવામાં ધ્યાન આપી શકો છો		
૫	વાંચતી વખતે મિત્ર ના વિચાર કરવા ગમે છે		
૬	એક જ જગ્યાએ બે થી ત્રણ કલાકથી વધારે વાંચી શકો છો		
૭	પરિવારના સભ્યો ટીવી જોતા હોય તો પણ તમને વાંચવું ગમે છે		
૮	વાંચતી વખતે દિનચર્યાના જ વિચાર કરવા ગમે છે		
૯	ઘોંઘાટ થાય તો શાંતિથી વાંચી શકો છો		
૧૦	૫૦ પંક્તિનું કાવ્ય એક જ બેઠકે પાકું કરી શકો છો		
૧૧	તમારી આસપાસ ઉત્તેજના ભર્યું વાતાવરણ હોય તો પણ વાંચી શકો છો		
૧૨	વાંચન વખતે અન્ય પ્રવૃત્તિ કરવાનું મન થાય છે		
૧૩	વાંચન વખતે તુરંત જ ઊંઘ આવવા લાગે છે		
૧૪	વાંચતી વખતે માત્ર મન વાંચવામાં જ કેન્દ્રિત શકો છો		
૧૫	તમને અતિશય ગુસ્સામાં હોય તો પણ વાંચવામાં ધ્યાન આપી શકો છો		
૧૬	વાંચન વખતે ભૂતકાળ વાગોળો છો		
૧૭	વાંચતી વખતે આવનાર પરિસ્થિતિ ના વિચારો આવે છે		

વિભાગ 3: સ્મૃતિના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	વર્ગમાં બધા જ શિક્ષકો ભણાવે છે તે તુરંત યાદ રહે છે		
૨	વર્ગમાં શીખવેલ બધા જ વિષયોનું વિષયવસ્તુ યાદ રહે છે		
3	જોડણી ના બધા જ નિયમો યાદ રહી જાય છે		
૪	શિક્ષક વર્ગમાં અચાનક ઊભા કરે તો તત્કાલ જવાબ આપી શકો છો		
૫	ગુજરાતી હિન્દીમાં વ્યાકરણ સરળતાથી યાદ રહી જાય છે		
૬	વાંચેલું બધું જ લાંબા સમય સુધી યાદ રાખી શકો છો		
૭	સમાચાર પત્રોના સમાચારો યાદ રાખી શકો છો		
૮	શાળાની બધી જ પ્રાર્થનાઓ મૌખિક યાદ રહે છે		
૯	ફિલ્મના બધા જ દ્રશ્યો સંપૂર્ણ રીતે યાદ રહે છે		
૧૦	પ્રવાસ દરમિયાન ના સ્થળો સતત સ્મૃતિમાં રાખી શકો છો		
૧૧	રાત્રે સુતા પહેલા દિનચર્યા યાદ કરી શકતા નથી		

૧૨	મહિના પહેલા જોયેલા દ્રશ્યો યાદ રાખી શકો છો		
૧૩	વિજ્ઞાનમાં કરાવેલ પ્રયોગ પછી નું વર્ણન યાદ રહી જાય છે		
૧૪	અંગ્રેજીના સ્પેલિંગ તુરંત જ યાદ રહી જાય છે		
૧૫	વિજ્ઞાન વિષયના વાંચેલ લેખ મને યાદ રહી જાય છે		
૧૬	દરેક વિષયના પ્રશ્નો ના જવાબ તુરંત જ આપી શકો છો		
૧૭	પરીક્ષા વખતે વાંચેલું બધું ઝડપથી યાદ રાખી શકો છો		

વિભાગ ૪: પરીક્ષાના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	**કલમ**	**હા**	**ના**
૧	પરીક્ષા નજીક આવતાં ચિંતા અનુભવો છો		
૨	પરીક્ષામાં પ્રથમ પેપર વખતે આત્મવિશ્વાસ ગુમાવો છો		
૩	પરીક્ષા વખતે તૈયાર કરેલું ભૂલી જાઓ છો		
૪	પરીક્ષા વખતે માત્ર પેપર મા ધ્યાન કેન્દ્રિત કરો છો		
૫	પરીક્ષા વખતે મન અસ્થિર રહે છે		
૬	પરીક્ષા વખતે આત્મવિશ્વાસથી જવાબ લખો છો		
૭	પરીક્ષા વખતે બધું ભૂલી જાઓ એવું લાગે છે		
૮	પરીક્ષા વખતે બાજુના વિદ્યાર્થીમાંથી જવાબ જુઓ છો		
૯	પરીક્ષા વખતે અતિશય ડર લાગે છે		
૧૦	પરીક્ષામાં અન્ય ની સહાયતા મળી જાય તો આનંદ આવે છે		
૧૧	પરીક્ષા વખતે પ્રશ્નોના જવાબ ઉલ્ટા સુલ્ટા થઈ જાય છે		
૧૨	પરીક્ષાનું નબળું પરિણામ આવે તો ગમે		
૧૩	બાહ્ય પરીક્ષાઓ આપવી ગમે છે		
૧૪	પરીક્ષા વખતે મનમાં અન્ય વિચારો આવે છે		
૧૫	પરીક્ષા વિશે વાત થતાં જ ગુસ્સો આવે છે		
૧૬	પરીક્ષામાં પ્રશ્નપત્ર કઠિન હોય તો ગમે છે		
૧૭	પ્રશ્નપત્ર હાથમાં આવતા જ આનંદ અનુભવો છો		

સોપાન - 2 ધ્યાનકેન્દ્રિતતા સંશોધિનીના પ્રાથમિક સ્વરૂપની સંરચના અને તજજ્ઞ મુલાકાત

પ્રયોજકે પોતાના હેતુઓ અનુસાર ધ્યાનકેન્દ્રિતતા સંશોધિનીના પ્રાથમિક સ્વરૂપની સંરચના માટે પૂર્વ પ્રાથમિક સ્વરૂપને તજજ્ઞ અભિપ્રાયો અને અજમાયશ ની પ્રક્રિયા પછી પ્રાથમિક સ્વરૂપ તૈયાર થયું હતું.

(અ) પૂર્વ પ્રાથમિક સ્વરૂપ અંગે નિષ્ણાંતોના અભિપ્રાયો પ્રયોજકે ધ્યાનકેન્દ્રિતતા સંશોધિની સંરચનાના પ્રથમ સોપાનને અંતે તૈયાર કરેલ ૭૦ કલમો ધરાવતું ઉપકરણ વિષયવસ્તુ નિષ્ણાંત, સંશોધન નિષ્ણાત, ઉપકરણ સંરચના અને પ્રમાણીકરણ નિષ્ણાંત પાસેથી અભિપ્રાયો પ્રાપ્ત કરેલ હતા આ તજજ્ઞોની યાદી નીચે દર્શાવેલ છે

પ્રયોજક દ્વારા મુલાકાત લીધેલ તજજ્ઞોની યાદી

ક્રમ	**તજજ્ઞ નું નામ**	**હોદો**
૧	ડો. મનોજભાઈ ભટ્ટ	ઇન્ચાર્જ પ્રિન્સિપાલ, ડૉ. સુભાષ મહિલા કોલેજ ઓફ એજ્યુકેશન, જુનાગઢ
૨	ડો. શિલ્પાબેન બી. બોરસાણીયા	ઇન્ચાર્જ પ્રિન્સિપાલ, તપોવન કોલેજ ઓફ એજ્યુકેશન જુનાગઢ
3	ડો. એસ. આર. ગજેરા	પ્રિન્સિપાલ, સુખપુર માધ્યમિક શાળા સુખપુર

દર્શાવ્યા અનુસાર તજજ્ઞોએ ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપમાં કેટલાક સૂચનો સૂચવ્યા છે તે આ મુજબ છે

- ધ્યાનકેન્દ્રિતતા સંશોધનનીના પૂર્વ પ્રાથમિક સ્વરૂપ માં રહેલ ૭૦ વિધાનોને વર્ગીકૃત કરીને વિભાગોમાં વહેંચી શકાય
- આ વિધાનમાં પાત્ર આપેલ પ્રતિચાર ના ગુણાંકન માટે વિચારવું
- માર્ગદર્શિકાનું અંતિમ સ્વરૂપ વિચાર્યું
- સામાન્ય માહિતી મેળવી અને સૂચનાઓ કેવી રાખવી

(બ) પૂર્વ પ્રાથમિક સ્વરૂપની અજમાયશ

પ્રયોજકે જૂનાગઢ શહેરની સરસ્વતી પ્રાથમિકશાળા જુનાગઢ સહેતુક રીતે પસંદ કરી તેમાંથી ૨૦ પાત્રોને આકસ્મિક રીતે પસંદ કરવામાં આવ્યા હતા.શાળામાં નિયમિત રીતે પ્રાર્થના કાર્યક્રમ માં યોગનો ઉપયોગ કરવામાં આવતો હોવાથી માહિતી પ્રાપ્ત કરવાની ખૂબ સરળ થઇ હતી. પૂર્વ પ્રાથમિક સ્વરૂપની અજમાયશથી સમય, જરૂરી સુચના, પ્રતિચાર મેળવવાની પ્રક્રિયા વગેરે અંગે પ્રયોજક સ્પષ્ટ થયા હતા

ક્રમ	શાળાનું નામ	વિસ્તાર	ધોરણ	કુમાર	કન્યા	કુલ
૧	સરસ્વતી પ્રાથમિક શાળા જુનાગઢ	શહેરી	૮	૧૦	૧૦	૨૦

નિષ્ણાંતોની મુલાકાત અને પૂર્વ પ્રાથમિક સ્વરૂપની નમુના પર અજમાયશ પરથી પ્રયોજક ધ્યાનકેન્દ્રિતતા સંશોધિનીના પ્રાથમિક સ્વરૂપની સંરચના કરી શક્યા હતા. જે મુખ્ય ચાર વિભાગમાં વહેંચાયેલી હતી અને પ્રત્યેક કલમો ની સંખ્યા દર્શાવેલ છે

વિભાગ કલમો ની સંખ્યા

ક્રમ	વિભાગ	કલમો ની સંખ્યા
૧	વર્ગકાર્યના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા	૧૬
૨	વાંચનના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા	૧૪
૩	સ્મૃતિના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા	૧૪
૪	પરીક્ષાના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા	૧૪

આમ કુલ ૫૮ વિધાનો ધરાવતી ધ્યાનકેન્દ્રિતતા સંશોધનની તૈયાર થઈ હતી. જે આ મુજબ હતી

વિભાગ-1: વર્ગકાર્યના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	શિક્ષક ભણાવે ત્યારે માત્ર તેમાજ ધ્યાન આપો છો		

૨	સ્વાસ્થ્ય સારું ન હોય તો અધ્યયન કરવું ગમે		
૩	ચાલુ વર્ગે અન્ય પ્રવૃત્તિ કરવાનું મન થાય		
૪	મન સતત બીજા વિચારો માં ભટક્યા કરે છે		
૫	બધા શિક્ષકોના વર્ગો ભરવા ગમે		
૬	ચાલુ વર્ગે અન્ય વિદ્યાર્થીઓ અવાજ કરે તો ગમે		
૭	સર કરતા ટીચર ના વર્ગો ભરવા ગમે છે		
૮	રસ વગર ના વિષયો ભણવા ગમે છે		
૯	સતત વર્ગો ચાલુ હોય તેવું શિક્ષણ કાર્ય ગમે		
૧૦	ઘરની પરિસ્થિતિના કારણે વર્ગમાં ધ્યાન દેવું ન ગમે		
૧૧	વર્ગમાં શ્યામ ફલક પર લખેલું લખવું ગમે છે		
૧૨	વર્ગ શિક્ષણ ઉપરાંત શિક્ષણ કાર્ય કરવું ગમે		
૧૩	શિક્ષણમાં રસ લેવો ગમે છે		
૧૪	વર્ગમાં શિક્ષક ગુસ્સે થાય તો વર્ગ માં ધ્યાન રહે છે		
૧૫	શિક્ષક વર્ગમાં પ્રશ્ન પૂછે તો જવાબ આપવા ગમે		
૧૬	ચાલુ વર્ગમાં બીજા વિષય તરફ રહે છે		

વિભાગ – ૨: વાંચનના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	એકાંતમાં વાંચવું ગમે છે		
૨	એક જ જગ્યાએ લાંબો સમય વાંચવું ગમે છે		
૩	વાંચતી વખતે રસપ્રદ રીતે વાંચવું ગમે છે		
૪	વાંચતી વખતે મિત્ર ના વિચાર કરવા ગમે છે		
૫	એક જ જગ્યાએ બે થી ત્રણ કલાક થી વધારે વાંચી શકો છો		
૬	પરિવારના સભ્યો ટીવી જોતા હોય તો પણ તમને વાંચવું ગમે છે		
૭	વાંચતી વખતે દિનચર્યાના જ વિચાર કરવા ગમે છે		
૮	ઘોંઘાટ થાય તો શાંતિથી વાંચી શકો છો		
૯	૫૦ પંક્તિનું કાવ્ય એક જ બેઠકે પાકું કરી શકો છો		
૧૦	વાંચન વખતે અન્ય પ્રવૃત્તિ કરવાનું મન થાય છે		

૧૧	વાંચન વખતે તુરંત જ ઊંઘ આવવા લાગે છે		
૧૨	વાંચતી વખતે માત્ર મન વાંચવામાં જ કેન્દ્રિત કરી શકો છો		
૧૩	વાંચન વખતે ભૂતકાળ વાગોળો છો		
૧૪	વાંચતી વખતે આવનાર પરિસ્થિતિ ના વિચારો આવે છે		

વિભાગ 3: સ્મૃતિના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	વર્ગમાં બધા જ શિક્ષકો ભણાવે છે તે તુરંત યાદ રહે છે		
૨	વર્ગમાં શીખવેલ બધા જ વિષયોનું વિષયવસ્તુ યાદ રહે છે		
૩	જોડણી ના બધા જ નિયમો યાદ રહી જાય છે		
૪	ગુજરાતી હિન્દીમાં વ્યાકરણ સરળતાથી યાદ રહી જાય છે		
૫	વાંચેલું બધું જ લાંબા સમય સુધી યાદ રાખી શકો છો		
૬	સમાચાર પત્રોના સમાચારો યાદ રાખી શકો છો		
૭	શાળા ની બધી જ પ્રાર્થનાઓ મૌખિક યાદ રહે છે		
૮	ફિલ્મના બધા જ દ્રશ્યો સંપૂર્ણ રીતે યાદ રહે છે		
૯	રાત્રે સુતા પહેલા દિનચર્યા યાદ કરી શકતા નથી		
૧૦	મહિના પહેલા જોયેલા દ્રશ્યો યાદ રાખી શકો છો		
૧૧	વિજ્ઞાનમાં કરાવેલ પ્રયોગ પછી નું વર્ણન યાદ રહી જાય છે		
૧૨	અંગ્રેજીના સ્પેલિંગ તુરંત જ યાદ રહી જાય છે		
૧૩	વિજ્ઞાન વિષયના વાંચેલ લેખ મને યાદ રહી જાય છે		
૧૪	દરેક વિષયના પ્રશ્નોના જવાબ તુરંત જ આપી શકો છો		

વિભાગ ૪: પરીક્ષાના સંદર્ભમાં ધ્યાનકેન્દ્રિતતા

ક્રમ	કલમ	હા	ના
૧	પરીક્ષા નજીક આવતાં ચિંતા અનુભવો છો		
૨	પરીક્ષા વખતે તૈયાર કરેલું ભૂલી જાઓ છો		
૩	પરીક્ષા વખતે માત્ર પેપર મા ધ્યાન કેન્દ્રિત કરો છો		
૪	પરીક્ષા વખતે મન અસ્થિર રહે છે		
૫	પરીક્ષા વખતે આત્મવિશ્વાસથી જવાબ લખો છો		
૬	પરીક્ષા વખતે બધું ભૂલી જાઓ એવું લાગે છે		

૭	પરીક્ષા વખતે બાજુના વિદ્યાર્થીમાંથી જવાબ જુઓ છો		
૮	પરીક્ષા વખતે અતિશય ડર લાગે છે		
૯	પરીક્ષા વખતે પ્રશ્નોના જવાબ ઉલ્ટા સુલ્ટા થઈ જાય છે		
૧૦	પરીક્ષાનું નબળું પરિણામ આવે તો ગમે		
૧૧	બાહ્ય પરીક્ષાઓ આપવી ગમે છે		
૧૨	પરીક્ષા વખતે મનમાં અન્ય વિચારો આવે છે		
૧૩	પરીક્ષા વિશે વાત થતાં જ ગુસ્સો આવે છે		
૧૪	પરીક્ષામાં પ્રશ્નપત્ર કઠિન હોય તો ગમે છે		

આમ ધ્યાનકેન્દ્રિતતા સંશોધિની સંરચના કરી તૈયાર કરી હતી..

સમાપન

આમ ધ્યાનકેન્દ્રિતતા સંશોધિનીની સંરચના માટે વિષયવસ્તુ વિશ્લેષણ વિવિધ સંદર્ભ પુસ્તકોને આધારે કરવામાં આવ્યુ. ત્યારબાદ કલમ રચના કરી તેનું સંપાદન કરવામાં આવ્યું. કલમ નું સંપાદન કરી કુલ ૭૦ વિધાનો ધરાવતી ધ્યાનકેન્દ્રિતતા સંશોધિની તૈયાર કરવામાં આવી જેમાં હકારાત્મક અને નકારાત્મક વિધાનો હતા. જે દ્વિ બિંદુ સ્કેલમાં હા અને ના મા માપન કરતા હતા. ત્યારબાદ તજજ્ઞોની મુલાકાત લઇ તેમના સૂચનોને આધારે સુધારા કરવામાં આવ્યા. ધ્યાનકેન્દ્રિતતા સંશોધિનીના પૂર્વ પ્રાથમિક સ્વરૂપની અજમાયશ પ્રાથમિક શાળાના પાત્રો પર કરવામાં આવી અને તજજ્ઞોની મુલાકાત માર્ગદર્શનના આધારે કુલ ૫૮ વિધાનો ધરાવતી પ્રાથમિક સ્વરૂપની ધ્યાનકેન્દ્રિતતા સંશોધિની તૈયાર થઈ હતી. આમ પ્રયોજકે યોગ્ય પદ્ધતિના આધારે આયોજનબદ્ધ રીતે ધ્યાનકેન્દ્રિતતા સંશોધિની રચના કરી હતી.

સંદર્ભ સૂચિ

સ્વીટ માર્ટ ૨૦૦૦ **એકાગ્રતા સફળતાની ચાવી**

લીલી જેમ્સ એલન ૨૦૦૨ **મનની અગાધ શક્તિ**

સંશોધનની વિશિષ્ટ પદ્ધતિઓ ૨૦૦3 રાજકોટ સૌરાષ્ટ્ર યુનિવર્સિટી

ઉચ્ચાટ ડી.એ. અને અન્ય ૧૯૮૮ **સંદોહન (પ્રથમ આવૃત્તિ**) રાજકોટ શિક્ષણ શાસ્ત્ર ભવન સૌરાષ્ટ્ર યુનિવર્સિટી

દેસાઈ હરિભાઈ અને દેસાઇ કે.જી ૧૯૯૨ **સંશોધન પદ્ધતિઓ અને પ્રવૃતિઓ પાંચમી આવૃત્તિ** અમદાવાદ, યુનિવર્સિટી ગ્રંથ નિર્માણ બોર્ડ, ગુજરાત રાજ્ય

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અપંગના ઓજસ

પરમાર નિલમબેન મનુભાઇ
પી.એચ.ડી.શોધછાત્ર,
ગુજરાત યુનિવર્સિટી,અમદાવાદ.

"મન હોય તો માળવે જવાય"

શરીર સશક્ત કદાચ ન હોય તો ચાલી શકે પણ મન તો તંદુરસ્ત જ જોઈએ. ખરેખર આમ જોવા જઈએ તો ઘણીવાર અપંગ વ્યક્તિમા ઘણી બધી ક્ષમતા રહેલી હોય છે, પરંતુ અપંગ વ્યક્તિને મળતા તિરસ્કારથી ઘણીવાર તે બહાર જ આવતા જ નથી.

કુમારપાળ દેસાઇના અપંગના 'ઓજસ પુસ્તક' મા રમતગમતના ક્ષેત્રમા પ્રસિદ્ધિ મેળવનાર અપંગ ખેલાડીઓના સંઘર્ષની કરી વાત કરેલી છે. ઓલ્મિપિક રમતનુ એ મહાન સૂત્ર છે એકે 'ઓલિમ્પિકની શાન વિજયમા નથી, પણ એમાં ભાગ લેવામાં છે અને તે પણ એક જિંદાદિલી માનવી તરીકે' - આવી જ રીતે જીવનની સિદ્ધિ પણ સંઘર્ષ સામે લડવામાં જ રહેલી છે.

જીવન સામે હારના માનવાવાળા એવા ઘણા બધા સાહસિકો આપણી જોઈએ છીએ. જેમા આપણે વોલ્ટર ડેવીસ કે જેણે ઊંચો કૂદકો લગાવીને ઓલિમ્પિક સ્પર્ધામા નવો વિક્રમ સ્થાપ્યો હતો. તેમણે તેમના પગ ને એક વાર કહી દીધું હતુ કે 'મારા શાંત મુંગા દોસ્તો એ વિશ્વાસ, રાખજો કે તમે એક દિવસ ચાલી શકશો, દોડી શકશો અને એવા ઊંચા કૂદકા પણ મારી શકશો અને ત્યાં સુધી તમે હિંમત હારશો નહી હુય હિમ્મત નહી હારુ.'

અરૂણીમાના જીવનમા પણ સંઘર્ષ ખુટતો જન નથી ડગલેને પગલે દુખ આવ્યા જ કરે છે. પરંતુ "કોશીષ કરને વાલો કી કભી હાર નહી હોતી". એ પંક્તિ મુજબ લોકોતો તમને હરાવવા બેઠા છે પરંતુ જ્યા સુધી તેમે હારતા નથી ત્યાસુધી જીત તમારા હાથમા જ હોય છે.

મુકમ કરોતિ વાચાલમ પંગુમ લંઘયતે ગિરિમ્

યતકૃપા ત્વહમ વંદે પરમાનંદ માધવમ ।

આમ પોતાની શારીરિક ખામીઓને ખામી ન બનવા દેતા એને જ પોતાની તાકાતમા ફેરવી નાખે છે. એટલે જ કહેવાય છે કે, ગમે તેટલી મુશ્કેલીઓ અને નિષ્ફળતામા જો વ્યક્તિ એનુ મના અડગ રાખેતો જરૂર એની જ જીત થાય છે. નિષ્ફળતામા પણ અડગ મન રાખે તો જરૂર એની જ જીત થાય છે.

પુરુષાર્થના બળે ધાર્યું પરિણામ આપણી લાવી શકીએ છીએ. નિરાશ થયા વિના પ્રયત્ન કરતાં રહીએ તો ચોક્કસ અંતે ધાર્યું પરિણામ મેળવી શકાય છે. જીવનમા આવતી તકલીફો ન જોતા પોતાના ધ્યેય તરફ આગળ વધતા રહે છે તોજ પોતાનુ ધ્યેય પૂરુ કરી શકાય છે.

"અપંગ અસહાય નથી, શક્તિપુંજ છે. એમને માત્ર પ્રેરણાની જરૂર છે." –ડૉ.લુડવિગ ઘટ મેન (અપંગના ઓજસ page 8)

અપંગના ઓજસ ચરિત્ર કથા માં કુલ ૨૧ ચરિત્રો નો સમાવેશ કરવામા આવ્યો છે જેમાં આપણે અહીં આપણે "સુરા ને પહેલી સલામ" મા રામ મૂર્તિ વિશે વાત કરીશું .

<u>સુરા ને પહેલી સલામ</u>

શારીરિક રીતે અશક્ત હોય એવી વ્યક્તિ કંઈ ન કરી શકે એ વાત ને ખોટી સાબિત કરનાર વીર રામમૂર્તિ જેઓ પહેલવાન બન્યા. એની જીવન કથા ગણી રસપ્રદ છે. અહીં કહેવાય છે જે બાળકનું શરીર કમજોર હોય ઉપરાંત તે રોગિષ્ટ પણ હોય. આવી વ્યક્તિ જીવનમાં નિરાશ બની જાય છે પણ રામમૂર્તિ નિરાશ બન્યા નહીં. તેમને બે શોખ હતા એક પારકા કજિયા જોવાનો અને બે રામાયણ-મહાભારત સાંભળવાનો. રામમૂર્તિને ચાર પાત્રો ખૂબ ગમતા ભીમ, હનુમાન, ભિષ્મ અને લક્ષ્મણ. આ ચાર પાત્રો એને એટલે ગમતા હતા કેમ કે, તેઓ એ સ્ત્રી સન્માનને સાચવ્યું હતું અને તેઓ બળવાન હતા. એટલે રામમૂર્તિ હંમેશા પોતે બળવાન બને એવું એની માને કહેતા અને ધીમે ધીમે એમણે કસરત કરવાની શરૂઆત કરી. કસરત કરતાં કરતાં ખાંસી બંધ ન થાય, મન તેમનું કસરત કરવા માટે તરસતું પણ શરીર સાથ ન આપતું એટલે અધવચ્ચેથી જ કસરત કરવાનો વિચાર છોડી દીધો. પોતાની નિર્બળતા ને જોઈ તેમણે આપઘાત કરવાનો પણ એકવાર નિશ્ચય કર્યો હતો. પણ અંતરાત્મામાથી અવાજ આવ્યો અને તેમણે હાર ન સ્વીકારી. સવારે વહેલા ઉઠી દોડવું અને કુશ્તીના નવા દાવ શીખવા લાગે રાત દિવસ એક જ રટણ. શરીર બળવાન કેમ બને. અને થોડાક જ સમયમાં શરીરનો રંગ બદલાઈ ગયો. એના શરીરની

નિર્બળતા ચાલી ગઈ અને પછી તો એ એટલા બધા બળવાન બની ગયા કે, તેઓ ઝાડ ને જોરથી ખભો મારે તો ઉપરથી ટપોટપ બે-ત્રણ નારીયળ તૂટી પડે.

એકવાર ૧૬ વર્ષની ઉંમરનો બનાવ છે. જેમાં રામમૂર્તિ બળનો ડંકો વાગી ગયો હતો. એક વખત ગામની ગટરમા ઉઘાડા ખાડિયામા એક મોટી જાડી ભેંસ ભરાઈ ગઈ. માણસો એકઠા થઈને મહેનત કરવા લાગ્યા પણ તે બહાર ન નીકળી. તે રામમુર્તિ ખબર પડતા ત્યાં આવ્યા અને લોકોને દૂર તેમણે ખસેડી ભેંસના બે સીંગડા પકડ્યા અને એક જ આંચકામા ભેંસને ઉઠાવીને બહાર કાઢી લીધી.

'હવે જ મારા જીવનની ખરી શરૂઆત હતી વિશાળ પ્રયત્નોથી પ્રતિબળ મેળવ્યું હતું મને પૂછતા કે આ અમાનુષી શક્તિનો ઉપયોગ શો? ત્યારે હું હતાશ થઈ જતો. આમ છતાં મને એવો દ્રડ વિશ્વાસ હતો કે મારું ભાવિ કંઈક અપૂર્વ છે નિયતિ મારી વિશેષ ગતિ કરશે જ'. (page 26)

તેઓ દિવસમાં એકવાર અને ક્યારેક બે વખત છ રતલનો હાથી પોતાના શરીર પર ઉભો રાખતા ઈ.સ.૧૯૫૦ના મે મહિનામા પોતાના શરીર બળથી ડંકો વગાડનાર યુજીન સેન્ડો, મલ્લયુદ્ધ મદ્રાસમા ખેલ કરવા ગયો અને ત્યાં તેમનું નામ સાંભળીને ગોરા મલ્લએ ના પાડી દીધી અને સામે ચાલીને હાર મેળવવા જેવું જ લાગ્યું એટલે એણે કાળા માનવી સાથે હું હરીફાઈ કરતો નથી. એમ કહી દીધું આ પછી તેમણે મદ્રાસમાં તેમણે અવનવા પ્રયોગો કર્યા હતા.

એકાદ વર્ષ સુધી સાઉથ ઇન્ડિયન એથ્લેટક એસોસિયેશનના નીચે એમણે મદ્રાસમાં અંગ બળના ઘણા પ્રયોગો પણ બતાવ્યા હતા. તે જ સમયે લોકમાન્ય ટિળકે પણ રાષ્ટ્રપ્રેમીઆ જુવાન ને બોલાવી ને પ્રોત્સાહન પણ આપ્યું હતું. દેશ-વિદેશમાં એમના સામર્થ્યનો જય જયકાર થવા લાગ્યો અંગ્રેજોને એમની ખૂબ ઈર્ષા થતી હતી પણ તેઓ કંઈ કરી શકતા નહીં. નિઝામ સરકારે સોનાનો ચાંદ પણ આપ્યો હતો.

ઈ.સ ૧૯૧૦મા મલાકામા એમને બબ્બેવાર સોમલ(ઝેર) આપવામાં આવ્યું. પહેલી વારમાં તો બચી ગયા પણ બીજી વારમાં બચવાની કોઈ આશા ન હતી. તેમ છતાં તેમણે પાંચ હજાર દંડ કરીને ઝેર પરસેવામા કાઢી નાખ્યું. પછી દસ મહિના પથારીવશ રહ્યા હતા અસહ્ય પીડા થતી હોવા છતાં તેઓએ ક્યારેય હાર ન માની.

"ભલે અહીં મારું મોત થાય પણ પાછો નહીં પડુ" –(page 36)

અપૂર્વ મનોબળથી એકાગ્રતા રાખી ને ૨૫ હોર્સ પાવરની ૧૧૨ કિલોમીટરની ઝડપે જતી મોટરને એકવાર નહીં પરંતુ ૧૩ વાર રોકી. ૧૯૦૭મા દાંતથી ત્રાજવામા મુકેલા ઘોડાને ઉઠાવવાનો પ્રયત્ન કરતાં તેમાં એમના બે દાંત પડી ગયા.

તેઓનું શરીર હિન્દ વાસીઓ માટે શરીરનો સર્વોચ્ચ જીવંત આદર્શ બન્યો હતો. તેઓએ વ્યાયામમાં આપણા દેશની પુરાણી પદ્ધતિથી જ શ્રેષ્ઠ ગણી હતી. તેમનું મૃત્યુ ૧૯૩૮ની ૨૦મી જાન્યુઆરીના રોજ થયું હતું.

ઇચ્છાશક્તિ અને જો ખંત સાથે પૂરી કરવામાં આવે તો ઘણું બધું મેળવી શકાય છે. “મન અડીખમ હોય તો શરીરની કોઈ મર્યાદા આપણને નડતી નથી”. બળની વાત થાય ત્યારે રામમુર્તિનુ નામ આવ્ય વગર રહેતુ નથી. જીવની મુશ્કેલ કસોટીઓથી પાર ઉતરનાર રામમુર્તિ ખરેખર પહેલવાનોના આદર્શ હાલ પણ બની રહ્યા છે.

સંદર્ભ :-

‘અપંગના ઓજસ’. લેખકઃ- કુમારપાળ દેસાઈ. પ્રકાશકઃ- આદર્શ પ્રકાશન પ્રથમ આવૃતિ – ૧૯૮૫

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સરોજ પાઠકની "સારિકા પિંજરસ્થા" વાર્તામાં મનોવિશ્લેષણવાદ

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સરોજ પાઠક આધુનિક પ્રયોગશીલ વાર્તાઓના લેખિકા તરીકે પ્રસિદ્ધ છે, ટૂંકી વાર્તા ઉપરાંત નવલકથાઓ પણ તેમણે લખી છે, અડધો ડરજન વાર્તા સંગ્રહો અને એટલી જ નવલકથાઓ તેમની પ્રયોગશીલતાની શાખા પૂરે છે. તે સતત પ્રયોગશીલ હતાં અને એથીય જીવંત રહ્યા હતા, ગમે તે ક્ષણે તે કશુંક નવું કરી બેસવાની ક્ષમતા ધરાવતા હતા. તેમના વાંચકો એમની સાહિતિક પ્રવૃત્તિઓ ઉપર સતત નજર રાખતા હતાં. સરોજ પાઠકના સ્વતંત્ર, સ્વમાનિ અને ખુમારી ભર્યા વ્યક્તિત્વ વાળા સરોજ પાઠકનો ટૂંકમાં પરિચય મેળવીએ.

સરોજ પાઠકનો જન્મ કચ્છ જિલ્લાના જખો ગામમાં ૦૧/૦૬/૧૯૨૯ના રોજ થયો હતો. તેમણે પ્રાથમિક અને માધ્યમિક શિક્ષણ મુંબઈમાં લીધું હતું. ઇ.સ.૧૯૪૭માં તેઓ મેટ્રિકની પરીક્ષામાં ઉતીર્ણ થયા હતા. ઇ.સ.૧૯૬૧માં ગુજરાતી વિષય લઈ ગુજરાત યુનિવર્સિટીમાં બી.એ. તેમજ ઇ.સ.૧૯૬૪માં એમ.એ.ની પદવી મેળવી હતી. ઇ.સ.૧૯૫૬ થી '૫૭માં આકાશવાણી સાથે જોડાયા અને એ ઉપરાંત તેઓ સોવિયેત ઇન્ફર્મેસન સર્વિસ સાથે પણ સંલગ્ન હતા. ઇ.સ.૧૯૬૪ થી તેઓ બારડોલી કૉલોજમાં અધ્યાપક તરીકે ફરજ બજાવી હતી. ઇ.સ.૧૯૮૯માં બારડોલીમાં જ તેમનું અવસાન થયું હતું.

સરોજ પાઠકના પતિ રમણલાલ પાઠકે તેમને પ્રથમ વાર્તા લખવાની પ્રેરણા આપી હતી.તેમની પ્રથમ વાર્તા "નહીં અંધારૂં, નહિ અજવાળું" જીવન માધુરી સામાયિકમાં પ્રકાશિત થઈ હતી, તેમનો પ્રથમ ટૂંકી વાર્તા સંગ્રહ "પ્રેમ ઘટા જુક આઈ "૧૯૫૯માં ચેતન પબ્લિસર્સ દ્વારા પ્રકાશિત થયો હતો અને તેને બોમ્બે રાજ્ય તરફ થી ઈનામ મળ્યું હતું.સરોજ પાઠકની શ્રેષ્ઠ વાર્તાઓના સંગ્રહમાં અલગ અલગ વાદ સાથે વાર્તાઓ સંકળાયેલી છે એમાં કુલ ૧૪ વાર્તાઓ છે અને તેમાથી મારે જેના વિષે વાત કરવાની છે તે " સારિકા પિંજરસ્થા" છે તેમાં મનોવિશ્લેષણવાદ ઉદભવે છે.

❖ મનોવિશ્લેષણવાદ એટલે શું ?

જે રીતે અસ્તિત્વવાદીવિચારધારાએ સાહિત્યકારોને આકર્ષ્યાં હતાં એ રીતે જ અન્ય નવ્ય વિચારધારાઓએ પણ સાહિત્યકારોને પ્રભાવિત કર્યા હતાં. મનોવિશ્લેષણવાદ ઈ.સ.૧૮૫૬માં મોરવિયા જેકોસ્લોવેકીયામા જન્મેલા મહાન માનસશાસ્ત્રી એડમંડ ફ્રોઈડ માંનસશાસ્ત્ર ક્ષેત્રે કરેલા માનવ મન વિષેના સંશોધનોએ માનવ જાતની વિચારદિશા બદલી નાખી હતી. ફ્રોઈડના સિદ્ધાંતોએ સાહિત્ય અને વિવેચન પર વિશેષ પ્રભાવ પાડ્યો છે. ફ્રોઈડના આ સંશોધનોએ માનવીનો માનવ વિષેનો ખ્યાલ બદલી નાખ્યો છે. ડાર્વિનના ઉત્ક્રાંતિવાદે માનવને પશુથી જુદો પાડ્યો હતો. પરંતુ ફ્રોઈડના અવચેતનના સિદ્ધત્તે અને મૂળભૂત જાતિયતાના સિદ્ધાન્તે માનવીને પુનઃ પશુની પંગતમાં બેસાડી દીધો છે! ડાર્વિન મનુષ્યને પશુનું શરીર આપ્યું જ્યારે ફ્રોઈડે માનવીને પશુની કામવૃતિ આપી છે એ બે વચ્ચે પ્રેમ જેવો તત્વનો સંપૂર્ણ છેદ ઊડાળીદીધો છે જે છે તે માત્ર કામ વૃતિ છે, વાશના છે, માનવીના તમામ સબંધો ઔપચારિક અને કૃત્રિમ છે માત્ર એક સ્ત્રી પુરુષ વચ્ચેનો સબંધ જ સાહજિક અને સનાતન છે.(૧)

❖ "સારિકા પિંજરસ્થા" વાર્તામાં મનોવિશ્લેષણવાદ :

ભારતીય સમાજ વ્યવસ્થામાં નારીને પરાપૂર્વથી સ્વાતંત્ર્ય આપવામાં આવ્યું નથી કન્યા જન્મે છે ત્યારથી પરણે ત્યાં સુધી પિતાના તાબામાં રહે છે, પરણે પછી પતિની કાબૂમાં રહે છે, અને વિધવા થાય તો પુત્રનું આધિપત્ય સ્વીકારવું પડે છે.આમ જન્મથી મૃત્યુ પર્યત આપણા દેશની પુરુષપ્રધાન સમાજ વ્યવસ્થામાં નારીને પુરુષ જ આધીન રહીને જીવવું પડે છે એને જીવન પર્યંત કોઈને કોઈ પુરુષના બંધનમાં જ જીવવું પડે છે. નારીની એ બંધન અવસ્થાને તાદસ્થ કરતી "સારિકા પિંજરસ્થા" વાર્તાલેખિકાના વાર્તા લેખનના પ્રાંરભિક પ્રયાસનું પ્રતિનિધિત્વ કરે છે. આ પ્રારંભિક રચનામાં પણ એમને આધુનિક વાર્તાઓની રીતિએ પાત્રના ચૈતસિક સંચલનો નિરૂપિને નારીની પરધિંતા પ્રગટ કરી છે નારીના મનોસંચલનો દ્વારા જ વાર્તાનું કાઠું સર્જાય છે સંશસ્મરણો પ્રતિક યોજના તથા દર્દની અર્ધ બેભાન અવસ્થા અસ્ત વ્યસ્થ ઉદગરો રૂપે વાર્તા માં નાઇકાના મનોવ્યાપરોનું ચિત્રણ રજૂ થયું છે.

શીર્ષકને પૂરેપૂરા અર્થમાં સાર્થક કરતી આ વાર્તાની નાયિકા "સારિકા અર્ધ બેભાન અવસ્થામાં કોઇની તીવ્ર આઘાતથી હોસ્પિટલમાં ખાટલે પડી છે, કપાળ પર મારતી સ્લેટ અને લોહીની અનુભૂતિ

સાથે એ અતીતનું એક સંશસ્મરણ એના અર્ધજાગૃત ચિત્તમાં ઉપશી આવે છે ઘરડા માસ્તરે સારિકાના શિશુ સહજ સામાન્ય સવાલથી ગુસ્સે થઈ એના માથામાં સ્લેટ મારી હતી, એનું કપાળ લોહી લોહી થઈ ગયું હતું. એ સ્મરણ અર્ધ જાગૃત અવસ્થામાં એને પીડે છે અને સૂચવે છે કે મોટા ઘરની દીકરીને ભણાવવા માટે ઘરડા માસ્ટર જ હોય, અને રમવાનું, ભણવાનું, શિશુ સહજ એને ગમે એટલુ ભાન હોય તોઈ એને સરવાળા, બાદબાકી, ગુણાકાર ભણવા જ પડે. ભદ્ર સમાજમાં કથા પ્રત્યે આવો અભદ્ર વ્યવહાર એને બાળપણથી જ શરૂ થઈ જાય છે. કપાળમાં સ્લેટ વાગવાના અતિતના સ્મરણોનો તંતુ પછી તરત વર્તમાન સાથે જોડી આપે છે નર્સના અડધા પડધા સબ્દો એને કાને પડતાં એને ભાન થાય છે કે હા આતો હોસ્પિટલ છે હું તો મોટા ઘરની દીકરી,ને મોટા ઘરની વહુ,ને એ પ્રતિષ્ઠિત જમીનદરની દીકરીને એવાજ ખાનદાનના કુટુંબના નબીરા સાથે એના માં બાપે ચૂપચાપ એના લગ્ન કરી નાખેલા.

સારિકા અર્ધ બેભાન અવસ્થામાં ભૂતકાળનો માં સાથેનો સંવાદ ઉપશી આવે છે, એ સંવાદ સૂચવે છે કે એની મરજી વિરુદ્ધ માં બાપે એને પરણાવી દીધેલી એને સાઇન્સ લાઇન નોતી લેવી પણ એને સાઇન્સ લાઇનમાં પરાણે ધકેલવામાં આવેલી, પછી એ ડોક્ટર થવા ઇચ્છતી હતી ત્યારે તીવી ભણતર છોડાવીને ખાનદાની ઘરના નબીરા સાથે જબદસ્તીથી પરાણાવી દેવામાં આવી હતી. એ બધુ યાદ આવતા સારિકાના મનોપટ્ટ ઉપર ભણેલા યુરોપીયન જેવા મુરતીયાની સિગારેટના ધુમડાના ગુચડા એની આજુ બાજુ વિટળાય વળે છે... ને ફરી વર્તમાન સાથે અનુસંધાન એનું ચિત્ત થોડું પામે છે એની આજુબાજુના એની ખબર લેવા આવેલા સગા વ્હાલાને એ લવારે ચડેલી જણાય છે.

પરણ્યા પછી એને મરજી વિરુધ્ધ નાચતા સિખવું પડેલું પતિના મોભા માટે પાર્ટીઓ ને ક્લાબોમાં જવું પડેલું નાચની તાલીમ પણ લેવી પહેલી... એ યાદ આવતા મદારીની ડુગડુગી અને ભગાભાઈ રતનબાઈની, નાચતી સ્મૃતિ એના માનસપટ્ટ પર ઝળકી રહે છે અને પછી ટોમી કૂતરાની વાત આવતા માથેરાનની હોટેલમાં મોળી રાત્રે પોતાના પતિને મિસીસ તારાપુર વાળાના સાનગપતિયાની એમને બરાબર પકડવાની વાત એનમાં માનસપટ્ટ પર ચિતરાય છે, બીજી સ્ત્રી સાથે છૂટ લેનાર પતિ પત્નીને બીજા પુરુષ સાથે છૂટ આપવા માંગતો હતો એ સ્મરણ તાજું થયું.

સારિકાને “માં” થવાની ઝંખના હતી, પરંતુ એને નૈસર્ગિક સુખથી પણ એને વંચિત રાખવામા આવી અને ખોળામાં એક કુરકુરિયું મૂકી દેવયેલું. વ્હાલ કરવા માટે ફ્રી લાઈફ , ક્લબ લાઈફ, ડિનર, હરવું

ફરવું ને એ બધા માટે એને માં થવાનું સુખ ફરજિયાત જતું કરવું પડેલું અને અંતે સફેદ સાડીમાં કોઈ પણ સંણગાર વગર સારિકા સાસુથી દૂર ટુટીયું વાળી બેથેલી હોય છે, એના લગ્નમાં ધમાલ નોતી થઈ તેમ મરણનીય અહી ધમાલ ન હતી પતિના મૃત્યુને સારિકા સાચું માની સકતી ના હતી સગા સબંધીઓ, ડોક્ટર, નર્સ વગેરેના ઘસારામાં કોઈએ સારિકાની મનોસ્થિતિ પ્રમાંણી નહીં. અંતે એ બેભાન થઈ ઢળી પડી. બ્લડ પ્રેસર, હિસ્ટીરિયા, ગાંડપણ, સનેપાત, લવારા…. ને અંતે એના પલંગની ચારે બાજુ ડંગ મચાવતા દર્દ ઉપર "પલંગ કા પીંજરા" નાખી દેવાય એની ચારે બાજુ પીંજરુ પડી ગયું સમગ્ર વાર્તા માં "સારિકા પિંજરસ્થા" સાર્થક જોવા મળે છે.

સારિકા આ વાર્તામાં એક વિચક્ષણ પાત્ર છે અને તે ભદ્ર સમાજની પરાધીન નારીનું પ્રતિનિધિત્વ કરે છે, પ્રકૃતિ સાથેનો શિશુનો પ્રેમ નૈસર્ગિક સબંધ તોડીને જબરજસ્તીથી એને ગણિત ભણવું પડે છે ત્યાંથી વાર્તાનો આરંભ થાય છે ધુમાડાના ગુચડા, ચસ્માના કાચ, નૃત્યની તાલીમ, મદારી, કૂતરા ટોપી ટાઈગર, કુરકુરિયું, પતિ પુરુષ, બાળક મંકી વગેરે પોઈન્ટ આ બધુ પ્રતીકની ગરજ સારે છે ને ચલચિત્રની જેમ ભાવકો સમક્ષ સારિકાની ક્રમશઃ પરાકાષ્ઠાએ પહોંચતી ચૈતસિક ગતિવિધિને વ્યંજિત કરે છે.

વાર્તામાં માત્ર એક જ પ્રસંગ કેન્દ્રમાં છે નાયિકાના ચૈતસિક સંચલનો, સંશસ્મરણો રૂપે અંધારા અજવાડાની રીતિએ ભૂત વર્તમાનની સહોઉપસ્થિતિ દ્વારા ત્રિવતાથી વ્યક્ત થયા છે. વિશિષ્ટ મનોવૈજ્ઞાનિક અભિગમથી થયેલી નાયિકાના મનોસંચલનોની યથાર્થ રજૂઆત અને પ્રતીકોનો નાયિકાના માનસિક સંદર્ભમાં વિશિષ્ટ વિનિયોગ આ વાર્તાને આધુનિક વાર્તાકલા સાથે આનુંસંધાન આપે છે જોકે "પલંગ કા પીંજરા" દાલદો અને અંતે પાંજરા માં સારિકાનું શરીર અને પ્રાણ ફફળી રહ્યા એમ કહીને લેખિકાએ અંત ભાગમાં પાંજરાના પ્રતીકનો સ્થૂળ વિનિયોગ ન કર્યો હોત તો ચાલત. પીંજરુ સમગ્ર વાર્તામાં નાયિકાની નિઃસહાયતા અને લાચારીનું પ્રતીક બની રહ્યું છે પછી સ્થળ, પીંજરુ, વાર્તાને અંતે ન મુકાયું હોત તો? પરંતુ "આસ્વાદન"ના વિવેચક કહે છે કે, જીવનભર મિથ્યા સામાજિક ઢાંચાના પીંજરામાં પુરાઈને અસહાઈ તરફળતી રહતી સારિકા માટે બેહોશ અવસ્થામાં એ સ્થૂળ પીંજરુ એ કેટલી તુચ્છ પીળા છે ! આમ મહંત માટે સ્થૂળ તુચ્છનું પ્રતીક વાપરી લેખિકાએ કળા દ્વારા મહતમ નિશાન વીંધ્યું છે અને એ જ આ કૃતિની ચિરંજીવિતાનું એક કારણ છે.

સારિકા સમગ્ર ભારતીય સમાજનું પ્રતિનિધિત્વ કરતું પાત્ર છે, ભારતમાં પુરુષ પ્રધાન સમાજ રચના છે સ્ત્રીને જન્મથી મૃત્યુ પરિર્યન્ત આપણા સમાજમાં પિતાને, પતિને, પુત્રોને એમ કોઈને કોઈ પુરુષના સબંધને આધીન રહીને જ જીવવું પડે છે સ્ત્રી સ્વતંત્રતાથી પોતાના વ્યકિત્વનો વિકાસ સાધી સકતી નથી એને પોતાના રસ રુચિ ગમા-અણગમાં પોતાના આદર્શ વિચારો મુજબનું જ પોતાનું જીવન ઘડવાનું જીવવાનું અધિકાર સમાંજે આપ્યો નથી. સ્ત્રીના આવા બંધનમઇ પરવશ લાચાર જીવનની કરૂણ કથાની આ વાર્તામાં સારિકાના પાત્ર દ્વારા નિરૂપવામાં આવી છે.

❖ **સંદર્ભ :**

(૧) “આધુનિકતા એક સંકૂલ સપ્રત્યય", લેખક - બિપિન આસર.

(૨) “સરોજ પાઠકની શ્રેષ્ઠ વાર્તાઓ” સંપાદન-આસ્વાદ, ડૉ. દિલાવરસિંહ જાડેજા : રમણ પાઠક

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ભારતમાં સ્ત્રી શિક્ષણનું મહત્વ

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સારાંશ

સ્ત્રી સશક્તીકરણ એટલે વ્યક્તિનો એવો વિકાસ કે જે પુરૂષો કે સમાજનો અવલંબન વિના એવું સામર્થ્ય અને શક્તિ કેળવે કે જેના દ્વારા સમાજમં પોતાનું સ્વાતંત્ર વ્યક્તિત્વ અને પોતાનો પુરૂષ સમાન દરજ્જો સ્થાપિત કરી શકે.

ભારતના પરંપરાગત સમાજમાં સ્ત્રી અને પુરૂષ વચ્ચે ભારે અસમાનતા પ્રવર્તતી હતી. સ્ત્રીનું સ્થાન અત્યંત નીચું મનાતું સમાજજીવનમાં તેને ઓછા અધિકારો મળ્યા હતા. પરંતું બ્રિટિશ યુગ દરમિયાન શૈક્ષણિક વિકાસ, આધુનિકરણ, કાનુનીકરણ વગેરે.પરિબળોની અસર નીચે સ્ત્રીના પરંપરાગત સ્થાનમાં પરિવર્તન આવ્યું, સ્વતંત્ર ભારતમં સ્ત્રી-શિક્ષણમાં વધારો થયો છે, બંધારણે સ્ત્રી-પુરૂષ સમાનતાનો આદર્શ સ્વીકાર્યો છે તથા સ્ત્રીઓને સામાજીક ,આર્થિક,રાજકીય જીવનમાં વિવિધ અધિકારો આપતા કાયદા બન્યા છે. આ બધાને પરિણામે સ્વતંત્ર ભારતમં સ્ત્રીના સ્થાનમં ઝડપથી પરિવર્તન આવી રહ્યું છે. અહીં આપણે આવા કેટલાક મહત્વના પરીવર્તનો તબક્કાવાર તપાસીશું.

પ્રસ્તાવના

બ્રિટીશયુગથી શરૂ થયેલી નારીમુક્તિની પ્રક્રિયા ધીમે ધીમે વધુ ઝડપી બની અને સ્વતંત્ર ભારતમાં સ્ત્રી સશક્તીકરણનો પ્રારંભ થયો ૨૬ જાન્યુઆરી ૧૯૫૦ થી અમલમાં આવેલા ભારતીય બંધારણમાં લૈંગિક સમાનતાનો સિદ્ધાંત સ્વીકારવામાં આવ્યો છે સ્ત્રી અને પુરૂષ બંનેને દરજ્જો અને તકની સમાનતાની ખાતરી આપવામાં આવી છે.બંધારણના આર્ટિકલ ૧૪ અને ૧૫ માં સમાનતાનો અધિકાર લક્ષવામાં આવ્યો છે અને આર્ટિકલ ૧૫ માં જણાવવામાં આવ્યું છે કે રાજ્ય કોઈપણ નાગરિક પ્રત્યે લિંગના પાયા પર ભેદભાવ નહીં રાખે, આમ સ્ત્રી અને પુરૂષને સમાનતા બક્ષવામાં આવી છે ભારતના સામાજિક કનૂનીકરણનો ઈતિહાસ આ સમાનતા પુરવાર કરે છે. શ્રીમતી તાયા ઝિંકીન જણાવે છે કે “ભારતમાં નારીમૂક્તિની પ્રક્રિયા ગામડા સુધી પ્રસારણ પામી છે. સ્ત્રી શિક્ષણ , સામાજિક કાયદા અને આજિવિકાની તકોએ સ્ત્રી સશક્તીકરણમાં પરિવર્તન લાવવામાં મહત્વનો ભાગ ભજવ્યો છે.

સ્ત્રી શિક્ષણ એ છોકરીઓ અને સ્ત્રીઓ માટે શિક્ષણ(પ્રાથમિક શિક્ષણ, માધ્યમિક શિક્ષણ, તૃતિય શિક્ષણ અને ખાસ કરીને આરોગ્ય શિક્ષણ) ની આસપાસના મુદ્દાઓ અને ચર્ચાઓના જટિલ સમૂહનો એક સંપૂર્ણ શબ્દ છે.તેને વારંવાર કન્યા શિક્ષણ અથવા સ્ત્રી શિક્ષણ કહેવામાં આવે છે.તેમા લિંગ સમાનતા અને શિક્ષણ ની પહોંચના ક્ષેત્રોનો સમાવેશ થાય છે.ગરીબી નાબૂદી માટે મહિલાઓ અને છોકરીઓનું શિક્ષણ મહત્વપૂર્ણ જોડાણ છે.વ્યાપક સંબંધિત વિષયોમાં સિંગલ-સેક્સ એજ્યુકેશન અને મહિલાઓ માટે ધાર્મિક શિક્ષણનો સમાવેશ થાય છે, જેમાં શિક્ષણને લિંગ રેખામા વિભાજિત કરવામા આવે છે.

છોકરીઓ અને સ્ત્રીઓ માટે શિક્ષણમાં અસમાનતાઓ જટિલ છે: સ્ત્રીઓ અને છોકરીઓ શાળામાં પ્રવેશ માટે સ્પષ્ટ અવરોધોનો સામનો કરવો પડે છે, ઉદા.તરીકે, સ્ત્રીઓ સામે હિંસા અથવા છોકરીઓને શાળએ જવા પર પ્રતિબંધ, જ્યારે અન્ય સમસ્યાઓ વધુ,વ્યવસ્થિત અને ઓછી સ્પષ્ટ છે,ઉદાહરણ તરીકે, વિજ્ઞાન,ટેક્નોલોજી,એન્જિનિયરીંગ અને મેથેમેટિક્સ (STEM) શિક્ષણની અસમાનતાઓ યુરોપ અને ઉત્તર અમેરિકામાં પણ ઊંડા મૂળ ધરાવે છે.

1] કેટલાક પશ્ચિમી દેશોમાં, સ્ત્રીઓએ શિક્ષણના ઘણા સ્તરે પુરુષોને પાછળ છોડી દિધા છે. ઉદાહરણ તરીકે,યુનાઈટેડ સ્ટેટ્સમાં ૨૦૦૫/૨૦૦૬ માં, મહિલાઓએ ૬૨% એસોસિયેટ ડિગ્રી, ૫૮% સ્નાતકની ડિગ્રી, ૬૦% માસ્ટર ડિગ્રી અને ૫૦% ડોક્ટરેટ મેળવી હતી.

2] છોકરીઓના શૈક્ષણિક સ્તરમાં સુધારો કરવાથી યુવા મહિલાઓના સ્વાસ્થ્ય અને આર્થિક ભાવિ પર સ્પષ્ટ અસર જોવા મળે છે,જે બદલામાં તેમના સમગ્ર સમુદાયની સંભાવનાઓને સુધારે છે.

3] જે બાળકોની માતાએ પ્રાથમિક શિક્ષણ મેળવ્યુ હોય તેવા બાળકોનો શિશુ મૃત્યુદર એ બાળકો કરતા અડધો છે જેમની માતાઓ અભણ છે.

4] વિશ્વના સૌથી ગરીબ દેશોમાં,50% છોકરીઓ માધ્યમિક શાળામાં ભણતી નથી.તેમ છતાં, સંશોધન દર્શાવે છે કે છોકરીઓ માટે શાળાના દરેક વધારાના વર્ષ તેમની જિવનકાળની આવકમાં 15% વધારો કરે છે. સ્ત્રી શિક્ષણમાં સુધારો, અને આ રીતે મહિલાઓની કમાણીની સંભાવના, તેમના પોતાના બાળકો માટે જિવનધોરણમાં સુધારો કરે છે, કારણ કે સ્ત્રીઓ પૂરુષો કરતા તેમના પરિવારોમાં આવકનું વધુ રોકાણ કરે છે.

5] તેમ છતાં ,છોકરીઓ માટે શિક્ષણમાં ઘણા અવરોધો હજુ પણ છે. કેટલાક આફ્રિકન દેશો માં ,જેમ કે બુર્કીના ફાસો, છોકરીઓ માટે ખાનગી શૌચાલયની સુવિધાના અભાવ જેવા મૂળભૂત કારણોસર છોકરીઓ શાળાએ જાય તેવી શક્યતા નથી.

6] સમાજ પર સ્ત્રી શિક્ષણનો વ્યાપક અસરને કારણે, સ્ત્રીઓમાટે શિક્ષણમાં અસમાનતા દૂર કરવી એ ટકાઉ વિકાસ લક્ષ્ય 4 "બધા માટે ગુણવતાયુક્ત શિક્ષણ" માં પ્રકાશિત કરવામાં આવ્યું છે, અને ટકાઉ વિકાસ લક્ષ્ય 5 "લિંગ સમાનતા" સાથે ઊંડાણપૂર્વક જોડાયેલું છે. કન્યાઓનું શિક્ષણ વિકાશસિલ દેશોમાં ઝડપી વિકાસ અને વસ્તી વૃદ્ધિમાં ઝડપી ઘટાડો તરફ દોરી જાય છે , આમ આબોહવા પરિવર્તન શમન જેવા પર્યાવરણીય મુદ્દાઓને સંબોધવામાં મહત્વપૂર્ણ ભૂમિકા ભજવે છે.

❖ મહિલા સશક્તિકરણ

શિક્ષણપ્રણાલીનો વહિવટ, અભ્યાસક્રમ અને કર્મચારીઓમાં ભિન્ન હોય છે. પરંતુ તેઓ જે વિદ્યાર્થીઓ સેવા આપે છે તેના પર તમામનો પ્રભાવ હોય છે. જેમ જેમ મહિલાઓને અધિકારો મળ્યા છે , ઔપચારીક શિક્ષણ એ પ્રગતિનું પ્રતિક અને લિંગ સમાનતા તરફ એક પગલું બની ગયું છે. સાચી લિંગ સમાનતાના અસ્તિત્વ માટે, એક સર્વગ્રાહી અભિગમ અપનાવવાની જરૂર છે. સ્રીઓ સામેની હિંસા અને પૂરુષો પરની આર્થિક અવલંબનને દૂર કરવાના ઉકેલો તરીકે કન્યા શક્તિ અને સ્ત્રી શિક્ષણનીચર્ચા ક્યારેક પ્રભૂત્વ મેળવી શકે છે અને સંદર્ભ , ઈતિહાસ અને અન્ય પરિબળો સ્ત્રીઓને કેવી રીતે અસર કરે છે તે સમજવાના દમનમાં પરીણમે છે

શિક્ષણ પ્રણાલીઓ અને શાળાઓ STEM વિષયો સહિત વિવિધ વિષયોમાં છોકરીઓની રૂચી નક્કી કરવામાં કેંન્દ્રીય ભૂમિકા ભજવે છે, જે ગુણવતાયુક્ત STEM શિક્ષણની એક્સેસ અને લાભ માટે સમાન તકો પૂરી પાડીને મહિલા સશક્તિકરણમાં યોગદાન આપી શકે છે.

❖ સામાજિક – આર્થિક વિકાસ પર અસર

સ્ત્રી શિક્ષણની સામાજિક-આર્થિક અસર આંતરરાષ્ટ્રીય વિકાસમાં સંશોધનનું એક મહત્વપૂર્ણ ક્ષેત્ર છે. પ્રદેશોમાં સ્ત્રી શિક્ષણની માત્રામાં વધારો વિકાસના ઉચ્ચ સ્તર સાથે સંબંધ ધરાવે છે. કેટલીક અસરો આર્થિક વિકાસ સાથે સંબંધિત છે. મહિલા શિક્ષણ મહિલાઓની આવકમાં વધારો કરે છે અને જીડીપીમાં વૃધ્ધી તરફ દોરી જાય છે. અન્ય અસરો સામાજિક વિકાસ સાથે સંબંધિત છે.

છોકરીઓને શિક્ષિત કરવાથી અનેક સામાજિક લાભ થાય છે, જેમાં ઘણા મહિલા સશક્તિકરણ સાથે સંકળાયેલા છે.

❖ <u>પર્યાવરણીય પ્રભાવ</u>

વિકાસશીલ દેશોમાં છોકરીઓનું શિક્ષણ (અને સામાન્ય રીતે મહિલાઓનું સશક્તિકરણ) ઝડપી વિકાસ અને વસ્તી વૃદ્ધિમાં ઝડપી ઘટાડો તરફ દોરી જાય છે. તેની આબોહવા પરિવર્તન જેવા પર્યાવરણીય મુદ્દાઓ પર તેની નોંધપાત્ર અસર પડે છે.

સંશોધન નેટવર્ક ડ્રોડાઉનનો અંદાજ છે કે છોકરીઓને શિક્ષિત કરવી એ આબોહવા પરિવર્તન સામે છઠ્ઠી સૌથી કાર્યક્ષમ ક્રિયા છે (સૌર ફાર્મ અણુશક્તિ વનીકરણ અને અન્ય ઘણી ક્રિયાઓથી આગળ).

ઉપસંહાર

સ્વતંત્ર ભારતમાં કાનૂનીકરણ, સ્ત્રીશિક્ષણ વગેરે નવાં પરિબળોના વિકાસને કારણે સ્ત્રીનું સ્થાન વધુ ઊંચુ આવ્યું છે. સ્ત્રી પુરૂષ સમાનતાનાં નવાં મૂલ્યો વિકસી રહ્યાં છે. આમ છતાં સ્ત્રીનું સ્થાન સૈદ્ધાંતિક રીતે જેટલું ઊંચું આવ્યું છે તેટલું ક્યાંક વ્યવહારમાં જણાતુંનથી. હજી પુત્રી કરતાં પુત્ર જન્મ વધુ ઈચ્છનીય ગણાય છે. સ્ત્રીશિક્ષણની બાબતમં હજી કેટલાક સમાજોમાં ઈચ્છનીય વર્તન-પરિવર્તનો થયાં નથી. છતાં, સશક્તિકરણ અંગે સમાજમં જાગૃતિ વધે તે આશાસ્પદ ચિહ •ન છે.

સંદર્ભ સુચી

૧) રાવલ,એન.વી કેળવણીની તાત્વિક અને સમાજશાસ્ત્રીય આધારશિલાઓ, અનડા પ્રકાશન અમદાવાદ.

૨) www.net.in

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THE FOOTPRINT OF PROFITABILITY RATIOS ON SELECTED INDIAN POWER COMPANIES; COMPARISON BASED STUDY

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Abstract

The key objective of any of the business concerns is to earn and get the maximization of profit. The various stakeholders such as customers, management, government, owners, competitors, investors, suppliers, employees, creditors, and financial institutions are indirectly or directly involved to get to know the real profitability of the business. For that reason, the current study of the selected power companies of India for the span from 2016-17 to 2020-21 will reveal the disparity in the profitability of the selected companies. From the said analysis, it was found by the researcher that the performance of finance of Power Grid is found to be very satisfactory from the point of view of net worth ratio, return on capital employed as well as EPS, but it was found that its net profit ratio was not so resonance. If we consider net profit ratio of the selected power companies of India then it is found that NHPC ranks highest among the other companies whereas NTPC consists of the lowest performance. The researcher has also used one-way ANOVA testing for finding out a significant difference in profitability ratios of selected Indian power companies during the period of study.

Key Words: Profitability, Net profit ratio, Net worth ratio, Return on capital employed ratio, EPS

Abbreviation

- EPS = Earning Per Share
- EBIT = Earning Before Interest & Tax
- NTPC = National Thermal Power Corporation Limited
- NHPC = National Hydro Power Corporation

Introduction

Power Sector companies are progressing companies in India. These companies are the ones that are playing a vital role in the national economy in the terms of the contribution to the national GDP i.e. Gross Domestic Product and it offers wide employment opportunities.

In the area of management, financial management is playing a vital role as finance is considered as the backbone of each managerial activity, without finance an organization is not able to undertake any of the business activity. Efficient financial management will be helpful in the successful running of the business. More than ever, studying the profitability performance of the company will be able to bring out the overall efficiency of the business, given that protection is the primary objective of any of the business organizations. Consequently, analyzing the profitability of selected Indian Power companies will be most useful.

Literature Review

Bhatt (2012): studied in his research paper about profitability ratio analysis with specific reference to Indian Petroleum Industry including BPCL, HPCL, ONGC, and RIL. It is found that ONGC"s profitability is the highest among other petroleum companies in India.

Puttanna (2014): studied Performance Analysis of Information Technology Sector in India. The main objective of this paper is to understand the EBIT-EPS analysis of 10 BSE companies in the IT sector. It also conducts a comparative study of EBIT-EPS analysis and security returns of the IT sector. The study on EBIT-EPS analysis reveals that all the companies in the IT sector are following different strategies for their earnings and debt funding.

Research Methodology

Problem Statement

In the expressions of Lord Keynes, “Profit is considered as the engine which drives the business enterprise.” Profit mainly consists of two important words i.e. Profit and Ability. On the Contrary, profitability can be measured in the requisites of the profit shown as a percentage of investments and sales. Profitability is the profit earning capacity contributing to the survival of the business. Analysis of profitability shows the efficiency of the operations of the business.

Hence in this study, the researcher has attempted to analyze the profitability of the selected Indian Power companies.

Objectives of the study

To study the profitability analysis of the selected Indian power companies.

Hypothesis of the study

H0: There is no significant difference in profitability ratios of selected Indian power companies during the period of study.

H1: There is a significant difference in profitability ratios of selected Indian power companies during the period of study.

Sample of the study

The universe of the study is all power sector companies in India. Three public sector power companies have been selected based on a convenient sampling method. These companies are:

(1) NTPC

(2) Power Grid

(3) NHPC

Period of the study

The researcher has undertaken the study is for 05 years from 2016-17 to 2020-21.

Source of data

This study mainly depends on the secondary data, the researcher collected the data from Annual reports of the companies' websites.

Tools and techniques

The following are the tools used to analyze the collected data.

- Average
- Analysis of Variance (ONE-WAY ANOVA)

Data Analysis and Interpretation

1. Net Profit Ratio

Net Profit Ratio = Net Profit after Interest & Tax * 100 / Net Sales

(2016-17 to 2020-21) (Ratio in %)

Company Name	2016-17	2017-18	2018-19	2019-20	2020-21	Average	Rank
NTPC	11.99	12.39	13.01	10.35	13.87	12.32	3
Power Grid	29.24	27.69	29.12	29.87	31.68	29.52	2
NHPC	38.44	39.9	32.23	34.42	38.01	36.60	1
Average	26.56	26.66	24.79	24.88	27.85		

(Source: Computed from Annual Reports)

Interpretation:

The above table shows the percentage of net profit ratio which is based on net sales. The higher the ratio, the higher net profitability of the business.

Inter-Company Comparison:

The above table shows that the average net profit ratio of NHPC is the highest which is given the first rank among the other selected Indian power companies. Power Grid is at the place of second and NTPC is at third place. It indicates that the net profitability of NHPC is higher as compared to the other selected Indian power companies.

ONE-WAY ANOVA TESTING

H0: There is no significant difference in net profit ratio of selected Indian power companies during the period of study.

Source of Variation	SS	df	MS	F	F crit
Between Groups	1558.865	2	779.4324	168.947	3.885294
Within Groups	55.36168	12	4.613473		
Total	1614.226	14			

(Source: Calculated) (Level of significance = 5%)

From the above testing, it has cleared that F calculated value is 168.95 which is more than the F table value of 3.89, the null hypothesis is rejected and hence it is concluded that there is a significant difference in net profit ratio of selected Indian power companies during the period of study.

2. Net Worth Ratio

Net Worth Ratio = (Net Profit after Interest & Tax - Pref. Dividend) * 100 /Net Worth

(2016-17 to 2020-21) (Ratio in %)

Company Name	2016-17	2017-18	2018-19	2019-20	2020-21	Average	Rank
NTPC	9.75	10.16	10.93	8.90	11.57	10.26	2
Power Grid	15.09	15.14	16.84	16.77	17.15	16.20	1
NHPC	10.37	9.76	9	10.02	10.21	9.87	3
Average	11.74	11.69	12.26	11.90	12.98		

(Source: Computed from Annual Reports)

Interpretation:

Net worth ratio shows the percentage of net profit based on net worth of equity shareholders.

Inter-Company Comparison:

The above table reveals that the Average net worth Ratio of the Power Grid is the highest which is given the first rank among the other selected Indian power companies. NTPC is given the second rank and NHPC is given the third rank. It is concluded that the net profitability with a viewpoint of equity shareholders of Power Grid is higher as compared to the other selected Indian power companies.

ONE-WAY ANOVA TESTING

H0: There is no significant difference in net worth ratio of selected Indian power companies during the period of study.

Source of Variation	SS	df	MS	F	F crit
Between Groups	125.6775	2	62.83873	79.92681	3.885294
Within Groups	9.43444	12	0.786203		
Total	135.1119	14			

(Source: Calculated) (Level of significance = 5%)

From the above testing, it has cleared that F calculated value is 79.93 which is more than the F table value of 3.89, the null hypothesis is rejected and hence it is concluded that there is a significant difference in net worth ratio of selected Indian power companies during the period of study.

3. Return on Capital Employed Ratio

Return on Capital employed = Net Profit before Interest & Tax * 100 /Capital Employed

(2016-17 to 2020-21) (Ratio in %)

Company Name	2016-17	2017-18	2018-19	2019-20	2020-21	Average	Rank
NTPC	8.30	7.57	7.45	7.88	8.04	7.85	2
Power Grid	9.57	9.86	10.04	10.42	10.77	10.13	1
NHPC	8.13	7.49	7.09	6.91	7.46	7.42	3
Average	8.67	8.31	8.19	8.40	8.76		

(Source: Computed from Annual Reports)

Interpretation:

This ratio shows the rate of return on capital employed.

Inter-Company Comparison:

The above table indicates that the average return on capital employed of Power Grid is the highest which is given the first rank among the other selected Indian power companies. NTPC is given the second rank and NHPC is given the third rank among the other selected Indian power companies. It is concluded that the net profitability with a viewpoint of capital employed of Power Grid is higher as compared to the other selected Indian power companies.

ONE-WAY ANOVA TESTING

H0: There is no significant difference in return on capital employed ratio of selected Indian power companies during the period of study.

Source of Variation	SS	df	MS	F	F crit
Between Groups	21.29989	2	10.64995	56.90898	3.885294
Within Groups	2.24568	12	0.18714		
Total	23.54557	14			

(Source: Calculated) (Level of significance = 5%)

From the above testing, it has cleared that F calculated value is 56.91 which is more than the F table value of 3.89, the null hypothesis is rejected and hence it is concluded that there is a significant difference in return on capital employed ratio of selected Indian power companies during the period of study.

4. **Earning Per Share Ratio**

Earning Per share = (Net PAT - Pref. Dividend) / (Number of Equity Shares)

(2016-17 to 2020-21) (Ratio in per share)

Company Name	2016-17	2017-18	2018-19	2019-20	2020-21	Average	Rank
NTPC	11.38	12.54	11.88	10.22	13.99	12.00	2
Power Grid	14.37	15.75	19	20.67	22.81	18.52	1
NHPC	2.53	2.7	2.57	2.65	2.99	2.69	3
Average	9.43	10.33	11.15	11.18	13.26		

(Source: Computed from Annual Reports)

Interpretation:

This ratio shows earning per share on equity shares. It is useful to know the Profitability with a viewpoint of equity share.

Inter-Company Comparison:

The above table reveals that the Average EPS of Power Grid is the highest which is given the first rank among the other selected Indian power companies. NTPC is at the place of second and NHPC is at third place. It indicates that EPS with a viewpoint of equity shareholders of Power Grid is higher as compared to the other selected Indian power companies.

ONE-WAY ANOVA TESTING

H0: There is no significant difference in earning per share ratio of selected Indian power companies during the period of study.

Source of Variation	SS	df	MS	F	F crit
Between Groups	633.1452	2	316.5726	67.7125	3.885294
Within Groups	56.10296	12	4.675247		
Total	689.2482	14			

(Source: Calculated) (Level of significance = 5%)

From the above testing, it has cleared that F calculated value is 67.71 which is more than the F table value of 3.89, the null hypothesis is rejected and hence it is concluded that there is a significant difference in earning per share ratio of selected Indian power companies during the period of study.

Limitation of the study

- The study period is restricted to 2016-17 to 2020-21 only.
- This study is based on secondary data taken mainly from annual reports and money control.
- The present study is mainly based on ratio analysis, which has its limitations.

Conclusion

The study of selected Indian power companies for the period from 2016-17 to 2020-21 reveals the difference in the profitability of the companies. The financial performance of Power Grid is very satisfactory in terms of net worth ratio, return on capital employed ratio, and EPS but its net profit ratio is not so sound. If we analyze net profit ratio of the selected power companies of India then it is found that NHPC ranks highest among the other companies whereas NTPC consists of the lowest performance. If we consider EPS then Power Grid pays the highest EPS of Rs. 18.52 and NHPC pays the lowest EPS of Rs. 2.69. From one-way ANOVA testing analysis, it is concluded that there is a significant difference in the profitability ratios of selected Indian power companies during the period of study.

References

Bhatt R. (2012). Profitability Ratio Analysis with Specific Reference to Indian Petroleum Industry- An Empirical Analysis. *Indian Journal of Accounting, XLIII (1)*, 71-77.

Puttann K. (2014). Performance Analysis of Information Technology Sector in India. *International Journal of Economic and Business Review, 2(3)*, 1-7.

Websites

www.ntpc.co.in
www.nhpc.gov.in
www.powergrid.in

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समीक्षक आचार्य नन्ददुलारे बाजपेयी

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सारांश ;-

मनुष्य एक जिज्ञासु सामाजिक प्राणी होने के कारण नई-नई बातों को जानने की इच्छा रखता है | साहित्य के क्षेत्र में साहित्यकार अपनी या औरों की रचनाओं का मुल्यांकन करता है क रचना अच्छी है या बुरी,कृति समाज उपयोगी है या निरुपयोगी,दोषयुक्त है या दोषपूर्ण | कसी भी साहित्यिक कृति का ऐसा स्वांगपूर्ण मुल्यांकन आलोचना या समालोचना कहा जाता है | यह आलोचना का कार्य करनेवाला आलोचक कहलाता है | आलोचक अपनी दीर्धद्रष्टि से धुल में पड़े हुए हीरे को भी पहचान लेता है |

हिन्दी आलोचना की दिशा में आचार्य रामचन्द्र शुक्ल,राम वलास शर्मा,हजारीप्रसाद ,श्यामसुन्दर दास जैसे कतिपय मेधावी आलोचकों का योगदान रहा है | आचार्य नन्ददुलारे बाजपेयीभी हिन्दी आलोचना जगत का एक बहुच र्चत नाम है | सन १९०६ में उन्नाव में पैदा होनेवाले नन्ददुलारे बाजपेयी की साहित्यिक प्रतिभा बड़ी ही उज्जवल रही है | हिन्दी साहित्य में उनकी ख्याति एक सफल आलोचक के रूप में रही है |

शब्दकुंजी ;- आलोचना,सौन्दर्यशास्त्र,सौष्ठववादी

बाजपेयी १९३० में छायावाद के माध्यम से हिन्दी साहित्य में अवतरित हुए | 'हिन्दी साहित्य बीसवीं शताब्दी' के कारण उनका हिन्दी आलोचना में पदार्पण हुआ था | उनके करकमलों से नि र्मत सफल आलोचनात्मक ग्रन्थ इस प्रकार है |

(१) जयशंकर प्रसाद
(२) प्रेमचंद
(३) आधुनिक साहित्य
(४) नया साहित्य,नये प्रश्न
(५) महाक व सूरदास
(६) राष्ट्रभाषा की कुछ समस्याएँ
(७) महाक व निराला

(८) क व सु मत्रानंदन पन्त

(९) रस सध्धांत

(१०) का आधुनिक युग

(११) आधुनिक साहित्य जगत और नई समीक्षा

इस प्रकार आलोचना के क्षेत्र में उनके योगदान को सराहनीय द्रष्टि से देखा जाता है |

बहुमुखी प्रतिभा के धनी बाजपेयीजी ने अपनी समालोचना में व भन्न सध्धांतों का परिचय करवाया है | अपनी प्रथम कृति में उन्होंने जो द्रष्टिकोण व्यक्त कया है ,वह इस प्रकार है |

- रचना में क व की मौ लकता,शक्तिमता,और कलात्मक सौष्ठव का अध्ययन |
- शैली का अध्ययन |
- क व की व्यक्तिगत जीवनी और रचना पर उसके प्रभाव का अध्ययन |
- काव्य के जीवन सम्बन्धी सामंजस्य और संदेश का अध्ययन |

एक जागरूक चंतन की द्रष्टि से कृतियों की जाँच-पड़ताल उन्होंने की है | शवकुमार मश्र ने लखा है-

“आचार्य बाजपेयी का समूचा समीक्षा कर्म एक जागरूक चंतक की मेघावी प्रतिभा तथा प्रगतिशील चंता का प्रतिफल है | उनके चंतन की मूलवर्ती जमीन बृहत सामाजिक तथा मानवीय सरोकारों की जमीन है और इसी जमीन से उन्होंने साहित्य,क वता या कला की ववेचना की है |” [१]

बाजपेयीजी ने छायावादी साहित्य को पश्चिम या बंगला का अनुवाद न मानकर उसे रीतिबद्ध और दिवेदीयुगीन साहित्य की प्रति क्रया माना है | इसमें मुखरित राष्ट्रिय चेतना को महत्व दिया है | उनकी समीक्षा में सौष्ठववादी वचारधारा का स्पष्ट प्रभाव परिल क्षत होता है | उन्होंने भारतीय अलंकारशास्त्र और पाश्चात्य काव्यशास्त्र से बहुत कुछ लया है और उन दोनों के समन्वित एवं सम्मि लत रूप को ही अपनाया है | सौष्ठववादी वचारधारा में काव्य के सौन्दर्य का उद्धाटन प्रमुख रूप से कया जाता है |इसी संदर्भ में उनका यह कथन सार्थक है-

" आलोचक जो नहीं है उसे रचता नहीं वरन जो है,उसे यथासम्भव पकड़ता है |उनका इस दौरान यह संकल्प है क आलोचक का पहला और प्रमुख कार्य है-कला का अध्ययन और उसका सौंदर्यानुसंधान |" [२]

बाजपेयीजी की समीक्षा पध्धति व्याख्यात्मक, ववेचनात्मक और वश्लेष्णात्मक रही है | उनके ववेचन में संयम,गहराई और शालीनता है |वह निरपेक्षता के प्रबल समर्थक थे |कहने में कोई दो राय न होगी क वह वादमुक्त आलोचक थे |उन्होंने लखा है-

" वाद पध्धति पर चलने का नतीजा साहित्य में कुत्रिमता बढ़ाना,दलबंदी फैलाना और साहित्य की निरपेक्ष माप को क्षति पहुंचना हो सकता है |"

वादमुक्ति के लए नन्ददुलारे बाजपेयी ने दो बातों पर जोर दिया है-एक समीक्षक का व्यक्तित्व समुन्नत होना चाहिए और दो वह तटस्थ होना चाहिए |

अपनी आलोचना पध्धति में निखार लाने हेतु उन्होंने तुलनात्मक पध्धति का प्रयोग कया है | जैसे की सांकेत की आधुनिकता के सन्दर्भ में उन्होंने कामायनी,मानस की तुलना की है |उसने भरत और अरस्तू के नैतिकता परक वचारों की तुलना भी की है |बाजपेयीजी ने ध्वनिमत ,साधारजैसे काव्य के अंगों के ववेचन में सौन्दर्य पर बल दिया है |जैसे:

"वैसा ही बाजपेयीजी भी मानते है क कलाकार का मानस सौन्दर्य की व्यंजना के लए समुन्नत होना चाहिए |" [३]

बाजपेयीजी की समीक्षा की प्रमुख वशेषता उनकी समन्वयशीलता है | हिन्दी के प्रबुद्ध इस वद्वान ने रस और स्वच्छंदतावाद का समन्वय कया है | उनका स्पष्ट मानना था क आत्मानुभूति की अ भव्यक्ति ही काव्य है |बाजपेयीजी ने दिवेदी युग के क वयों और लेखकों का आरंभ करके नई क वता तक के रचनाकारों की समीक्षा की है |रचनात्मक साहित्य के प्रति उन्होंने बल दिया है |इसी दिशा में स्वयं उनका मानना है क-

" मेरी निष्पति यह है क रचनात्मक साहित्य ही सध्धांतों की सृष्टि के लए उपादान बन सकता है |इसके वपरीत कोई सध्धांत कसी रचनात्मक कलाकृति की ओर उसकी ववेचना को अनुशा सत नहीं कर सकता |" [४]

बाजपेयीजी की आलोचना में पं डत नहेरु जैसे वचारकों का प्रभाव रहा है | शायद इसी कारण उनकी समीक्षा में मानवतावाद के उद्‌धोष हुआ है | जैसे:

“साहित्य की रचना और संवेदना एक मान सक पदार्थ है जो जितनी गम्भीर होगी,उतनी ही आध्यात्मिक कही जायेगी | इस द्रष्टि से आप मुझे गम्भीर संवेदनाओं के प्रेमी कह सकते है |”

उनकी रचनाओं के ववेचन में स्वतनता,समता एवं बन्धुत्व का स्वर मुखरित हुआ है |

नि:संदेह नंददुलारे बाजपेयी हिन्दी आलोचना जगत का एक चमकता हुआ चतारा है | उन्होंने नीतिवादी आग्रह से साहित्य को मुक्त करते हुए स्वच्छंदतावाद का पंथ प्रशस्त कया है | रस,ध्वनि,अलंकार,रीती,आदि उनके चंतन के वषय रहे है |

संदर्भ सू च ;-

(१) आलोचना के प्रतिमान- शवकुमार मश्र -पृष्ठ-१४४
(२) हिन्दी साहित्य: बीसवीं शताब्दी-नन्ददुलारे बाजपेयी-पृष्ठ-७९
(३) आलोचक: आचार्य नन्ददुलारे बाजपेयी-राममूर्ति त्रिपाठी -पृष्ठ-११
(४) हिन्दी साहित्य: बीसवीं शताब्दी-नन्ददुलारे बाजपेयी-पृष्ठ-७९

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અશ્વમેઘ નાટકમાં પુરાકલ્પનાનો વિનિયોગ

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ભૂમિકા

ચિનુમોદી ગુજરાતીના મહત્વના નાટ્યકાર છે. એમની પાસેથી પૌરાણિક કથાવસ્તુના સંખ્યાબંધ નાટકો પ્રાપ્ત થયા છે. તેઓ પૌરાણિક કથાવસ્તુનો ઉપયોગ કરીને તેમાંથી નવો આધુનિક અર્થ પ્રગટ કરવા માટે જાણીતા છે. ચિનુમોદી પાસેથી 'અશ્વમેઘ' અને 'નૈષધરાય' એમ બે પૌરાણિક નાટકો પ્રાપ્ત થાય છે. અહીં મારા આ અભ્યાસલેખમાં 'અશ્વમેઘ' નાટકમાં યોજાયેલા પુરાકલ્પનને કેન્દ્રમાં રાખીને તેની ચર્ચા કરવાનો ઉપક્રમ સેવાયો છે.

'અશ્વમેઘ' એક સ્રીની પશુકામના અને એ અતિકામનાના કરૂણ પરિણામનું નાટક છે. "અશ્વમેઘ' નાટકમાં પુરાણ પ્રસિધ્ધ પુરાકલ્પનનો ઉપયોગ કરીને ચિનુ મોદીએ એક નવા દ્રષ્ટિકોણથી તેનો વિનિયોગ કર્યો છે. તેથી, આ નાટક જાતીય સમસ્યા ઉપર પ્રકાશ ફેલાવતું વિચિત્ર અને પ્રયોગશીલ નાટક બન્યું છે, અહીં રાજા વિચિત્રમૈનની મહારાણી મોહિનીની અશ્વ સાથે અમાગમ માણવાની તૃષાનું નિરૂપણ થયું છે. આ સંદર્ભે ચિનુ મોદી પ્રસ્તાવનામાં નોંધે છે કે, .

"જાતીયવૃત્તિ નિયતિકૃત નિયમ રહિતા છે – એ સત્ય અખળી અળગા કરવા જેવું નથી... અને એને સ્વાભાવિક લેખ્યા પછીથ, અંતે તો તો કરૂણા જ આવે છે આ કથાનકમાં સ્પષ્ટ છે." (પૃ.8).

'અશ્વમેઘ'નું મૂળ કથાવસ્તુ પુરાણ પ્રસિધ્ધ છે. વેદઉપનિષદ પુરાણ વગેરેમાં અશ્વમેઘ યજ્ઞના ઉલ્લેખો રજુ થયેલા છે. રામાયણ અને મહાભારત જેવા મહા કાવ્યોમાં પણ અશ્વમેઘનો ઉલ્લેખ રજુ થયેલો છે. પરંતુ ચિનુ મોદીનું આ 'અશ્વમેઘ' નાટક એક જુદા જ અભિગમથી લખાયેલું છે. ડૉ. લવકુમાર મ. દેસાઇ નાટકના પુરકલ્પન અંગે આ પ્રમાણે નોંધે છે. -

“અશ્વમેધ નાટકના હાર્દ સમો બીજક અશ્વ સાથેના ને નાયિકાનો સૃષ્ટિક્રમ વિરુધ્ધ સમ્યક યોગનો વિધિ નાટ્યકારે સંદર્ભોને ચાતરી કરી મનગમતી રીતે પ્રયોજ્યો છે. વૈદિક ગ્રંથોથી માંડીને રામાયણ, મહાભારત જેવા મહાકાવ્યોમાં અશ્વમેધ યજ્ઞમાં બલિ તરીકે હોમાનારા ‘મૃત’ અશ્વ સાથે આ પ્રકારનો વિધિ દર્શાવાયોછે, જીવંત અધ સાથે કયાંય નહીં.”(પૃ.૮૮ રંગભૂમિના કેનવાસે)

તેમાંના કેટલાક સંદર્ભો નીચે મુજબ છે.

“કૌશલ્યાએ મન માં ધર્મ ભાવના રાખીને સ્થિર ચિતથી પેલા (સૂત) અધ સાથે એક સ્ત્રી ગાળી.”
(વલ્મીકિ રામાયણ, બાલકાંડ,પૃ.૧૪-૩૮)

“કેશ ઉપર તરફ બાંધીને અને પછી છુટા મૂકીને પછી ડાબા હાથ વડે દાબી સાથળ થપથપાવતી રાજાની પત્નીઓ જમણા હાથ વડે પોતાના વસ્ત્રથી મરેલા અશ્વને પવન વીંઝે છે. ત્યારપછી પટરાણીને આ મરેલા (અશ્વ) સાથે સૂવા માટે આદેશ આપવામાં આવે છે.” (અશ્વતાયન શ્રોતસુતમ, અધ્યાય ૧૦-૮ -૧૦ -૧૧)

આપણા દેશમાં પુરૂષોના પશુઓ સાથેના જાતીયકર્મના કિસ્સા ક્યારેક પ્રગટ થાય છે. યુરોપમાં પણ સ્ત્રીઓના આવા પશુસંયોગ મહદંશે શ્વાન સંયોગના કિસ્સા જાણવા મળે છે. અહીં સ્પષ્ટ છે કે નાટ્યકારનો અભિગમ માનવીની જાતીય વાસનાને નિરૂપવાનો કહો કે, માનવમનની સંકુલતા કે અકળદશાને નિરૂપવાનો છે.

સમગ્ર નાટક ત્રણ અંકમાં કુલ નવ દ્રશ્યોમાં વિસ્તરે છે. નાટ્યવસ્તુના સંકલન માટે પ્રયોજાયેલું ‘કથાગીત' ગ્રીકકોરસની ગરજ સારે છે. નાટક દરમિયાન ક્યાંક દ્રશ્યનો આરંભ કરવા માટે કે ક્યાંક પાત્ર-પ્રસંગાનુસાર પ્રયોજાતુ આ કથાગાન નાટ્યતંતુને જોડવા ઉપરાંત માનવમનનો ભેદ ઉકેલવો જાણે શક્ય જ નથી' એવા ભાવને ઘૂંટ્યા કરે છે. અશ્વમેધ' ચિનુ મોદીનું પૂર્ણકક્ષાનું નાટક છે. નાટકમાં મૂળ ધ્વનિ તો સ્ત્રીની અદમ્ય કામેચ્છાને પ્રગટ કરે છે. ચિનુ મોદીએ પણ સ્ત્રીની અદમ્ય કામેચ્છાને પ્રગટ કરવા ‘અશ્વમેધ' નાટકમાં ભાષાનો વ્યંજનાના સ્તરે પ્રતીકાત્મક એવી કાવ્યબાનીનો પ્રયોગ કરી નાયિકા મોહિનીની કોઇ પશુ પરત્વે નહીં, પરંતુ સ્ત્રી માત્રની પૂર્ણ રૂપ માટેની ઉત્કટ ઝંખનાને કલાત્મક રીતે આલેખી છે. મોહિનીની બીજક' નામના અશ્વ અર્થાત પશુ

પરત્વેની વિકૃત અને અવૈધ યૌન સંબંધ બાંધવાની સ્થૂળ ઝંખનાને, પ્રબળ પુરૂષત્વની સ્ત્રીની સનાતન ઝંખનામાં રૂપાંતરિત કરવા માટે ભાષાની વ્યંજનાને ખપમાં લીધી છે. જેને કારણે નાટ્યકૃતિ સ્ત્રી અને પશુ વચ્ચેના અવૈધ અને વિકૃત યૌન સંબંધના આલેખનમાંથી મુક્ત બની, સ્ત્રીની અદમ્ય કામેચ્છાનું કલાત્મક નિરૂપણ કરતી રસ કૃતિ બની શકી છે. મૂળ કથાવસ્તુનો આધાર પ્રાચીન ભારતમાં પ્રચલિત અશ્વમેઘ યજ્ઞ અને તેની પ્રચલિત વિધિઓ, માન્યતાઓ, રીતિઓ અને કેટલીક પ્રચલિત દંતકથાઓનો આધર લઇ ચિનુ મોદી એ 'અશ્વમેઘ' નાટ્યકૃતિની રચના કરી છે. એ સંદર્ભેઆ કૃતિ પૌરાણિક કથાવસ્તુ આધારિત છે. એમ કહેવામાં કશું જ અયોગ્ય તો નથી જ. આ નાટકમાં સ્ત્રીની કામેચ્છાની તીવ્રતાને પ્રગટ કરવામાં નાટ્યકાર સફળ રહ્યા છે.

નાટ્યકૃતિમાં સ્થૂળ રીતે તો એ પ્રતીત થાય છે કે નાયિકા મોહિનીનો અશ્વ સાથેના મૈથુન માટેનો તલસાટ છે. એવો અર્થ અભિધાના સ્તરે સ્ફૂટ થાય છે. પરંતુ વ્યંજનાના સ્તરે વિચારતાં ઝંખના તો પ્રતાપી પૌરૂષત્વની જણાય છે. એ નાટ્યકારે સંવાદ દ્વારા પ્રગટ કરી છે.

મોહિની : “તો પછી શુભ મુહૂર્ત કઢાવી અશ્વમેઘનો આરંભ કરો... અમને

ચક્રવર્તીના હૃદયેશ્વરી થવાના કોડ જાગ્યા છે.” (પૃ.૭૧)

“ચાર ચાર માસે બીજક, તારી પ્રતિછવિ તો જોવા મળશે... આવા ઉમળકા તો મેં સોળ વર્ષની વયે પણ અનુભવ્યા નહોતા... ઓહ, બીજક તે મને મને નખશીખ આંદોલિત કરી મૂકી છે.... આ આવેગ, આ ઉમળકા ખાળ્યા પણ કેમ જાય.” (પૃ.૮)“એની પીઠ સાથેના સતત ગતિયુક્ત સંયોગને કારણે કે આથી પણ અમે રતિ સુખનો અનુભવ (મોં ઢાંકી દે છે) એ ક્ષણથી.... એ ક્ષણથી... (પૃ.૮૧)

“બીજક, તુ અશ્વ નથી. પ્રિય, તુ અશ્વ નથી. તુ તો છે મારા સોળમા વર્ષે જન્મેલા અને તરત હત્યા પામેલા સ્વપ્નનો પુનઃ જન્મ.” (પૃ.૮૭)

“હું મનુષ્ય છુ. તું પશુ છે, એટલે મારી ભાષા, મારા પ્રેમની ભાષા પણ તને નથી સમજાતી. એવું તે કંઇ હોય.” (પૃ.૮૮)

મોહિનીના આ સંવાદો સ્ત્રીમાં રહેલા છે. કોઇ પૂર્ણ પુરૂષને પામવાની અદમ્ય ઝંખનાને પ્રગટ કરે છે. બીજુ કે, અશ્વમેધ યજ્ઞ કરી પોતાનો પતિ-સ્વામી ચક્રવર્તી રાજા બને, પોતે એવા ચક્રવર્તી રાજાની પટરાણી બને એ તો પ્રથમ દ્રષ્ટિનો અર્થ છે. પરંતુ ગર્ભિત અર્થ તો એ છે કે અશ્વમેધ યજ્ઞ નિમિત્તે એ યજ્ઞની જ એક માન્ય વિધિ રૂપે અશ્વસાથે મૈથુન કરવાની અને તે રીતે પોતાની ઉત્કટ કામેચ્છા સંતોષવાની તક મળે. ડી મોહિની અશ્વરતિ માટેની ઝંખના પ્રગટ નહી, ગોપિત રાખે છે. મુખરિત નહીં, પણ વ્યંજિત છે. ચક્રવર્તીપણા અંગે પણ એની અંદરની ઝંખના તો અશ્વ સાથેના રતિ સુખની છે.

દ્રશ્ય : ૨માં મોહિની અશ્વ સુખ માટે તરવરાટ અનુભવે છે. અને કહે છે. - “તો કોની અને શાની વાટ જૂઓ છો ? અશ્વ બતાવો અશ્વ જેનું જોમ પૂર્ણ પુરૂષથી પણ વિશેષ પ્રમાણમાં હોય. લાવો... લાવો... ખરી પછાડી, પૂચ્છ ઉછાળી દોડે... નહીં... નહીં કેવળ પાણીપંથો નહીં, પણ.... પૂર્ણિમાએ ઉછાળા લેતા સમુદ્રના મોજાં જેવા ધુઘવતા... ગર્જતા, તટે પડેલી નૌકાના છિદ્ર છિદ્રમાં પ્રવેશી નૌકાને ઉન્મત કરી સમુદ્રમાં ખેંચી જતાં મોજાં જેવા અશ્વ.... ઉન્મત કરતા અશ્વ.”(પૃ.૧૮)

અહીં નાટ્યકારે પૂર્ણિમા, સમૂદ્રના મોજા અને નૌકાના પ્રતીકો અને ભાષાની વ્યંજનાને કામે લાગાડી છે. અશ્વ-પશુ સાથેના રતિ સુખની ઝંખના નહિં, પરંતુ સ્ત્રીની પૂર્ણરૂપ માટેની ઝંખનાને ધ્વનિત કરી છે. એટલે જ તો આ વ્યંગ્યાર્થ પ્રેક્ષક વર્ગમાં અશ્વસુખ ઝંખતી સ્ત્રી પરત્વે ધૃણા નહીં, પરંતુ પ્રતાપી પુરૂષની ઉત્કટ ઇચ્છા ધરાવતી સ્ત્રી પ્રત્યેનો સમભાવ જન્માવે છે. અશ્વ બીજક એ સ્થૂળ અશ્વ ન રહેતાં પૂર્ણ પરૂષ’નું રૂપ બનીને પ્રગટે છે. અને તે દ્વારા મોહિનીનો કામ સુખ માટેનો તલસાટ સૂચિત થાય છે.ભાવકના મનમાં એ પ્રશ્ન થાય કે, સ્ત્રી અન્ય પુરૂષ તરફ જાતીય આકર્ષણ અનુભવે એ માનવ સહજ છે. પરંતુ એક પ્રાણી-અશ્વ તરફ જાતીય આકર્ષણ અનુભવે તે અસહજ છે, એ પ્રકારની વૃત્તિ જાતીય વિકૃતિમાં ખપે. પરંતુ પુરાણોક્ત ઉક્તિ કે માન્યતા અનુસાર એવો ઉલ્લેખ છે કે, - “અશ્વમેધ યજ્ઞ કરનારા મહારાજાની પટરાણી સાથે એક વર્ષમાં પરિભ્રમણ કરીને વિજયી થયેલા ઘોડાની સાથે મૈથુન વિધિ થઇ જાય પછી એ અશ્વને યજ્ઞવિધિમાં આખોને આખો હોમી દેવામાં આવે છે. આ એક બાહ્ય ઉપચાર હોઇ શકે જે પ્રતીકાત્મક વિધિ તરીકે પ્રતિષ્ઠા પામ્યો હોય.”

મોહિની : ખરી પછાડી, પુચ્છ ઉછાળી દોડે... નહીં, નહીં કેવળ પાણીપંથા નહીં પણ

પૂર્ણિમાએ ઉછાળા લેતા સમુદ્રના મોજા જેવા ધૂધવતા... ગર્જતા... પડેલી નૌકાના છિદ્ર છિદ્રમાં પ્રવેશીને નૌકાને ઉન્મત કરતાં, અશ્વ કેટલી છે વાર?, અશ્વપાલ અશ્વ નથી તૈયાર ?"(પૃ.૧૩)

રાણી મોહિનીના મનમાં ચાલતું અશ્વનું ચિત્ર અને તેની ઉછાળા મારતી કામેચ્છા કવિ સિતાંશુ યશશ્ચંદ્રના મૃત્યુ એક સરરિયલ અનુભવ'ની પ્રથમ પંક્તિથી આરંભાતા આ સંવાદ દ્વારા ચિનુ મોદીએ ધ્વનિ ચમત્કૃતિનો એક ઉત્તમ નમૂનો પૂરો પાડ્યો છે. આ નાટકમાં ગદ્ય-પદ્યની સુમેળ સાધતી સંવાદ યોજના છે.

સંવાદ યોજના અર્થગંભીરયુક્ત, સંવાદો સંક્ષિપ્ત, વિસ્તૃત અને અર્થસભર તથા પ્રવાહી છે. લય-લઢણ, આરોહ-અવરોહ, ઉત્કટ વેદનાઓ, મૌન કથનાદી યથાર્થપણે પ્રકટ થઇ સ્વાભાવિક અને સહજ રીતે મુખ્ય કથા પ્રવાહમાં સંયોજિત થયેલ જોવા મળે છે. સરળતાની સાથે સાથે પ્રયોજનશીલ, લક્ષ્યાર્થયુક્ત કાવ્યશ્રીથી સંસ્કૃત તત્સમ શબ્દોથી સુશોભિત ભારે લાગે છે.

ચિનુ મોદીના પુરાકલ્પન આધારીત 'અશ્વમેધ' નાટકમાં મોહિનીના પાત્ર દ્વારા અસંયોગી સંબંધની પરાકાષ્ઠા વિશેષ સંવાદપરક વૃતિથી આકારિત થઇ છે. તેના ઉદ્દ્ઘાટીત આવેગો દ્વારા નાયિકાની મનઃસ્થિતિ અસરકારક રીતે અભિમુખ થઇ છે. એક સ્ત્રી સહજ વાસના પશુ વાસનામાં પુરાકલ્પન દ્વારા પ્રગટ કરી આપવામાં ચિનુ મોદી સફળ થયા છે. તેની સાથે જ રાજા વિચિત્રસેનની માનસિક અવસ્થા પણ એ સાથે જ વિશેષકર રૂપે જાગ્રત થઇ છે. પૌરાણિક સમયના માત્ર આચારો કે વિધિવિધાનોનો ઉપયોગ કરીને નાટ્યકારે અહીં સ્ત્રીની અતૃપ્ત કામવાસનાને, પશુકામનાને સરસ રીતે વ્યક્ત કરી છે. આ રીતે જોઇએ તો,નાટ્યકાર પુરાકલ્પનનો વિનિયોગ કરી આધુનિક અર્થઘટન કરવામાં સફળ રહ્યા છે. જેથી, અશ્વમેધ' ચિનુ મોદીનું વિશિષ્ટનાટક બની રહે છે.

આધુનિક નાટ્યકલાના પ્રયોગશીલ સર્જક ચિનુ મોદીનું નાટક અશ્વમેધ' પુરાકલ્પનની વિભાવનાને બખૂબ પ્રગટ કરી આપે છે. આધુનિક સર્જન કલાની આ નુતન વિભાવના એમના હાથે સરસ રીતે રજુઆત પામી છે. તેનો સમય, પરિસ્થિતિ, ઘટના વિધાન, રજુઆત અને પાત્રોની સમયાનુસારી રજુઆત નાટકમાં સારી રીતે ઉપસી રહે છે. તેમાં પાત્રોની ગતિવિધિ અને એમના ચૈતસિક સંચલનો દ્વારા પૌરાણિક કથા વર્તમાનયુગીન હોવાની પ્રતીતિ વાચકને મળી રહે એવી જહેમત કથાકારે ઉઠાવી હોય એવું સ્પષ્ટ જણાઇ આવે છે.

સંદર્ભસુચિ:

૧.અશ્વમેધ –ચિનુંમોદી,રન્નાદે પ્રકાશન

૨.આધુનિક ગુજરાતી નાટક:પ્રત અને પ્રયોગ,ડો.મહેશ ચંપકલાલ

૩.સાઠોત્તરી ગુજરાતી મૌલિક દીર્ઘનાટક:ડો.પ્રભુદાસપટેલ,ડીવાઇન પબ્લીકેશન્સ

૪.રંગભૂમિના કેનવાસે:લવકુમાર દેસાઈ

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ઐતિહાસિક નવલકથાકાર કનૈયાલાલ મુનશી

ગોહેલ વિજયકુમાર ધનજીભાઈ
પીએચ.ડી. સ્કોલર,
સૌરાષ્ટ્ર યુનિવર્સિટી, રાજકોટ

સારાંશ :–

ઐતિહાસિક નવલકથાકાર તરીકે મુનશી ગુજરાતી સાહિત્યમાં ચિરંજીવી સ્થાન પ્રાપ્ત કરનાર સર્જક છે. પોતાની ઐતિહાસિક નવલકથામાં મુનશી જે સૃષ્ટિ રચે છે તેની સાથે તેના વિવિધ તત્વો સુસંગત રીતે ગોઠવાઈ જતા હોય છે. તેમાં મુનશીની નવલકથાકાર તરીકેની સિદ્ધિ રહેલી છે. મુનશીએ 'ગુજરાતની અસ્મિતા'નો આદર્શ પ્રજા સમક્ષ મુકવાનું એક ઐતિહાસિક કામ કર્યું. ૧૯ મી સદીના અંતમાં અને ૨૦ મી સદીના આરંભમાં જ્યારે આપણા દેશનો ઈતિહાસ બદલી રહ્યો હતો ત્યારે દેશના જુદા જુદા પ્રદેશોમાં સર્જકોએ ભુતકાળની ગૌરવગાથાઓ નીરુપવાનું અને પ્રાદેશિક તેમજ રાજકીય ભાવનાને સંકોરવાનું કામ કર્યું છે. મુનશીએ ઐતિહાસિક નવલકથાઓમાં ઈતિહાસને અવગણીને કાળવ્યુત્ક્રમનો દોષ વહોરી લીધો છે છતાં પણ નવલકથામાં તેમણે વાર્તાસંયોજનની જે સિદ્ધિ દાખવી છે તે આજ સુધી અદ્વિતીય છે.

પ્રસ્તાવના :–

૩૦ મી ડીસેમ્બર ૧૮૮૭ના રોજ ભરૂચમાં જન્મેલા કનૈયાલાલ મુનશી જીવનનાં એક જ ફેરામાં અનેક કાર્યો કરી ગયા. મુનશી સાહિત્યકાર ઉપરાંત ઈતિહાસકાર, પત્રકાર, કેળવણીકાર, ધારાશાસ્ત્રી, વહીવટકર્તા, સ્વાતંત્ર્યસેનાની અને રાજનીતિજ્ઞ હતાં. તેઓ બહુપ્રતિભામુખી હતાં. તેમની બહુમુખી પ્રતિભાનાં નોંધપાત્ર નિદર્શન નાટક, નવલકથા, નવલિકા, જીવનચરિત્ર, પ્રવાસકથા, નિબંધ વગેરે સ્વરૂપની કૃતિઓ તેમજ તેમનાં લેખો અને વ્યાખ્યાનોમાં મળે છે.[૧] ગુજરાતની સાહિત્યરસિક જનતામાં મુનશી નવલકથાકાર તરીકે વિશેષ કરીને ઐતિહાસિક નવલકથાઓના સર્જક તરીકે નામના મેળવી છે.

મુનશીએ બધી મળીને સામાજિક, ઐતિહાસિક અને પૌરાણિક એમ ત્રણ પ્રકારની નવલકથા આપી છે. જોકે તેમની ઐતિહાસિક નવલકથાઓ જેટલી કળાપૂર્ણ અને ચિરંજીવ બની છે, તેટલી સામાજિક નવલકથાઓ નથી બની. ફ્રેંચ નવલકથાકાર એલેકઝાન્ડર ડ્રૂમાની નવલકથાઓની અને વિશેષ ''થ્રી મસ્કેટિયર્સ'' અને ''કાઉન્ટ ઓફ મોન્ટેક્રિસ્ટો''ની સીધી અસર મુનશીએ ઝીલી છે તેમ છતાં મુનશીની નવલકથાઓ કેવળ અનુકરણાત્મક બની નથી.

મુનશીએ ખાસ કરીને ઐતિહાસિક નવલકથાનાં રૂપ અને રીતિની એવી પરંપરા સર્જી, જેને તેમનાં અનેક અનુગામી સર્જકો અનુસર્યા.[૨]

ઐતિહાસિક નવલકથાકાર મુનશી :

ઐતિહાસિક નવલકથાનો લેખક ભૂતકાળમાં બનેલા બનાવોના માળખા પર નવલકથાનું નિર્માણ કરે છે. પણ આ કલાનિર્માણમાં નવલકથાકારનો ઉદ્દેશ્ય કેવળ ઈતિહાસદર્શન કે ભૂતકાળના બનાવોને યથાતથ રૂપમાં આપણી સમક્ષ રજૂ કરવાનો નથી હોતો. આ કામ તો સમય–સ્થળની ઝીણવટભરી માહિતીનો અભ્યાસી ઈતિહાસકાર જ વધારે સારું કરી શકે. ઐતિહાસિક નવલકથાકારએ ઈતિહાસકારથી ભિન્ન મિજાજનો માનવી છે.એનો આદર્શ ઈતિહાસકારથી ભિન્ન હોઈ છે. ઈતિહાસકારનું લક્ષ્ય એક જ ઈતિહાસદર્શન. જ્યારે ઐતિહાસિક નવલકથાકારનું લક્ષ્યબિંદુ નવલકથા હોઈ છે. ઈતિહાસ એનું સાધન છે. સાધ્ય તો નવલકથા છે. આથી નવલકથાના સર્જકોને ઈતિહાસ સાથે છૂટ લેવાનો કે તેમાં ફેરફાર કરવાનો અધિકાર અબાધિત રહે છે. એટલું જ નહિ પરંતુ, એમ કરવાનું નવલકથા માટે અનિવાર્ય પણ બની રહે છે. ઐતિહાસિક નવલકથાકાર વાર્તાને રસમય બનાવવા ઈતિહાસપ્રસિદ્ધ પ્રસંગો અને પાત્રોમાં ફેરફાર કરી તેમાં નવાં પાત્રોને પ્રસંગો કલ્પનાબળે ઉમેરી, પોતાની નવલકથાને જ વફાદાર રહે તે સ્વાભાવિક છે. આ ઉપરાંત વાચક પણ નવલકથાકાર પાસે ઈતિહાસ નહિ, પણ રસમય વાર્તાની જ અપેક્ષા રાખે છે. આથી ઐતિહાસિક નવલકથાકાર પોતાને અને પોતાના વાચકોને વફાદાર રહેવા ઈતિહાસ સાથે છૂટ લે છે.[૩]

આમ છતાં આ ફેરફારોના ઔચિત્યનો પ્રશ્ન ચર્ચાસ્પદ બન્યો છે. જોકે એના કોઈ નિયમો કરી ઐતિહાસિક નવલકથાકાર પર સ્થાપી શકાયા નથી. એ ફેરફારો ઔચિત્યનો પ્રશ્ન ઐતિહાસિક નવલકથાકારના ઉદેશ્ય સાથે સંબંધિત છે. નવલકથાકારનો આશય ઈતિહાસના તે સ્થળ–સમયનું , તેમાં વતા માનવીઓની મહત્વનું, તેમના ગૌરવનું દર્શન કરાવવાનો જ હોય તો તેણે ઈતિહાસના બનાવોને તેની મુખ્ય ઘટનાઓ, પાત્રોના માનસ, વાતાવરણ આદિને વફાદાર રહેવું જોઈએ. પણ કેટલાંક નવલકથાકાર એવા હોય છે જેમનો ઉદ્દેશ્ય ઈતિહાસના બનાવોનો આશ્રય લઈ એક રસપ્રદ સર્જનાત્મક નવલકથાની કૃતિ આપવાનો હોય છે. એમની નજર સમક્ષ તો એક માત્ર હોય છે. 'નવલકથા'. ઈતિહાસ ખાતરએ 'નવલકથા'નો ભોગ આપવા માગતા નથી અને આથી નવલકથાના કલાવિધાનને માન આપી તે ઈતિહાસમાં નિઃસંકોચ ફેરફાર કરે છે. મુનશી ઐતિહાસિક નવલકથાના લેખક તરીકે આ બીજા પ્રકારમાં આવે. ઐતિહાસિક નવલકથામાં નવલકથા અને ઈતિહાસ અને ઈતિહાસ બંનેનું

ઔચિત્યપૂર્વકનું સામંજસ્ય કરનારા નવલકથાકારો તો વિરલ છે. મુનશી એક સમર્થ નવલકથાકાર છે તેમ ઈતિહાસદ્રષ્ટા પણ છે.[૪]

સામાજિક નવલકથાથી સાહિત્યમાં પ્રવેશ કરનાર મુનશીની ખરી કારકિર્દી ઐતિહાસિક નવલકથાથી શરૂ થાય છે. એમની પહેલી ઐતિહાસિક નવલકથા બહાર પડી ત્યારે ઈ.સ.૧૯૧૬ના મે માસના 'બુદ્ધિપ્રકાશ'માં શંકરપ્રસાદ રાવલે નોંધ્યું : 'આપણા જીવંત વર્તમાનકાળ પાસે આપણા જીવંત અને ઉજ્જળ ભૂતકાળની પૂજા કરાવતી ખુદ ગુજરાતના ઈતિહાસની નવલકથા તો આ પહેલવહેલી છે' મુનશીને ઉત્તમ નવલકથાકાર તરીકેની કીર્તિ પણ આ 'પાટણની પ્રભુતા' અને એ પછી પ્રગટ થયેલી 'ગુજરાતનો નાથ' ઈત્યાદી ઐતિહાસિક નવલકથાએ જ મળી છે.[૫]

પાટણની પ્રભુતા :–

મુનશીની પહેલી ઐતિહાસિક નવલકથા પાટણની પ્રભુતા હતી. આ નવલકથાએ મુનશીને નવલકથાકાર તરીકે ગુજરાતી સાહિત્યમાં માનભર્યુ સ્થાન અપાવ્યું છે. જોકે 'પાટણની પ્રભુતા' શરૂઆતની હોઈ તેનું વસ્તુગ્રથન 'ગુજરાતનો નાથ' ના મુકાબલે શિથિલ લાગે, પણ તોય વાચકના રસપ્રવાહમાં સતત નિમગ્ન રાખતી પ્રસંગપરંપરા અને તેનું કલાયુકત સંયોજન ગુજરાતી ઐતિહાસિક નવલકથાએ તો 'પાટણની પ્રભુતા'માં પહેલીવાર જોયું.[૬]

પાટણની પ્રભુતા નવલકથા સોલંકીયુગના કર્ણદેવ સોલંકી અને તેના પુત્ર સિદ્ધરાજના સમયના બનાવોને કેન્દ્રમાં રાખીને લખાયેલી નવલકથા છે. મુનશી તેને ઐતિહાસિક નવલકથા તરીકે ઓળખાવે છે, તો પણ 'પાટણની પ્રભુતા'ની ઐતિહાસિકતાનો પ્રશ્ન ચર્ચાસ્પદ બન્યો છે. આ નવલકથામાં મુખ્ય બે પ્રવાહો સમાંતરે વહે છે; એક કર્ણદેવના અંત સમયે તે સમયના ગુજરાતમાં ચાલતા રાજકીય–ધાર્મિક ઝઘડાનું ચિત્રણ; બીજો, મહારાણી મીનલ અને મહામંત્રી મુંજાલની પ્રણયકથા.

'પાટણની પ્રભુતા' ના ઉપરથી દેખાતા ઐતિહાસિક વસ્તુમાં કલ્પનાનું પણ મિશ્રણ થયું છે. મીનલ–મુંજાલની પ્રણયકથા જે આ નવલકથાનું પ્રધાન અંગ છે તે મુનશીની કલ્પનાનું સર્જન ગણાવી શકાય. મુંજાલ જેવો મહામાત્ય અને ગુજરાતની લોકપ્રિય રાણી પરસ્પર પ્રેમ કરે એ ઐતિહાસિક સત્યની વિરુદ્ધ હોવા ઉપરાંત નૈતિકતાની દ્રષ્ટિએ પણ ચર્ચાસ્પદ મુદ્દો બને છે.[૭]

'પાટણની પ્રભુતા'માં મીનલ અને મુંજાલ ઐતિહાસિક પાત્રો છે એ વાત સાચી પણ એમની વચ્ચેના પ્રણય ઈતિહાસસિદ્ધ હકીકત નથી. તે જ પ્રમાણે આનંદસૂરી પણ કાલ્પનિક પાત્ર જ છે. આ ઉપરાંત મુંજાલ, મીનલ, જયસિંહ, ઉદો વગેરે પાત્રો નિરૂપાયા છે તે રીતે ઐતિહાસિક કરતાં વિશેષ તો કાલ્પનિક લાગે છે અને કેટલાંક મહત્વના પ્રસંગો પણ કાલ્પનિક હોઈ તેવા જ છે.[૮]

ગુજરાતનો નાથ :–

'ગુજરાતનો નાથ'ની પ્રસ્તાવનામાં મુનશી નોંધે છે. 'અનેક ઐતિહાસિક પ્રસંગો અને કથાઓની સંકલ્પના કઈ આ વાર્તા લખી છે અને ઐતિહાસિક તત્વો બન્યાં ત્યાં સુધી તેવા ને તેવાં રાખ્યાં છે'. ઈતિહાસ પ્રત્યે વફાદારી બતાવવાનો મુનશીનો આશય અને પ્રયત્ન આમાં જોઈ શકાય છે. મુનશી કહે છે. તેમ આ નવલકથામાં કેટલીક મહત્વની ઐતિહાસિક ઘટનાઓને મૂળ રૂપમાં એમણે સ્વીકારી છે. ખરી માળવા નરેશની પાટણ ઉપરની ચડાઈ અને તે સમયે શાંતુ મહેતાએ કરેલી પાટણની સાચવણી, મીનળદેવીની જાત્રા, રા'નવઘણની હાર, ખેંગારે લીધેલી ચાર પ્રતિજ્ઞાઓ અને તેનું પાલન, હેમચંદ્રાચાર્યની દીક્ષા વગેરે પ્રસંગો ઈતિહાસસિદ્ધ છે.[૯]

રાજાધિરાજ :–

મુનશીની ઐતિહાસિક નવલકથામાં સોલંકીયુગની ઈતિહાસકથા 'રાજાધિરાજ' માં આગળ વધે છે. પાટણ અને જૂનાગઢ વચ્ચેનું યુદ્ધ વર્ષો સુધી ચાલ્યા કર્યું છે. 'ગુજરાતના નાથ'માં હતું એ જ રજવાડાનું વાતાવરણ આ કૃતિમાં પણ છે. 'પાટણની પ્રભુતા' અને 'ગુજરાતનો નાથ' ના મુકાબલે આ કથામાં પ્રસંગો ઓછા છે અને ઓછા નાટયતત્મય છે.[૧૦]

જય સોમનાથ :–

'જય સોમનાથ' મુનશીની પ્રૌઢ અને સબળ કલમે લખાયેલી ઐતિહાસિક નવલકથા છે. મુનશી આ નવલકથાને ઉપરોકતત નવલકથાઓની વાર્તામાળાનો મણકો કહે છે. તો પણ આ નવલકથાના પહેલાના સમયની પછીથી લખાયેલી વાર્તા છે. ભીમદેવના સમયમાં મહમૂદ ગઝની ગુજરાત પર ચડી આવ્યો અને તેણે સોમનાથની મૂર્તિનું ખંડન કર્યુ તે પ્રસંગે ગુજરાતના રાજપૂતોએ સોમનાથના રક્ષણાર્થે જે શૌર્ય અને સ્વાર્પણ દાખવ્યા તેની કથા આલેખાઈ છે. આ કથાના આલેખન વિશે મુનશી પોતાનો ઉદ્દેશ્ય વ્યકતત કરતાં કહે છે, 'આ વાર્તામાં મારો ઈરાદો સુલતાન મહમૂદનું આક્રમણ ચીતરવાનો નથી. પણ ગુજરાતે કરેલો પ્રતિરોધ વર્ણવવાનો છે'. મુનશીની અન્ય ઐતિહાસિક નવલકથાઓ કરતાં આના રૂપરંગ કંઈક જુદો છે. આ નવલકથાની પ્રસ્તાવનામાં મુનશી લખે છે. 'એની

કલ્પના શૈલી, રચના અને લખાવટમાં ફેર પડયો છે. જેટલો ૨૫ વર્ષના અને ૫૦ વર્ષના માણસમાં હોય એટલો તો જરૂર.' પ્રથમની નવલકથાઓ પછી ઘણાં સમય બાદ વર્ષો બાદ આ નવલકથા લખાઈ હતી. તે દરમિયાન મુનશીના વિચારો અને ભાવનાઓમાં પરિવર્તન આવ્યું હોય તે સ્વાભાવિક છે.[૧૧]

પૃથ્વીવલ્લભ :–

'પૃથ્વીવલ્લભ' પણ ઐતિહાસિક નવલકથા છે એનું કથાવસ્તુ 'પ્રબંધચિંતામણી'ના 'મુંજરાસા' અને 'મુંજપ્રંબધ' પરથી લેવામાં આવ્યું છે. માલવાનો રાજા મુંજ રસિક હતો. કલા અને કવિતાનો મર્મવિદ અને ચાહક હતો. તેલંગણાના ચાલુકયરાજ તૈલપને તેણે પંદર–સોળ વાર યુદ્ધમાં હરાવ્યો હતો. સવંત–૧૦૫૨માં એણે ફરીથી તૈલંગણ પર આક્રમણ કર્યુ ત્યારે તૈલપે મુંજને હરાવ્યો અને કેદમાં નાખ્યો. સોળ દિવસ સુધી ઘેરઘેર ભીખ મંગાવી અંતે હાથીના પગ નીચે કચડાવી નાખ્યો.[૧૨]

અનેક વિવેચકોના મત પ્રમાણે આ નવલકથા શ્રેષ્ઠ છે. ઈ.સ.૧૯૨૦માં પ્રગટ થયેલી 'પૃથ્વીવલ્લભ' જેટલી વખોડાઈ હતી તેટલી જ વખાણાઈ હતી. આ નવલકથાનું વિષયવસ્તુ ગુજરાતને અડીને આવેલા માળવાનું છે.

મુનશીની નવલકથાઓમાં ઐતિહાસિક વિકૃતિઓ :–

મુનશીની ઐતિહાસિક નવલકથાઓમાં ઐતિહાસિક વિકૃતિ થયાનો આક્ષેપ અનેક વિવેચકો તરફથી મૂકવામાં આવ્યો છે. તેના મુખ્ય બે કારણો ગણાવી શકાય. એક એલેકઝાન્ડર ડ્રમાની ઝીલેલી અસર અને બીજું અર્વાચીન યુગની પોતાની ઈસ્ટ એવી જીવનભાવનાઓનું તેમણે ઐતિહાસિક સમયક્રમનું ઉલ્લંઘન કરીને પણ સ્વીકારેલું ધોરણ. મુનશીએ તે સમયના પ્રસિદ્ધ પાત્રોમાં ફેરફાર કર્યા છે અને કેટલાંક પ્રધાન પાત્રો નવાં સજર્યા છે એમ જોવા મળ્યું છે. આથી તેમની કૃતિઓમાં ઈતિહાસની અવગણના થવા પામી છે.[૧૩]

મુનશીના અભ્યાસીઓની મુખ્ય ફરિયાદ એ છે કે તેમણે ઐતિહાસિક કથાઓમાં ઈતિહાસની સુપ્રસિદ્ધ ઘટનાઓ તથા વ્યકિતઓના નિરૂપણમાં ઐતિહાસિક તથ્યોને એ પ્રકારે મરડી મરડીને રજુ કર્યા છે કે એ પાત્રોના ગૌરવ અને અસલી લોકપ્રસિદ્ધ વ્યકિતતત્વ ખંડિત થયાં છે અને તે કારણે એ પાત્રો તથા તેમની આસપાસના ઐતિહાસિક વાતાવરણનું ચિત્રણ વિકૃત અને વિસંવાદી બનવા પામ્યું છે.[૧૪]

રામલાલ મોદી જેવા ઈતિહાસભકત અભ્યાસી, નવલકથાના લેખકને એટલી છૂટ તો આપે છે કે ઐતિહાસિક નવલકથામાં કલ્પિત પાત્રો અને પ્રસંગો તે યો રાખે છે કે લેખક ઐતિહાસિક અને કાલ્પનિક પાત્રો વચ્ચે

પારસ્પરિક કલ્પિત સંબંધો બાંધે તે ન ચાલે કેમ કે આવા સંબંધોને લઈને વાચકો ઈતિહાસ વિશે ભ્રામક ખ્યાલો ધરાવતા થઈ જાય અને ગેરરસ્તે દોરવાઈ જાય. તેઓ એ બાબતે પણ આગ્રહી છે કે, નવલકથામાં લેખકે કોઈ રાજાનો સમગ્રરાજ્યકાળ આવરી લીધો હોય તો ઈતિહાસનો એક પણ અગત્યનો પ્રસંગ કથામાંથી બાકાત રાખી શકાય નહિ.[૧૫]

'પાટણની પ્રભુતા' અને 'ગુજરાતનો નાથ' નવલકથાઓએ સાહિત્યમાં ઘૂમરીઓ પેદા કરી હતી. એમની પ્રણાલિકાભંજકવૃત્તિ–પ્રવૃત્તિથી સમાજનો ચૂસ્ત વર્ગ તો ચોંકેલો હતો જ. ત્યારબાદ મુનશીની ઐતિહાસિક નવલકથામાં ઈતિહાસ સાથે અણઘટતી છૂટ લેવા માટે સાક્ષરોનો પણ એક વર્ગ તેમનાં પર ખફા થયો. ઈંગ્લેન્ડમાં વોલ્ટર સ્કોટ જ્યારથી ઐતિહાસિક નવલકથાનું ક્ષેત્ર ખેડવા માંડયું ત્યારથી ઈતિહાસ અને નવલકથા વચ્ચેના સંબંધની ચર્ચાઓ ત્યાં જાગવા માંડી હતી. વાર્તાકારે ઐતિહાસિક નવલકથા ન જ લખવી એવી પણ એક આગ્રહભરી વૃત્તિ એ સમયે ત્યાં હતી. ઐતિહાસિક નવલકથામાં ઈતિહાસ અને નવલકથા બંને બગડે છે એવો એ વર્ગનો દ્રઢ અભિપ્રાય હતો.[૧૬]

મુનશીએ ઐતિહાસિક નવલકથા વિશેના પોતાના મંતવ્યો'ઐતિહાસિક પાત્રો અને તેનું નિરૂપણ' નામનાં વ્યાખ્યાન દ્વારા પ્રગટ કર્યા છે. મુનશીની દ્રષ્ટિએ 'નવલકથાકારની કલ્પના અને સર્જકતાને સ્વાભાવિકતાના જ બંધનો હોઈ છે. એટલે કે માનવસ્વભાવની શકયતા અશકયતાની જે મર્યાદાને જ માત્ર ઐતિહાસિક નવલકથાકારની મર્યાદા.'[૧૭]

ઉપસંહાર :–

મુનશીની ઐતિહાસિક નવલકથાઓમાં સ્વદેશપ્રેમ અને ગુજરાતની અસ્મિતાનો મુખ્ય જીવનસંદેશ પડઘાય છે. કીર્તિદેવ, મુંજાલ, આનંદસૂરી વગેરેમાં વિવિધકક્ષાની ઊછળતી દેશભક્તિનું દર્શન થાય છે. મુનશીની કૃતિઓમાંથી પ્રાપ્ત થતાં જીવનસંદેશ અંગે રવિશંકર મ. જોશી લખે છે : 'મુનશીએ કાર્ય કરવાનો મંત્ર– જીવનમાં ચેતન પ્રગટાવવાનો મંત્ર ગુજરાતમાં ફૂંકયો છે'. ગાંધી એ ગુજરાતમાં ચેતનનો તણખો એક દિશાએથી મૂકયો તો મુનશીએ અન્ય દિશાએથી મૂકયો.

સંદર્ભસૂચિ :–

1. દેસાઈ, મહેબુબ (૨૦૧૭) ઈતિહાસ વિરાસત, અમદાવાદ : ગૂર્જર સાહિત્ય પ્રકાશન, પૃષ્ઠ:૫૫
2. નાયક રતિલાલ અને પટેલ સોમાભાઈ(૨૦૦૯) કનૈયાલાલ મુનશી(સર્જક–પ્રતિભા શ્રેણી, અમદાવાદ : આદર્શ પ્રકશન, પૃષ્ઠ : ૩૮

3. એંજન પૃષ્ઠ : ૭૪
4. એંજન પૃષ્ઠ : ૭૪
5. એંજન પૃષ્ઠ : ૭૫
6. દાવલપુરા બાબુ (૨૦૦૭) કનૈયાલાલ મુનશી : વ્યક્તિતત્વ અને વાઙ્મય, અમદાવાદ, પાર્શ્વ પબ્લિકેશન, પૃષ્ઠ : ૧૮૨
7. ઉપરોકત નાયક રતિલાલ પૃષ્ઠ : ૭૧
8. ઝવેરી મનસુખલાલ(૧૯૮૩), ગુજરાતી ગ્રંથકાર શ્રેણી–૧૪ : કનૈયાલાલ મુનશી, અમદાવાદ કુમકુમ પ્રકાશન, પૃષ્ઠ : ૨૬
9. ઉપરોકત નાયક રતિલાલ પૃષ્ઠ : ૭૩
10. ઉપરોકત ઝવેરી મનસુખલાલ પૃષ્ઠ : ૩૧
11. ઉપરોકત નાયક રતિલાલ પૃષ્ઠ : ૯૪
12. મુનશી કનૈયાલાલ માણેકલાલ(પુનઃમુદ્રણ : ૨૦૦૪), પૃથ્વીવલ્લભ, અમદાવાદ, ભારતીય વિદ્યાભવન વતી, ગૂર્જર પ્રકાશન
13. ઉપરોકત નાયક રતિલાલ પૃષ્ઠ : ૫૩
14. ઉપરોકત દાવલપુરા બાબુ, પૃષ્ઠ : ૧૧૧
15. માસ્તર ધર્મેન્દ્ર, પ્રશાંત અને પંડયા ઉપેન્દ્ર(સંપાદકો),(૧૯૮૮), કનૈયાલાલ માણેકલાલ મુનશી : જન્મશતાબ્દી અધ્યયન ગ્રંથ, ભરૂચ : કુલપતી ક.મા.મુનશી જન્મશતાબ્દી સમિતિ પૃ. ૨૧૭
16. પારેખ મધુસૂદન(૧૯૬૭), કનૈયાલાલ મા. મુનશી સાહિત્ય વન અને પ્રતિભા, મુંબઈ : સુ. રામકૃષ્ણન કાર્યવાહક મંત્રી ભારતીય વિદ્યાભવન ચોપાટી, પૃષ્ઠ ૬૧
17. એંજન પૃષ્ઠ : ૬૨

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A STUDY ON INVESTOR'S BEHAVIOUR IN AHMEDABAD TOWARDS STOCK MARKET DURING PANDEMIC

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ABSTRACT

This study is being conducted during the time of COVID-19. This paper examines the impact of COVID-19 on the Indian stock market, which includes BSE (Bombay Stock Exchange) and NSE (National Stock Exchange). We have witnessed the major fluctuations on NIFTY and SENSEX in the stock market over the period from January 2020 to December 2021. The curiosity is to examine the behaviour of the people of Ahmedabad in the state of Gujarat how they invested in the stock market during the time of COVID-19. Based on different demographic factors such as age, gender, income and occupation, the research focuses on the occupation factor as an independent variable and examines the behavioural aspect of stock market investment decisions during COVID -19 of the people of Ahmedabad. During COVID-19, many businesses are affected and eventually closed down, people have not been able to get stable income, and many people have lost their jobs or suffered wage cuts. The present study uses the chi-square test of independence. It is observed that the profession is directly related to the frequency of investment, the purpose of the investment, the ability to take risks, expect higher returns and invest in the stock market with the right knowledge. It is not affected by past savings.

KEY WORDS: Behavioural Finance, COVID-19, SENSEX, NIFTY, Age, Occupation

I. INTRODUCTION

The psychological factors that are relevant at the time of investment decision and to analyse how that behaviour affect the market is called as behavioural finance. Stock market is the sum of buyers and sellers of stocks, which represent ownership of business, which includes public as well as private companies which are sold to investors through equity crowed funding platforms. In stock market in India include SENSEX and NIFTY. SENSEX is top 30 companies which is listed on Bombay stock exchange (BSE) where NIFTY is top 50 companies which is listed on National stock exchange (NSE).

The outbreak of the highly infectious COVID-19 (corona virus) has affected human life and is slowing down the global economy. COVID-19 is a virus that cause illness from common cold to more several diseases. COVID-19 was declared a global health emergency by the world health organization (WHO) on 30 January 2020. During this period all over the world has gone for lockdown and millions of jobs were lost. In India, the government announced the lock down in phases, the first phase was announced from 25th March, 2020 to 14th April, 2020 which lasted of 21 days. Immediately the second phase of lock down was announced from 15th April 2020 to 3rd May 2020 (19 days), the third phase of lock down was announced from 4th May 2020 to 17th May 2020 (14 days) and the fourth phase of lock down was from 18th May 2020 to 31st May 2020. The unlock process was also systematically announced by the Government. COVID 19 Vaccination includes Vaccination of frontline workers, Citizens more than 60 years of age and more than 18 years of age. COVID 19 Vaccination started from 16th January 2021. In the first phase COVID Vaccinated front line workers. In the second phase of for senior Citizens (above the age of 60 years). In the third phase the age of above 45 years started from 1st may 2021. The present study is to know the behaviour of the people of the people of Ahmedabad in the state of Gujarat on stock market investment during the period of COVID-19.

I. A REVIEW OF LITERATURE

Sohail, Hussain, & dr. Qamar, (2020) studied the investors psychosomatic, experience and market factors affect that the individual investor behaviour during COVID-19 in the PSX [Pakistan Stock Exchange]. For data collection semi-structured interviews and google docs are used. The findings of study in the market and personal factors are most important factors that influence the individual decisions. Investors are careful in investing by relying on their own experience and broker advices.

Vijayakumar, (2020) the objective of the paper is to understand long term and short-term dynamic effects of US and leading Asian markets on Indian stock market. This study investigated the co-integration and relationship between the US, Asian and Indian stock markets namely Dow Jones Industrial Average (DJIA), Hang Seng (Hong Kong), Shanghai Composite and NIFTY indices. Positive momentum at Hong Kong and China leads to positive impact on NIFTY, whereas, the US- DJIA has negative impact of NIFTY in the short run based on secondary data used in this study.

Alzyadat & Asfoura, (2021) study contributes to investigate the impact of COVID-19 pandemic on stock market in Saudi Arabia during the period from March 15, 2020 to August 10, 2020. The paper used Vector Auto- Regressive (VAR) model and Autoregressive conditional Heteroscedasticity ARCH models. The study concluded that the stock market in USA responded negatively and strong during early periods of COVID 19 pandemic, then the response began to decline. However, the Saudi government's response time and size of the stimulus package have played an important role in the impacts of COVID 19 on the stock market.

Gupta, Chaudhary, & Gupta, (2021) The paper has focused on studying the impact of COVID-19 on stock markets in different countries like China, Japan, Hong Kong, the United Kingdom, Germany, United states and India. The paper uses T – test and non-parametric test of mann-Whitney test. This study indicates fast recovery of markets after an initial setback for a transient period. In this study findings indicate the economic impact of this pandemic on stock markets across the globe, by studying across major Economics.

II. RESEARCH METHODOLOGY

OBJECTIVES OF THE STUDY

1. To study the trend of NIFTY and SENSEX during the period of January 2020 to December 2021.
2. To examine the behaviour of Stock market investment [short term] based on Occupation during Covid-19 of the people of Ahmedabad in the state of Gujarat.

RESEARCH DESIGN

The study uses descriptive research design and is quantitative in nature.

SCOPE OT THE STUDY

The scope of the study is limited to Ahmedabad city of Gujarat State.

SOURCES OF DATA

There are two types of data collection techniques, primary as well as secondary sources.

Primary data: To evaluate the behaviour for stock market investment decisions the study uses primary data and it is collected with the help of questionnaire which administered 165 respondents from the city of Ahmedabad of Gujarat state.

Secondary data: For evaluation of the influence of the stock market, the data is collected from the website of BSE and NSE. Various books, journals, research papers and magazines are used to collect secondary information on stock market.

SAMPLING

The sample size for the purpose of study is 165 respondents and the sampling method is convenient sampling.

TOOLS AND TECHNIQUES

For the purpose of addressing the objectives under study, various statistical tools are used such as Trend analysis, Descriptive statistics, graphical representation and Chi square test of independence.

HYPOTHESIS

TABLE NO 1: Hypothesis

NO.	HYPOTHESIS	RESULT
1.	H0: There is no significance association between occupation and frequency of investment of the people investing in stock market.	Reject
	H1: There is significance association between occupation and frequency of investment of the people investing in stock market.	
2.	H0: There is no significance association between occupation and when investment started of the people investing in stock market.	Reject
	H1: There is significance association between occupation and when investment started of the people investing in stock market.	
3.	H0: There is no significance association between occupation and purpose for investing of the people investing in stock market.	Fail to reject
	H1: There is significance association between occupation and purpose for investing of the people investing in stock market.	
4.	H0: There is no significance association between occupation and investment skills during COVID 19 of the people investing in stock market.	Fail to reject
	H1: There is significance association between occupation and investment skills during COVID 19 of the people investing in stock market.	
5.	H0: There is no significance association between occupation and influence in decision making of the people investing in stock market.	Reject

	H1: There is significance association between occupation and influence in decision making of the people investing in stock market.	
6.	H0: There is no significance association between occupation and risk-taking behaviour of the people investing in stock market.	Fail to reject
	H1: There is significance association between occupation and risk-taking behaviour of the people investing in stock market.	
7.	H0: There is no significance association between occupation and return from stock market of the people investing in stock market.	Fail to reject
	H1: There is significance association between occupation and return from stock market of the people investing in stock market.	
8.	H0: There is no significance association between occupation and encouraging behaviour of the people investing in stock market.	Reject
	H1: There is significance association between occupation and encouraging behaviour of the people investing in stock market.	
9.	H0: There is no significance association between occupation and past savings of the people investing in stock market.	Reject
	H1: There is significance association between occupation and past savings of the people investing in stock market.	

I. DATA ANALYSIS

SECONDARY DATA

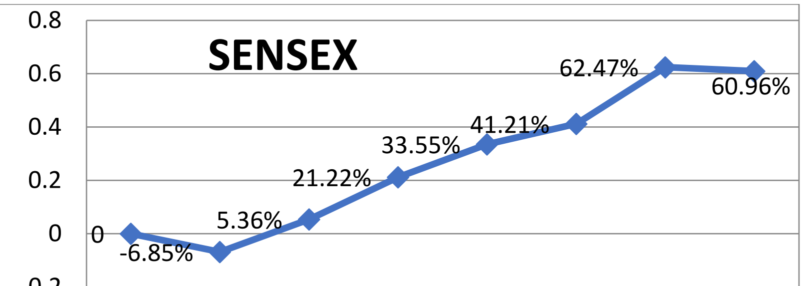
The price of SENSEX and NIFTY is being computed for the period January 2020 to December 2021 quarterly.

TABLE NO.2: SENSEX

Month	Price	Percentage Change
JAN - MAR 2020(Base Year)	36163.1	
APR - JUN 2020	33685.8	-6.85%
JUL - SEP 2020	38101	5.36%
OCT - DEC 2020	43838.4	21.22%
JAN - MAR 2021	48298.3	33.55%
APR - JUN 2021	51067.5	41.21%
JUL - SEP 2021	58755.2	62.47%
OCT - DEC 2021	58208.5	60.96%

Source: https://www.bseindia.com/Indices/IndexArchiveData.html

Chart No. 1 Sensex



	Jan-Mar 20	Apr-Jun20	Jul-Sep 20	Oct-Dec 20	Jan-Mar 21	Apr-Jun 21	Jul-Sep 21	Oct-Dec 21
Percentage change	0	-6.85%	5.36%	21.22%	33.55%	41.21%	62.47%	60.96%

The Chart no.1 shows the linear trend of Sensex. The first Quarter of 2020 is taken as base year (Jan-Mar) and the trend is computed for the following months till the period of December 2021. In the second quarter, trend line decline to -6.85% after that Sensex trend line shows increasing trend which has risen from – 6.85% to 5.36%. Since the third quarter of 2020 to till the third quarter of 2021 Sensex trend started to increase respectively which was 21.22%, 33.55%, 41.21% and 62.47%. But in the last quarter of 2021 was observed slightly decreased compared to third quarter of that year which 60.96% is.

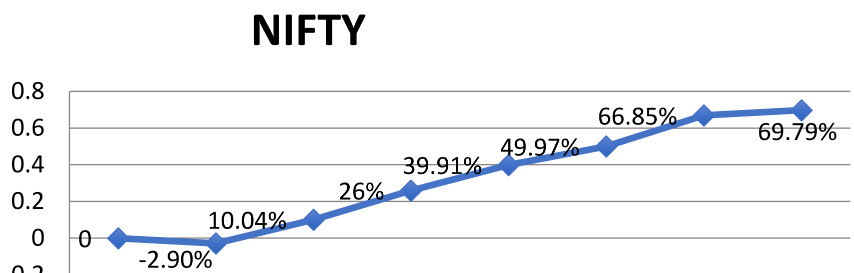
TABLE NO.3: NIFTY

Month	Price	Percentage Change
JAN - MAR 2020(Base Year)	10210.15	
APR - JUN 2020	9914.1	-2.90%
JUL - SEP 2020	11236.17	10.04%
OCT - DEC 2020	12864.37	26%
JAN - MAR 2021	14284.81	39.91%
APR - JUN 2021	15311.8	49.97%
JUL - SEP 2021	16837.8	66.85%
OCT - DEC 2021	17336.3	69.79%

Source: https://in.investing.com/indices/s-p-cnx-nifty-historical-data?interval_sec=monthly

The Chart no.2 shows the linear trend of Nifty. The first Quarter of 2020 is taken as base year (Jan-Mar) and the trend is computed for the following months till the period of December 2021. In the second quarter, trend line decline to -2.90% after that Nifty trend line shows increasing trend which has risen from – 2.90% to 10.04%. And from the third quarter of 2020 till the last quarter of 2021 Nifty has started to increase respectively which was 10.04%, 26%, 39.91%, 49.97%, 66.85% and 69.79%.

CHART NO. 2 NIFTY



	Jan-Mar20	Apr-Jun20	Jul-Sep 20	Oct-Dec 20	Jan-Mar21	Apr-Jun 21	Jul-Sep 21	Oct-Dec 21
Percentage Change	0	-2.90%	10.04%	26%	39.91%	49.97%	66.85%	69.79%

Here, we can see that SENSEX and NIFTY chart. 1st quarter of 2020 has risen. In the second quarter of 2020, the stock market goes down because Banking sector and pharma companies were down 4-7 Percent each. The FMCG and healthcare industry were down 3-6 percent each, while IT was down by 1.7 percent. In the third quarter of 2020 the stock market goes up because IT index was the star of July 2020 with 22.49% returns largely by positive guidance from Infosys, TCS, HCL tech and Wipro. In the fourth quarter of 2020, the Nifty returned a 7.81% in the month of December. December 2020 was a repeat of November 2020 it means all major sectors generated positive returns. Pharma and metals did good performance in December. India accounts for 60% of vaccine manufactured in the world and 70% of WHO purchase the vaccine. Private banks had a 22% rally in November and December. In the first quarter of 2021, was the best year for BSE and NSE. In SENSEX moved by around 10,000 points in a single year. The SENSEX has gained 9,910 points between January 1, 2021 to December 29, 2021. This is the highest year and even in percentage, 2021 was the best year in last four years. Sensex imply 10 major worlds across 9 countries that it has shown the best performance among major Asian Economics. In the second and third quarters of 2021, SENSEX and NIFTY goes up which was respectively 41.21% and 62.47%. In the fourth quarter of 2021 the NIFTY has risen which was 69.79%. And SENSEX has slight down which is 60.96%

PRIMARY DATA

TABLE NO.4: FREQUENCY TABLE

PARTICULAR	FRQUENCY	INVESTING IN STOCK MARKET
GENDER		
MALE	101	79
FEMALE	67	21
TOTAL	**168**	**100**
AGE		
Less than 25 years	68	30
25-40 years	40	29
40-60 years	50	33
More than 60 years	10	8
TOTAL	**168**	**100**
OCCUPATION		
Private job	55	36
Business/Profession	47	37
Government job	5	3
Housewife	13	2
Retried	6	5
Student	42	17
TOTAL	**168**	**100**
INCOME		
Less than RS. 5,00,000	143	82
RS. 500,001- RS. 10,00,000	20	14
RS. 10,00,001 - RS.25,00,000	3	3
More than RS. 25,00,000	2	1
TOTAL	**168**	**100**

Source: Primary data

Out of 168 respondents, 100 respondents are investing in stock market. Out of 100 responded, 79 are male and 21 are female. So, the males are invested more in stock markets. out of 100 respondents 62 respondents are from the age group of 25-60 years age group that are investing in stock market. from the Less than 25 years age group 30 respondents are investing in stock markets. From the age group of More than 60 years age group 8 respondents investing in stock market. Business/profession and private job 37 and 36 respondents are interested to invest in stock market. Government employees out of 5 respondents only 3 respondents are interested in invest in stock market. Out of 13 respondents only 2 housewives are investing in stock market. From 6 retired respondents 5 respondents are invested in stock market. Out of 42 students 17 students are invest in stock market. Less than 5,00,000 RS. out of 143 respondents 82 respondents interested to invest in stock market. from the income group of less than RS.5,00,000. From 5,00,001- 10,00,000 income group out of 20 respondents 14 respondents are invested in stock market. From 10,00,001- 25,00,000 income group 3 respondents are investing in stock market. More than 25,00,000 out of 2 respondents only 1 respondent are investing in stock market.

TABLE NO.5: OCCUPATION AND FREQUENCY OF INVESTMENT

Occupation	Investment started		Total
	Before Covid-19	During Covid-19	
Private Job	24	12	**36**
Business/ Profession	29	8	**37**
Government Job	0	3	**3**
House Wife	1	1	**2**
Retired	3	2	**5**
Student	8	9	**17**
Total	**65**	**35**	**100**

TABLE NO.6: CHI-SQUARETEST

Particulars	Value	Dif	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.215	5	.001
Likelihood Ratio	22.847	5	.000
Linear-by-Linear Association	1.876	1	.171
N of Valid Cases	100		

From the table no.5, Private Job and Business/ Profession category were investing occasionally in the stock market are 49.20 % and 30.16% respectively, Whereas Government employees and Housewife were investing occasionally in the stock market are only 1.59%. On the other side, the only category who is investing in the stock market daily with 48.65% is the Business /Profession category.

The Chi- Square statistic for these responses is 20.215 and the significance value is 0.001 which is lower than 0.05. Hence, we fail to accept null hypothesis. Therefore, there is significant association between occupation and frequency of investing in the stock market.

TABLE NO.7: OCCUPATION AND WHEN INVESTMENT STARTED

Occupation	Frequency of Investment		Total
	Daily	Occasionally	
Private Job	5	31	**36**
Business/ Profession	18	19	**37**
Government Job	2	1	**3**
House Wife	1	1	**2**
Retired	5	0	**5**
Student	6	11	**17**
Total	**37**	**63**	**100**

TABLE NO.8: CHI-SQUARE TEST

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.184	5	.048
Likelihood Ratio	12.016	5	.035
Linear-by-Linear Association	4.849	1	.028
N of Valid Cases	100		

From the table no.7, Private Job and Business/Profession category were investing in the stock market before Covid-19 are 36.92% and 44.62% respectively. Whereas Housewife were investing in the stock market before Covid-19 are 1.54%. On the other side, During Covid -19 Private employees and Business/ Profession category were started their investing are 34.28% and 22.85% respectively.

The Chi-square statistic for these responses is 11.184 and the significance value is 0.048 which is lower than 0.05. Hence, we fail to accept null hypothesis. Therefore, there is significant association between occupation and starting of the investment.

TABLE NO.9: OCCUPATION AND PURPOSE FOR INVESTING

Occupation	Purpose				Total
	For Extra Knowledge	For savings	To fulfil daily needs	To get Extra income	
Private Job	0	14	3	19	36
Business/ Profession	0	8	3	26	37
Government Job	0	2	0	1	3
House Wife	0	0	0	2	2
Retired	0	1	0	4	5
Student	1	3	2	11	17
Total	**1**	**28**	**8**	**63**	**100**

TABLE NO.10: CHI-SQUARE TEST

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.376	10	.689
Likelihood Ratio	8.326	10	.597
Linear-by-Linear Association	.107	1	.744
N of Valid Cases	100		

From the table no.9, Private Job employees were investing in the stock mainly for saving and to earn extra income with 39% and 52.77 % respectively. Same as Business/ Profession category were also investing in the stock market for saving and to earn extra income with 21.62% and 70.27% respectively. Whereas Only 3.57% % retired employee who were investing for the saving purpose.

The Chi-square statistic for these responses is 7.376 and the significance value is 0.689 which is higher than 0.05. Hence, we fail to reject null hypothesis. Therefore, there is no significant association between occupation and purpose of investing.

TABLE NO.11: OCCUPATION AND INVESTMENT SKILLS

Occupation	Investment skills			Total
	Excellent	Good	Moderate	
Private Job	6	19	8	**36**
Business/ Profession	22	10	4	**37**
Government Job	1	2	0	**3**
House Wife	1	1	0	**2**
Retired	3	1	0	**5**
Student	3	8	4	**17**
Total	36	41	**16**	**100**

TABLE NO.12: CHI-SQUARE TEST

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.963	15	.085
Likelihood Ratio	25.023	15	.050
Linear-by-Linear Association	2.387	1	.122
N of Valid Cases	100		

From the table no.11, Private Job employees are having Moderate and excellent investment skills with 22.22% and 52.77% respectively. Whereas Business/Profession category are having excellent and good investment skills with 59.45% and 27% respectively. On the other side Government Job employees and Housewife are having excellent investment skills with only 2.77%.

The Chi-square statistic for these responses is 22.963 and the significance value is 0.085 which is higher than 0.05. Hence, we fail to reject null hypothesis. Therefore, there is no significant association between occupation and investment skills.

TABLE NO.13: OCCUPATION AND INFLUENCE

Occupation	Influence					Total
	Always influenced	Never influenced	Often influenced	Rarely influenced	Sometimes influenced	
Private Job	3	16	2	1	14	36
Business/ Profession	3	22	2	1	9	37
Government Job	1	1	0	1	0	3
House Wife	0	1	0	0	1	2
Retired	2	3	0	0	0	5
Student	4	1	3	4	5	17
Total	13	44	7	7	29	**100**

TABLE NO.14: CHI-SQUARE TEST

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.565	20	.023
Likelihood Ratio	35.671	20	.017
Linear-by-Linear Association	3.602	1	.058
N of Valid Cases	100		

From the table no.13, never influenced respondents are from the Private Job and Business/Profession category with 36.36% and 50% respectively. Similarly, Sometimes Influenced respondents are also from the Private Job and Business/Profession category with 48.27% and 31.03% respectively.

The Chi-square statistic for these responses is 34.565 and the significance value is 0.023 which is lower than 0.05. Hence, we fail to accept null hypothesis. Therefore, there is significant association between occupation and influencing through factors.

TABLE NO.15: OCCUPATION AND RISK-TAKING BEHAVIOUR

Occupation	Risk taking behaviour			Total
	Careful	Risk averse	Risk taker	
Private job	27	4	5	36
Business/Profession	30	1	6	37
Government job	2	0	1	3
House wife	2	0	0	2
Retired	3	0	2	5
Student	12	0	5	17
Total	**76**	**5**	**19**	**100**

TABLE NO.16: CHI-SQUARE TEST

Particular	Value	df	Asymp. Sig. (2 -sided)
Pearson Chi- square	8.460	10	.584
Likelihood Ratio	9.145	10	.518
Linear-by-Linear Association	2.420	1	.120
N of Valid Cases	100		

From the table no.15, 35.53% respondents were doing careful investment in stock market in the category of private job. whereas 39.47% were doing careful investment in the category of business/profession. On the other hand, Government employees and house wife were doing careful investment in stock market is only 2.63%. Only 26.32% student having risk taking ability in stock market.

The Chi-square statistic for these responses is 8.460 and the significance value is 0.584 which is higher than 0.05. Hence, we fail to reject null hypothesis. Therefore, there is no significant association between occupation and risk-taking behaviour.

TABLE NO.17: OCCUPATION AND RETURN FROM STOCK MARKET

Occupation	RETURN FROM STOCK MARKE		Total
	Yes	No	
Private job	28	8	36
Business/Profession	33	4	37
Government job	3	0	3
House wife	2	0	2
Retired	4	1	5
Student	10	7	17
Total	**80**	**20**	**100**

TABLE NO.18: CHI-SQUARE TEST

Particular	Value	df	Asymp. Sig. (2 -sided)
Pearson Chi- square	8.079	5	.152
Likelihood Ratio	8.555	5	.128
Linear-by-Linear Association	2.405	1	.121
N of Valid Cases	100		

From the table no.17, private job and Business/profession were earned return from stock market are 35% and 41.25% respectively. Whereas housewife and Government employees earned return from stock market are only 2.5% and 3.75%. On the other hand, student category was earned return from stock market are 12.5%.

The Chi-square statistic for these responses is 8.079 and the significance value is 0.152 which is higher than 0.05. Hence, we fail to reject null hypothesis. Therefore, there is no significant association between occupation and return from stock market.

TABLE NO.19: OCCUPATION AND ENCOURAGING BUYING BEHAVIOUR

Occupation	Encouraging buying behavior		Total
	Yes	No	
Private job	25	11	36
Business/Profession	34	3	37
Government job	1	2	3
House wife	2	0	2
Retired	5	0	5
Student	9	8	17
Total	**76**	**24**	**100**

TABLE NO.20: CHI-SQUARE TEST

Particular	Value	Df	Asymp. Sig. (2 -sided)
Pearson Chi- square	16.132	5	.006
Likelihood Ratio	17.749	5	.003
Linear-by-Linear Association	2.090	1	.148
N of Valid Cases	100		

From the table no.19, private job and Business/profession were encouraging behaviour in stock market are 32.89% and 44.74% respectively. Whereas only 1.32% government employees were encouraged behaviour in stock market. On the other hand, retired employees and house wife was not encouraged in stock market.

The chi square statistic for these responses is 16.132 and the significance value is 0.006 which is lower than 0.05. Hence, we fail to accept null hypothesis. Therefore, there is significant association between occupation and encouraging behaviour.

TABLE NO.21: OCCUPATION AND PAST RETURN

Occupation	Past savings		Total
	Yes	No	
Private job	26	10	36
Business/profession	33	4	37
Government job	2	1	3
House wife	2	0	2
Retired	5	0	5
Student	7	10	17
Total	**75**	**25**	**100**

TABLE NO.22: CHI-SQUARE TEST

Particular	Value	df	Asymp. Sig. (2 -sided)
Pearson Chi- square	16.938	5	.005
Likelihood Ratio	17.724	5	.003
Linear-by-Linear Association	2.922	1	.087
N of Valid Cases	100		

From the table no.21, Private job and Business/profession were earned good amount of return in past in stock market are 34.67% and 44% respectively. Whereas Government employees and house wife were earned return in past only 2.67%. On the other hand, student was earned return in past is 9.33%.

The Chi-square statistic for these responses is 16.938 and the significance value is 0.005 which is lower than 0.05. Hence, we fail to accept null hypothesis. Therefore, there is significant association between occupation and return in past.

V. CONCLUSION

The objective of this study is to know the relevance of the individual investor participating in the stock market of Ahmedabad city is rational or not. The research paper focuses on the main factor affecting the investors in the decision making is his occupation.

The present study concludes that there is significant association between occupation and frequency of investments where respondents are mostly investing occasionally from the Private Job and Business/ Profession category. There is significant association between occupation and the period at which they started to invest in stock market because the respondents are invested in stock market before COVID-19. There is no significant association between occupation and purpose of investing in stock market where respondents most preferred investing in the stock market for savings and extra income. There is no significant association between occupation and investment skills as respondents from the all the occupation category are having good and excellent investment skills. There is significant association between occupation and influence in the decision-making of the people investing in the stock market. There is no significant association between occupation and risk-taking behaviour of the people because respondents have shown careful risk behaviour from the all-occupation category. There is no significant association between occupation and return from stock market because most of the respondents are getting return from stock market. There is significant association between occupation and encouraging behaviour. There is significant association between occupation and return in past.
Thus, Occupation plays major role during COVID-19 and investment in stock market for the people of Ahmedabad in the state of Gujarat.

VI. LIMITATION

1. In the present study number of respondents are limited to Ahmedabad city.
2. The study is only conducted in Ahmedabad city in Gujarat state.

REFERENCES

1. Alzyadat, J. A., & Asfoura, E. (2021, April 15). The Effect Of Covid-19 Pandemic On Stock Market: An Emperical Study In Saudi Arabia. *Journal Of Asian Finance, Economics And Business, 8*.
2. Gupta, H., Chaudhary, R., & Gupta, S. (2021). Covid-19 Impact On Major Stock Markets. *Fortune Institute Of International Business*.
3. Sohail, A., Hussain, A., & Dr Qamar, Q. A. (2020, October - December). An Exploratory Study To Check Impact Of Covid-19 On Investment Decision Of Individual Investors In

Emerging Stock Market. *Electronic Research Journal Of Social Science And Humanities, 2*(4).
4. Vijayakumar, A. N. (2020). Dynamic Effects Of Us And Assian Markets On Indian Stock Market. *Journal Of Commerce And Accounting Research*.
5. SENSEX: https://www.bseindia.com/Indices/IndexArchiveData.html
6. NIFTY: https://in.investing.com/indices/s-p-cnx-nifty-historical-data?interval_sec=monthly

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AN ANALYTICAL STUDY OF CAPITAL STRUCTURE AND ITS IMPACT ON PROFITABILITY OF SELECTED PETROLIUM COMPANIES IN INDIA

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Abstract

"An Analytical study of Capital Structure and its impact on profitability of selected Petroleum companies in India" is attempt to establish the hypothesized relationship as to how far the capital structure variable affect the business revenue of companies and what the interrelationship is between capital structure and profitability for that researcher has randomly selected five petroleum companies with the help of secondary data for the year 2015 to 2019. The research report is based on Secondary method. The researcher has collected data from Annual reports of the companies, Websites of BSE and NSE. To check relation between capital structure and profitability researcher has used two way annova. The ratio taken for capital structure and profitability is debt equity ratio, interest coverage ratio, fixed asset turnover ratio, gross profit ratio, net profit ratio, operating margin ratio, return on long term fund ratio and return on capital employed.

Introduction

India is one of the fastest growing major economies in the world and the third largest consumer of petroleum products, after US and CHINA. The adoption of significant policy of liberalization and privatization in July 1991 gave a boost to the petroleum India. Through adoption of liberalization and privatization the overall economy of India grew also. the demand for petroleum products increased at an annual rate of about 5.5 percent so there is great potential for investors to invest in the sector and gain the increasing demands for the for the petroleum products, not only this but LPG reforms have also given a push to foreign direct investment in the sector. The first oil deposits in the country were discovered near the town of Digboi in the state of Assam. The natural gas industry in India began in the 1960s with the discovery of gas fields in Assam and Gujarat. As on 31 March 2018 India had estimated crude oil reserves of 594.49 million tons and natural gas reserve of 1339.57 billion cubic meters. India imports 82% of its oil needs and aims to bring that down to 67% by 2022 by replacing it with local exploration. Demand for crude oil is wide application is house-hold and industrial activities, it is apparent that there will be major investments in this industry in future.

In financial management, finance manager has to take three important decision such as Acquisition of fund, Allocation of fund and Appropriation of profit i.e. financing decision, investment decision, dividend decision it is call 3 A' of financial management. For optimum capital structure financial manager has to consider financing decision. Capital structure consist of long term source of funds such as debenture, long term debt, preference share capital, equity share capital and retained earnings. Finance manager has to take a rational decision about capital structure i.e. which combination of finance instrument will increase value of the firm and decrease the cost of capital because company want to achieve the goal of wealth maximization, long term survival and proper utilization of fund.

Review of Literature

Neeti,M.(2017) have analysed impact of capital structure on profitability ; with reference to selected companies from oil and natural gas industry of India. In this research paper, researcher has an object to investigate impact of capital structure on profitability of firms. A sample of seven firms listed in NSE and BSE were selected and the financial data of these companies during the period 2005 to 2015 is used for this study. The judgement sampling which is non random sampling technique is chosen for sample selection in this study. The correlation and regression analyse were used. The corporate financial performance, which is represented by dependent variables return on asset and net profit ratio is taken into consideration and the effect of independent variables which are sales of a firm, total asset of a firm, debt service capacity, dividend pay outs and leverage ratio are used. Impact of optimum capital structure on profitability of firm is dependent field of financial management.

Anshu,H. And Kapil,S.(2014) have identifies the most important determinant of capital structure of 870 listed Indian firms comprising both private sector and government companies for period 2001-2010. Ten independent variables and three dependent variables have been tested using regression analysis. It has been concluded that factors such as profitability, growth, asset tangibility, size, cost of debt tax rate, and debt serving capacity have significant impact on the leverage structure chosen by firm in the Indian context.

Sichizya,S.(2015) has analysed the effect of “capital structure on profitability of listed manufacturing company in Tanzania” using panel data of six companies listed in the Dares salaam stock exchange during a 5 year period. The period was from 2009 to 2013 in which 30 observation were obtained. Panel data for the selected companies were analysed using fixed effect regression statistical technique. Researcher has used ratio of return on asset, return on equity, short term debt to asset, long term debt to asset. There is negative relationship revealed between debt to equity ratio and return on equity.

Touseef,A. (2014)“impact of capital structure on profitability of trading companies in Colombo stock exchange in Shrilanka”. The purpose of this paper is to empirically examine the impact of capital structure on profitability and suggest the trading companies in order to increase their profitability through adapting a better strategic frame work of capital structure. the researcher has collected sample of 8 trading companies were collected through secondary data for the period of 2008-2012 and analyze the data by using correlation analyses and regression analyses to find out the association between the variable.

Goyal,A. (2013) has study the “impact of capital structure on performance of listed public sector bank in India”. Researcher has an object to measure the impact of capital structure on banking performance to provide empirical evidence regarding listed public sector banks in India. The researcher has collected all public sector banks operating in India are the population of the study. Sample of the study include banks, which are listed on national stock exchange from 2008 to 2012.in this research, researcher have analyzed the data by using regression analysis has been used for establishing relationship between return on asset, return on equity and earnings per share with capital structure. The findings reveal positive relationship of short term debt with profitability.

Objective of Study

- To identify the different ratio of capital structure and profitability.
- To check the difference in different capital structure ratio and profitability ratio.
- To identify the impact of independent variable (Debt equity ratio, Interest coverage ratio, Fixed asset turnover ratio) on dependent variable (Gross profit ratio, Net profit ratio, Return on capital employed, Return on long term fund).

Hypothesis of Study

HO1 = there is no significant difference in capital structure ratio.

HO2 = there is no significant difference in profitability ratio.

Data Collection

This research is based on secondary data, data is has been collected from various official website, annual report, magazine and research papers.

Table – 1 A table showing Net profit ratio of selected companies

	2019	2018	2017	2016	2015	Total	Mean	S.D.	C.V.
Reliance	9.47	11.58	12.98	11.75	6.90	52.68	10.54	2.39	22.71
OIL	18.85	25.03	16.28	23.57	25.75	109.48	21.90	4.13	18.87
HPCL	2.19	2.89	3.31	2.15	1.32	11.86	2.37	0.76	32.23
IOC	3.20	5.03	5.30	3.23	1.20	17.96	3.59	1.66	46.15
BPCL	2.39	3.37	3.97	3.92	2.13	15.78	3.16	0.86	27.13
Total	36.10	47.90	41.84	44.62	37.30				
Mean	7.22	9.58	8.37	8.92	7.46				
S.D.	7.16	9.31	5.88	9.03	10.49				
C.V.	99.18	97.18	70.25	101.14	140.61				

During the last five years the Net profit of reliance is high that is 12.98 in the year 2017 and low that is 6.90 of the year 2015.The average is 10.54 of last five years. The Standard Deviation of the data is 2.39 that indicate the variability of the performance during these five years. The Covariance of the data is 22.71 that indicate the ratio of standard deviation to mean in percentage. On the other hand the performance of Oil is high that is 25.75 in the year 2015 and low that is 16.28 in the year 2017. The average is 21.90 of last five years. The Standard Deviation of the data is 4.13. The Covariance of the data is 18.87.While performance of Hpcl is high that is 3.31 in the year 2017 and low that is 1.32 in the year 2015. The average is 2.37 of last five years. The Standard Deviation of the data is 0.76.The Covariance of the data is 32.23. The researcher has also indicate the performance of Ioc that is 5.30 highest in the year 2018 and low that is 1.20 in the year 2015. The average is 3.59 of last five years. The Standard Deviation of the data is 1.66 that indicates the variability of the performance during these five years. The Covariance of the data is 46.15 that indicate the ratio of standard deviation to mean in percentage. During the last ten years the performance of Bpcl is high that is 3.97 in the year 2017 and low that is 2.13 in the year 2015. The average is 3.59 of last five years. The Standard Deviation of the data is 0.86 that indicate the variability of the performance during these ten years. The Covariance of the data is 27.13 that indicate the ratio of standard deviation to mean in percentage.

Table – 2 A table showing calculation of variance

Source of Variation	SS	D.f	MS	Fcal.	F tab	Status of Null HypothisisH0
Years	0.146769	4	0.036692	307.9097	3.006917	Not accepted
Company	0.002883	4	0.000721	6.048151	3.006917	Not accepted
Error	0.001907	16	0.000119			

The researcher has performed two-way analysis of variances to test the hypothesis, mentioned as above, at 5% level of significance. The calculated value of F test – ANOVA for years is 307.90 while tabulated value of F test-ANOVA is 3.00.so, the researcher may state that the null hypothesis for the years is rejected. The researcher has found significant difference in net profit ratio of selected petrochemical industry during the period of study.

While comparison of industry for the performance of net profit ratio, the researcher has found that the calculated value of F is 6.04 and table value is 3.00.again in case of industry, the calculated value is greater than tabulated value. So, the null hypothesis is rejected for industry. So, the researcher has concluded that the net profit ratio of selected petrochemical industry is significant different.

Table – 3 A table showing Operating profit ratio of petrochemical companies

	2015	**2016**	**2017**	**2018**	**2019**	**Total**	**Mean**	**S.D**	**C.V**
Reliance	9.6	17.21	17.87	17.83	15.7	78.21	15.64	3.49	22.31
Oil	36.21	36.74	32.64	36.7	39.92	182.21	36.44	2.59	7.10
HPCL	2.74	4.4	5.68	4.86	4.15	21.83	4.37	1.08	24.73
IOC	2.32	6.06	8.83	9.35	6.41	32.97	6.59	2.79	42.34
BPCL	3.49	5.84	5.35	5.01	4.02	23.71	4.74	0.97	20.38
Total	54.36	70.25	70.37	73.75	70.2				
Average	10.87	14.05	14.07	14.75	14.04				
S.D	14.47	13.69	11.55	13.35	15.24				
C.V	133.08	97.41	82.03	90.52	108.54				

During the last five year Operating profit of reliance is high that is 17.87 in the year 2017 and low that is 9.6 of the year 2015.The average is 15.64 of last five years. The Standard Deviation of the data is 3.48 that indicate the variability of the performance during these five years. The Covariance of the data is 22.31 that indicate the ratio of standard deviation to mean in percentage. On the other hand the performance of Oil is high that is 36.92 in the year 2019 and low that is 32.64 in the year 2017. The average is 36.44 of last five years. The Standard Deviation of the data is 2.58. The Covariance of the data is 7.09.While performance of Hpcl is high that is 5.68 in the year 2017 and low that is 4.4 in the year 2016. The average is 04.36 of last five years. The Standard Deviation of the data is 1.07.The Covariance of the data is 24.72. The researcher has also indicate the performance of Ioc that is 9.35 highest in the year 2018 and low that is 2.32 in the year 2015. The average is 6.59 of last five years. The Standard Deviation of the data is 2.79 that indicates the variability of the performance during these five years. The Covariance of the data is 42.34 that indicate the ratio of standard deviation to mean in percentage. During the last ten years the performance of Bpcl is high that is 5.84 in the year 2016 and low that is 4.02 in the year 2019. The average is 4.74 of last five years. The Standard Deviation of the data is 0.96 that indicate the variability of the performance during these ten years. The Covariance of the data is 20.38 that indicate the ratio of standard deviation to mean in percentage.

Table – 4 A table showing calculation of variances

Source of Variation	SS	Df	MS	Fcal.	F tab.	status of Null Hypothesis
Year	3693.66	4	923.416	216.704	3.00692	Not accepted
Company	46.8805	4	11.7201	2.75044	3.00692	Accepted
Error	68.179	16	4.26119			

The researcher has performed two-way analysis of variances to test the hypothesis, mentioned as above, at 5% level of significance. The calculated value of F test – ANOVA for years is 216.704 while tabulated value of F test-ANOVA is 3.00.so, the researcher may state that the null hypothesis for the years is rejected. The researcher has found significant difference in Operating profit ratio of selected petrochemical industry during the period of study.

While comparison of industry for the performance of Operating profit ratio, the researcher has found that the calculated value of F is 2.75 and table value is 3.00.again in case of industry, the calculated value is less than tabulated value. So, the null hypothesis is accepted for industry. So, the researcher has concluded that the Operating profit of selected petrochemical industry is not significant different.

Table – 5 A Table Showing Return on capital employed of Selected Petroleum Companies

	2019	**2018**	**2017**	**2016**	**2015**	**Total**	**Mean**	**S.D.**	**C.V.**
Reliance	9.95	11.80	11.04	8.24	7.41	48.44	9.69	1.85	19.06
OIL	9.33	9.55	9.28	10.09	11.66	49.91	9.98	0.99	9.93
HPCL	21.48	24.77	29.21	8.84	6.23	90.53	18.11	10.07	55.64
IOC	18.14	24.86	22.73	8.00	4.28	78.01	15.60	9.07	58.12
BPCL	17.19	21.87	23.89	16.77	13.70	93.42	18.68	4.12	22.07
Total	76.09	92.85	96.15	51.94	43.28				
Mean	15.22	18.57	19.23	10.39	8.66				
S.D.	5.34	7.35	8.66	3.66	3.91				
C.V.	35.09	39.58	45.01	35.22	45.13				

During the last five years Return on capital employed of reliance is high that is 11.80 in the year 2018 and low that is 7.41 of the year 2015.The average is 9.69 of last five years. The Standard Deviation of the data is 1.85 that indicates the variability of the performance during these five years. The Covariance of the data is 19.06 that indicate the ratio of standard deviation to mean in percentage. On the other hand the performance of Oil is high that is 11.66 in the year 2015 and low that is 9.33 in the year 2019. The average is 9.98 of last five years. The Standard Deviation of the data is 0.99. The Covariance of the data is 9.93.While performance of Hpcl is high that is

29.21 in the year 2017 and low that is 6.23 in the year 2015. The average is 18.11 of last five years. The Standard Deviation of the data is 10.07.The Covariance of the data is 55.64. The researcher has also indicate the performance of Ioc that is 24.86 highest in the year 2018 and low that is 8.00 in the year 2016. The average is 15.60 of last five years. The Standard Deviation of the data is 9.07 that indicate the variability of the performance during these five years. The Covariance of the data is 58.12 that indicate the ratio of standard deviation to mean in percentage. During the last ten years the performance of Bpcl is high that is 23.89 in the year 2017 and low that is 13.70 in the year 2015. The average is 18.68 of last five years. The Standard Deviation of the data is 4.12 that indicate the variability of the performance during these ten years. The Covariance of the data is 22.07 that indicate the ratio of standard deviation to mean in percentage.

Table – 6 A table showing calculation of variance

Source of Variation	SS	Df	MS	Fcal	F tab	Status of Null Hypothesis H0
Years	0.031395	4	0.007849	4.284956	3.006917	Not accepted
Company	0.056702	4	0.014175	7.738963	3.006917	Not accepted
Error	0.029307	16	0.001832			

The researcher has performed two-way analysis of variances to test the hypothesis, mentioned as above, at 5% level of significance. The calculated value of F test – ANOVA for years is 4.28 while tabulated value of F test-ANOVA is 3.00.so, the researcher may state that the null hypothesis for the years is rejected. The researcher has found significant difference in return on capital employed ratio of selected petrochemical industry during the period of study.

While comparison of industry for the performance of return on capital employed ratio, the researcher has found that the calculated value of F is 7.73 and table value is 3.00.again in case of industry, the calculated value is greater than tabulated value. So, the null hypothesis is rejected for industry. So, the researcher has concluded that the return on capital employed of selected petrochemical industry is significant different.

Table – 7 A Table Showing Return on long term funds of Selected Petroleum Companies

	2015	**2016**	**2017**	**2018**	**2019**	**Total**	**Mean**	**S.D**	**C.V**
Reliance	10.88	11.99	11.85	12.71	10.91	58.34	11.67	0.78	6.66
OIL	13.63	11.86	9.71	11.69	15.48	62.37	12.47	2.18	17.47
HPCL	15.72	22.02	35.89	29.8	25.48	128.91	25.78	7.65	29.65
IOC	9.7	16.4	24.79	27.94	20.53	99.36	19.87	7.16	36.05
BPCL	23.38	27.45	26.55	24.78	19.47	121.63	24.33	3.14	12.90
Total	73.31	89.72	108.79	106.92	91.87				
Average	14.66	17.94	21.76	21.38	18.37				
S.D	5.41	6.74	10.90	8.58	5.49				
C.V	36.90	37.57	50.09	40.13	29.86				

During the last five year Return on long term funds of reliance is high that is 12.71 in the year 2018 and low that is 10.91 of the year 2015.The average is 11.66 of last five years. The Standard Deviation of the data is 0.77 that indicate the variability of the performance during these five years. The Covariance of the data is 6.66 that indicate the ratio of standard deviation to mean in percentage. On the other hand the performance of Oil is high that is 15.48 in the year 2019 and low that is 9.71 in the year 2017. The average is 12.47 of last five years. The Standard Deviation of the data is 2.17. The Covariance of the data is 17.47.While performance of Hpcl is high that is

35.89 in the year 2017 and low that is 22.02 in the year 2016. The average is 25.78 of last five years. The Standard Deviation of the data is 7.64.The Covariance of the data is 29.65. The researcher has also indicate the performance of Ioc that is 27.94 highest in the year 2018 and low that is 9.7 in the year 2015. The average is 19.87 of last five years. The Standard Deviation of the data is 7.16 that indicates the variability of the performance during these five years. The Covariance of the data is 36.04 that indicate the ratio of standard deviation to mean in percentage. During the last ten years the performance of Bpcl is high that is 27.45 in the year 2016 and low that is 19.47 in the year 2019. The average is 24.32 of last five years. The Standard Deviation of the data is 3.13 that indicate the variability of the performance during these ten years. The Covariance of the data is 12.89 that indicate the ratio of standard deviation to mean in percentage.

Table – 8 A table showing calculation of variances

Source of Variation	SS	Df	MS	Fcal.	F tab	status of Null Hypothesis
Year	856.575	4	214.144	10.3033	3.00692	Not accepted
Company	167.305	4	41.8264	2.01243	3.00692	Accepted
Error	332.544	16	20.784			

The researcher has performed two-way analysis of variances to test the hypothesis, mentioned as above, at 5% level of significance. The calculated value of F test – ANOVA for years is 10.30 while tabulated value of F test-ANOVA is 3.00.so, the researcher may state that the null hypothesis for the years is rejected. The researcher has found significant difference in return on long term funds of selected petrochemical industry during the period of study.

While comparison of industry for the performance of return on long term funds ratio, the researcher has found that the calculated value of F is 2.01 and table value is 3.00.again in case of industry, the calculated value is less than tabulated value. So, the null hypothesis is accepted for industry. So, the researcher has concluded that the return on long term funds of selected petrochemical industry is not significant different.

Findings

So, researcher has found significant difference in Net profit ratio and Return on Capital Employed but there is no significant difference in Operating Profit and Return on Long term fund ratio of selected petroleum companies.

References

www.moneycontrol.com
www.reddifmoney.com
www.wikipedia.com

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The Impact of Cryptocurrency Regulation in India: Positive and Negative Aspects

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ABSTRACT

A cryptocurrency is a type of digital money that does not have a central issuing or regulatory body. A decentralized system uses blockchain technology to record and manage transactions in order to avoid fraudulent activities. Blockchain technology is a kind of framework used to record exchanges, which makes it hard to hack. There has been a tremendous surge in retail investors after the Supreme Court overturned the RBI's restriction on crypto transactions. Each square inside the chain contains an assortment of exchanges, and each time a substitution exchange happens on the blockchain, a record of that exchange is added to every member's record. A hash is an unchanging cryptographic mark that is utilized to record blockchain transactions. A hacker would need to alter each square in a chain, which is continually developing and expanding the framework's security, to destroy the blockchain. The main aim of this study is to know about cryptocurrency regulation in India and know the negative and positive aspects of the regulation of nations.

Keywords: Cryptocurrency, Blockchain Technology, Digital Currency, Bitcoin

I. INTRODUCTION

From 1998 through 2009, online currencies with encrypted ledgers, such as B-Money and Bit Gold, were experimented with but never completely developed. Satoshi Nakamoto, whose true identity is unknown, contributed a paper titled Bitcoin - A Peer to Peer Electronic Cash System to a discussion on cryptography in 2008. As a result, cryptocurrency, also known as digital or virtual currency, has grown in popularity as a means of transaction. According to CoinMarketCap.com, there are presently over 2,200 distinct cryptocurrencies traded openly. On June 6, 2019, the overall worth of all cryptocurrencies was around $246 billion, while the total value of all bitcoins was around $136 billion.

Regardless the lawful vagueness on whether digital currency speculation is allowed in India and tremendous unpredictability in costs, the nation has the biggest number of crypto proprietors on the planet at 10.07 crore, as indicated by agent revelation and correlation stage BrokerChooser. In examination, the quantity of stock financial backers (Unique Client Codes) enlisted with the BSE in India has ascended from 70 million in June 2021 to 80 million as of now, as per information by the trade. As far as the quantity of crypto proprietors as a level of the all-out populace, India remained at the fifth spot at 7.30%.

There has been a tremendous surge in retail investors after the Supreme Court overturned the RBI's restriction on crypto transactions. Since June 2020, CoinSwitch Kuber, India's largest cryptocurrency platform, has onboarded approximately 8 million members.

II. GOVERNMENT ACTIONS

The RBI study on the operation of cryptocurrencies in India was thrown out by the Supreme Court. With a new regulation, the Indian government is moving closer to prohibiting cryptocurrency transactions, believing that this would pose a danger and pave the way for a new currency within the nation. Crypto firms say that prohibiting this new form of technology would put India behind the curve, and that "thoughtful rules" would be the best approach. Keeping this in mind, the Securities Contracts (Regulations) Act 1959, the Companies Act 2013, and the Prevention of Money Laundering Act 2002 will all be altered as a result of the adoption of cryptocurrencies.

III. CRYPTOCURRENCY IN INDIA

In recent years, India has seen a significant expansion in the use of technology, particularly blockchain, to facilitate financial transactions. Most authorities, such as the Reserve Bank of India, have taken notice of this progress. While the current administration has accelerated progress toward a computerized or cashless economy, Bitcoin remains an exception. The RBI began considering the use of cryptocurrencies in open markets in 2013 and has subsequently advised customers, holders, and brokers on the use of "virtual money" while remaining silent on its legitimacy, including in 2017. Likewise, various regulators, such as the enforcement directorate and the income tax department, have been quick to shut down cryptographic money-related businesses by staging strikes under the guise that the use of digital money was infringing on outside trade and violating illegal tax avoidance guidelines.

IV. OBJECTIVES OF THE STUDY

This document was created by the project's creators in order to shed light on the legality of cryptocurrencies in India, as well as its good and negative impacts. Throughout the course of this study, we encountered a variety of viewpoints on both sides of the debate. The reader of this study paper should anticipate to learn a lot about our country's complete cryptocurrency effort.

V. RESEARCH METHODOLOGY

The authors used secondary data in order to conduct their research. Several papers, magazines, and websites, including the RBI's official website and Forbes, compiled the data. For this research, a descriptive study was used. The writers used qualitative data to explore and analyze the influence of legalizing cryptocurrency in India on its people and economy in order to achieve the goal of this research project. A comparison was done with other countries and the consequences they had experienced. India is the study's demographic constraint. By analyzing secondary data, the authors have attempted to fill in the study gap.

VI. ANALYSIS AND INTERPRETATION

The Working of Bitcoins

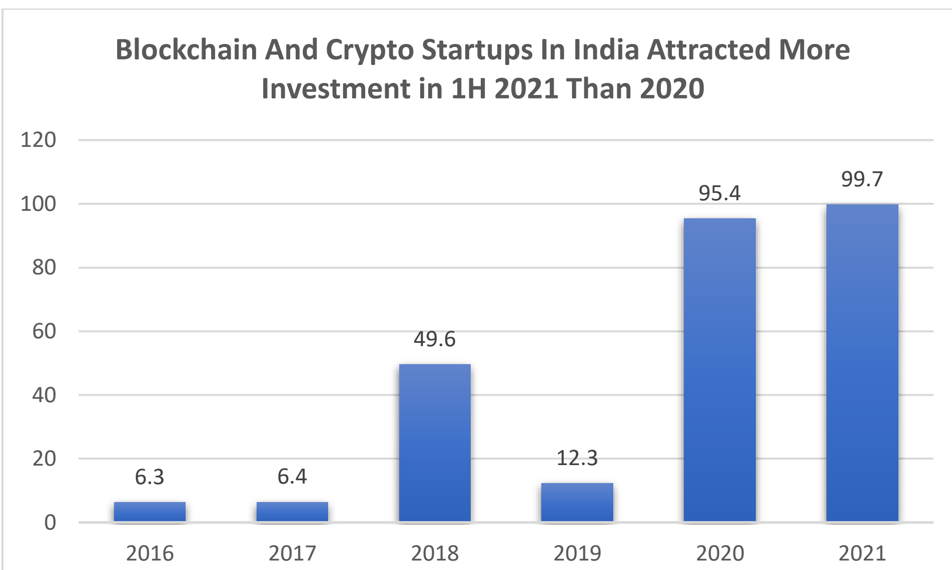
Bitcoin is a sophisticated currency, to put it simply. That is a concept that may be more complicated than one realizes: it isn't simply a set amount of money saved in an advanced record, comparable to a bank account or a credit line. Bitcoin, unlike coins or paper currencies, does not have any physical components. A worldwide distributed system determines the value, confirmation, and validation of individual Bitcoins.

Bitcoins are cryptographic blocks of information that are used as currency. Computer power is required to move this information from one person or location to the next and to check the trade, such as spending money. Clients known as "diggers" allow the strategy to use their frameworks to safely examine individual trades. For their efforts, these users receive fresh Bitcoins. The Bitcoin network generates, verifies, and verifies data blocks that are exchanged as private money.

Cryptocurrency refers to Bitcoin and its many variations/deductions. The system makes use of cryptography - a very advanced bookkeeping system known as a blockchain - to create new coins and confirm the ones that are sent from one person to the next. The cryptographic arrangements serve a variety of purposes, including making transactions very impossible to replicate, allowing banks or wallets of coins to be transported as data, and verifying the Bitcoin system's exchange from one person to the next.

Bitcoins are systems made or mined. A customary money ought to be stepped or printed by an economy; the mining perspective is expected to make the system self-supporting: individuals eliminate Bitcoins by giving taking care of influence from their structures to the coursed association, which creates new squares of data that contain the overall record of taking everything into account. The encoding and unraveling measure for these squares needs an enormous proportion of taking care of force, and the individual who viably makes the new square (or even more exactly, the individual whose system created the randomized number that the PC recognizes as the new square) is compensated with a particular number of Bitcoins, or with a particular proportion of trade costs.

The essential necessity for all the additional handling power allocated to the shared system, which creates new Bitcoins that may later be used, is increased by the cycle of shifting Bitcoins from one client to the next. It's a self-scaling, self-copying architecture that generates cryptographic representations of considerable value related to wealth.



(Source: Traxcn)

Investment in crypto and blockchain businesses in India has surged dramatically in 2021 compared to the previous year, according to a media report citing Traxcn statistics. In 2016, India's crypto and blockchain businesses received only $6.3 million in funding. By June 15, 2021, India's crypto and blockchain firms have already received $99.7 million in funding. (Khan, 2021)

VII. POSITIVE ASPECTS IN INDIA

A. Growth in Job

The crypto and blockchain markets, according to the job search portal, have seen fast development. Jobs connected to blockchain technology, cryptocurrency, and bitcoin have increased by more than 90% in the United States. Bangalore and Pune, it was also revealed, offer a lot of promise for blockchain and crypto career prospects.

Unemployment has risen dramatically in practically all areas of the economy in recent months.

Wazir's CEO (Nischal Shetty) believes that cryptocurrencies may assist the country create additional job possibilities while also helping to stabilize the country's employment rates (Helms, 2020).

B. Wealth Creation

Initial coin offerings (ICOs) have the potential to become a worldwide platform for entrepreneurs to raise funds. This year, ICOs raised over $346 million globally. This may entice international investors to invest in Indian firms. (Chandrashekhar, Kar, & Manikandan, 2020)

With India's present economic situation, it would be a huge mistake to ignore cryptocurrencies. Globally, blockchain firms have raised over 5.5 billion dollars, with Indian companies obtaining less than 0.2 percent of these funds. Over $744 million was invested in a fintech business in Singapore (Gupta, 2020).

C. Blockchain Technology Helping Traditional Financial Institutions

In India, cryptocurrency does not have to compete with fiat currency or any of the traditional financial institutions. They could be able to coexist in the same space. Traditional financial institutions with cryptocurrency and blockchain technology may be complementary. Collaboration would bring in additional investors, while blockchain technology would improve bank security and transactions, as well as give improved transparency and accountability (Gupta, 2020).

D. The Increasing Trend of Digital Payments

There has been a significant growth in the trend of digital payments, which has considerable future potential. The use of cryptocurrencies for domestic transactions would appeal to the general people (Martucci, 2020).

Due to the ease of access of cryptocurrency, which is not tied to a country, investors may be able to invest more on the internet. They would be safer and have a lower danger of being robbed if they used blockchain technology. Cryptocurrency might be used by international firms for faster and easier transfers, as it is hassle-free and has lower transaction cost (Rahman & Dawood, 2019).

VIII. NEGATIVE ASPECTS IN INDIA

A. Scalability

While digital coins are gaining popularity, they are still outnumbering the number of transactions processed by payment providers such as Visa. Unless the delivery infrastructure for these technologies is dramatically increased. The development of currency is more complicated in this case.

B. Cybersecurity Concerns

Because this currency and its reliance on the internet are fully reliant on the internet, it will be vulnerable to security breaches and might fall into the hands of non-state actors. Mitigating this will need ongoing security infrastructure improvements, and keeping track of these persons can be a time-consuming operation.

C. Funding of Non-State Organizations

The procedures for how these transactions function, knowing that they meet end to end with no record of the recipient or sender, would make non-state group financing easier and forgettable.

D. Regulations

Indeed, even with the ideal innovation and all issues that can be taken care of it will be an unsafe speculation except if legislatures and government associations take on this framework. Which would consequently require a tremendous measure of venture from these associations and that will be an extremely precarious interaction.

E. Devaluation of Currency

With the presentation of cryptographic forms of money there are chances that there will be a shift from monetary standards and that will influence the valuation of the country's now existing cash. That may contrarily affect the economy.

Presently, with regards to the legitimate parts of digital currencies, we need to remember that there must be another body that would ignore the working of this cash and they would be accountable for shaping the principles and guidelines. With the presentation of this money, numerous different revisions should be made in various parts of the constitution.

IX. REMEMBERING THIS THE AMENDMENTS DEMONSTRATIONS WILL REQUIRE CHANGES:

1. The Securities Contracts (Regulation) Act 1956t:

Tokens issued by an identified user and backed by the issuer's underlying assets are the only securities that come under this category.

2. Companies Act, 2013:

This Act's concepts and criteria would apply to all types of tokens. The technique of store by an organization would be designated as a store and moreover provide certain exclusions from its suitability under the demonstration, when it comes to the acknowledgement of store the acceptance of cash.

3. Payments and Settlements Systems Act 2007:

If the crypto activity is to be centered on a payment system or another regulated system, the issuer will need another payment mechanism that is accepted by the RBI under the PSA and meets KYC/AML requirements.

4. Prevention of Money Laundering Act 2002:

Under this Act, any pretenses that come under the conceptions and do not follow the regulations that this act establishes are punishable by ten years in jail. However, it is unclear whether the reporting obligations set forth in Chapter IV of the Prevention of Money Laundering Act of 2002 apply to wallet operators, third-party bitcoin services, crypto-asset exchanges, and other entities.

X. IMPACTS TO BE EXPECTED AFTER INDIA APPROVES CRYPTOCURRENCY

A. Reduction in Remittance

A few governments throughout the world, such as India, have used neutralist measures that limit settlements made with various countries or the other way around, either by charging excessively expensive fees or by establishing new rules. The fear of not being able to transmit money to family and friends is leading more people to use computerized Cryptocurrency, the most popular of which is Bitcoin.

B. Control Over Restricted Capital

Many sovereign monetary forms and their use outside of our own countries are being directed and limited, which is fueling interest in Bitcoin. For example, the Chinese government has recently made it more difficult for people and organizations to spend the country's money overseas, resulting in a liquidity crisis. As a result, options like as Bitcoin have exploded in popularity in China. India sees this as an opportunity to profit.

C. Improving Acceptance

Customers are using Bitcoins in greater numbers than at any point in recent memory, owing to the fact that more legitimate businesses and corporations have begun to accept them as a form of payment. Today, internet users and financial professionals use bitcoins on a regular basis, with 1.1 million bitcoin wallets added and used throughout the world in 2016. This might be a fantastic time for India to transition to electronic money.

D. Crackdown of Corruption

Advanced cryptocurrencies, such as Bitcoin, can be used as a tool to aid in the fight against corruption in India. To make it tougher to give incentives and bring in gathered black cash, India recently demonetized its top currency and still-in-use banknotes. This can also act as a driver of Bitcoin interest in India, allowing people to send and receive money without having to explain themselves to the experts.

XI. THE FUTURE OF CRYPTOCURRENCY IN INDIA

According to a survey done by global consulting company PwC, India might be among the frontrunners in the adoption of the blockchain technology that underpins crypto in the next five years provided the right level of corporate and government participation is reached.

"The cryptocurrency sector is scorching hot," said Sharan Nair, CBO of CoinSwitch Kuber. Companies looking to obtain exposure to the crypto sector have increased their interest in 2021. Given the limitations of doing business in a pandemic environment, several sectors struggled in FY21. For the most part, fintech was not one of them."

It is estimated that 15 million Indians have invested in private cryptocurrency holdings. Cryptocurrency investments in the country surged by about 400 percent in a year, from $923 million in April 2020 to nearly $6.6 billion in May 2021.

The Finance Ministry indicated that the world is developing swiftly with technological innovations, after the introduction of a carefully calibrated policy on bitcoin and digital money earlier in May. Recently, there has been talk of bitcoin and other cryptocurrencies becoming recognised as an asset class in India. The central government, on the other hand, has declared that Bitcoin and other cryptocurrencies would not be recognised as legal cash in the near future.

The government has declared that it will "explore the active deployment of crypto's blockchain technology to usher in the digital economy." This is wonderful news for the crypto community. Rather of outright banning cryptocurrencies, the Indian government may instead implement strict rules and restrictions in their place. (Times, 2021)

XII. CONCLUSION

Cryptocurrency is an interesting model of payment systems that is both practical and safe, and it has the potential to help businesses grow. They also serve as an alternate payment method to currency notes, allowing users to quickly engage in financial transactions such as transferring, exchanging, purchasing, and selling. The blockchain technology adds to the transaction's security. Several variables may contribute to good improvements in the e-commerce, e-business, and e-payment sectors, but there are also a number of negative elements that harm this kind of transaction. To obtain more confidence, cryptocurrency must be effectively regulated and monitored. However, given the huge level of interest in cryptocurrency and blockchain throughout the world, prohibiting it in India is not an option, and we will await the RBI's decision on cryptocurrency in India. The sooner you start, the better.

References:

Anand, N., Agrawala, P., & Das, D. (2020). *Blockchain & cryptocurrency laws and regulations 2022*. Retrieved from Global Legal Insights: https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/india#:~:text=After%20the%20RBI%20circular%20dated

Barone, A. (2019, June 15). *Investopedia is part of the Dotdash publishing family*. Retrieved from Investopedia: https://www.investopedia.com/articles/forex/091013/future-cryptocurrency.asp

Chandrashekhar, A., Kar, S., & Manikandan, A. (2020, March 5). *Now that crypto trade is legal in India, here's what happens next*. Retrieved from The Economics Times: https://economictimes.indiatimes.com/industry/banking/finance/banking/now-that-crypto-trade-is-legal-in-india-heres-what-happens-next/articleshow/74485025.cms?from=mdr

Crider, M. (2020, April 24). *What Is Bitcoin, and How Does it Work?*. Retrieved from How-To Geek: https://www.howtogeek.com/141374/htg-explains-what-is-bitcoin-and-how-does-it-work/

Gupta, S. (2020, March). *Crypto has the potential to revitalize India's economy*. Retrieved from forkast.news: https://forkast.news/cryptocurrency-law-india-economy-legal-ban/

Helms, K. (2019, August 29). *Crypto Can Boost Indian Economy - How Banning Will Hurt it*. Retrieved from Bitcoin.com: https://news.bitcoin.com/crypto-can-boost-indian-economy-banning-will-hurt-it/

Khan, A. (2021, June 18). *Blockchain And Crypto Startups In India Attracted More Investment in 1H 2021 Than 2020*. Retrieved from dazeinfo.com: https://dazeinfo.com/2021/06/18/blockchain-and-crypto-startups-in-india-attracted-more-investment-in-1h-2021-than-2020/

Kharpal, A. (2019, April 12). *Everything you need to know about the blockchain*. Retrieved from CNBC LLC: https://www.cnbc.com/2018/06/18/blockchain-what-is-it-and-how-does-it-work.html

Ledger SAS. (2019, October 23). *A Brief History of Bitcoin & Cryptocurrency.* Retrieved from Ledger SAS: https://www.ledger.com/academy/crypto/a-brief-history-on-bitcoin-cryptocurrencies

Livemint. (2021, october 13). *India has highest number of crypto owners in the world at 10.07 crore*. Retrieved from Livemint.com: https://www.livemint.com/market/cryptocurrency/india-has-highest-number-of-crypto-owners-in-the-world-at-10-07-crore-report-11634110396397.html

Marr, B. (2017, December 6). *A Short History Of Bitcoin And Crypto Currency Everyone Should Read*. Retrieved from Forbes India LLC: https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/?sh=30444d0b3f27

Martucci, B. (2021, may 12). *What Is Bitcoin – History, How It Works & Security Features*. Retrieved from Money Crashers: https://www.moneycrashers.com/bitcoin-history-how-it-works-pros-cons/

Rahman, A., & Dawood, A. K. (2019). Bitcoin and Future of Cryptocurrency. *Ushus-Journal of Business Management, 18*(1), 61-66. doi:https://doi.org/10.12725/ujbm.46.5

Times, T. E. (2021, August 23). *India among the global leaders for crypto adoption*. Retrieved from The Economics Times: https://economictimes.indiatimes.com/markets/cryptocurrency/india-among-the-global-leaders-for-crypto-adoption/articleshow/85485394.cms?from=mdr

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A STUDY ON PROFITABILITY ANALYSIS OF SELECTED AUTOMOBILE COMPANIES IN INDIA

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ABSTRACT

Any business organization's primary goal is to make money. Without profit, no company can survive. Profitability analysis is carried out to shed light on present operating performance and the efficiency of a commercial firm. This research, on the other hand, examines the probability position of selected automobile companies over a 5-year period, from 2014-15 to 2018-19, in terms of several profitability ratios and ANOVA. The purpose of this research is to look at the earning performance and profitability of a few automobile firms in India. The research was solely based on secondary sources. In the long run, profitability helps to the company's continuous growth, hence the Organisation must focus on productivity and resource utilization. The current study discovered that leverage, company size, sales growth, asset turnover ratio, industrial index, and production are the elements that determine automobile company profitability.

KEYWORDS: Profitability, Automobile, Mean, Ratio analysis, Growth

1. INTRODUCTION

The automobile industry is one of India's most important industries. A well-developed transporting system is crucial to the development of the economy, and India is no exception. The automobile industry is one of the biggest in the world. The automobile industry plays a significant role in the Indian economy. The automobile sector is the manager in the creation and process technologies in the developed sector. It has been predictable as one of the drivers of economic growth and the domestic automobile industry has been thought to be the present of the economy. Such a belief is in line with the international trend since in most mature economies the automobile industry's act has been viewed as a reflection of the economy's strength. This sector has emerged as the daylight sector in the Indian financial system.

According to data available by the Department of Industrial Policy and Promotion (DIPP), organization of Commerce, the amount of collective Foreign Direct Investment (FDI) inflow into the auto division from April 2000 to November 2012 was worth US$7,518 million. The Global and Indian manufacturer is focusing their hard work to develop original products, technologies, and transport chains. India is one of the key markets for Global Manufacturers for fusion and electronic vehicles, which is the new growth in the automobile sector.

The automobiles are divided into four segments - two-wheelers, commercial vehicles, passenger vehicles, and three-wheelers. Two-wheelers India is one of the world's greatest increasing passenger car markets it is the second major two-wheelers manufacturer and fifth largest commercial vehicle producer. It is also home to the major motorcycle manufacturer. Besides, India is the fourth-largest passenger car promote in Asia**.**

2. LITERATURE REVIEWS

Shrabanti Pal, (2015) made a study on "Evaluation of financial performance in terms of financial ratios- an empirical study on Indian automobile industry" The objective of the study was to categorize the financial ratios which were also used for data reduction purposes and exploring the individual variables which affect the profitability of the concerned industry by applying factor analysis and multiple regression analysis during the study period. Factor analysis is applied in the study on 36 audited financial ratios grouped in 7 categories. The period of study is for 15 years from 1999-2000 to 2013-2014. The study revealed that three individual variables which are working capital to total assets, inventory turnover ratio and dividend pay-out ratio to cash profit have a significant effect on the profitability factor of the concerned industry

Aryan Chakraborty, (2017) tried to explain that, Performance of a company is evaluated with respect to its use of assets, shareholder equity and liability, income, expenses and ratios etc. The Objectives of the study is to analyse the financial position of top five leading FMCG Companies and to highlight the financial performance and return of the selected companies using various Financial Ratios and ANOVA. The period of the study is of 6 years that is from 2011 to 2016. The study is based on secondary data. The research revealed that ITC Limited position is better in comparison to other FMCG Firms.

Rosy Dhingra, Kapil Dev & Madhuri Gupta, (2018) the purpose of the study is to examine and make a comparative analysis of performance of selected FMCG companies and to find out financial ratios. For this purpose, Wilks' Lambda and multiple discriminant function analysis model is used. The study is based on primary as well as secondary data. The period of the study is for 12 years that is from 1 April 2006 to 31 March 2017. The study revealed that the discriminate function analysis help in realizing the significant financial ratios and which have major impact on company's performance in stock market.

Amandeep Kaur, (2018) Conducted study on "A Study of Financial Resource Management in the Selected Indian Telecommunication Companies" the aim of this research paper is to study financial performance, profitability and compare the financial performance of selected telecom companies. For this purpose, Ratio using the tool of Ratio analysis and trend analysis also applied on the data to study the trend in the ratio calculated. The study is based on secondary sources. The period of the study is of 9 years that is from 2008 to 2017. The paper revealed that both the companies need to focus on improvement of short-term solvency positions.

3. STATEMENT OF THE PROBLEM

The primary objective of each and every business is to earn maximum profit. A business needs profits not only for it to fulfill day-to-day expenses, but also for survival and expansion of the Business. The investors are also attracted towards the industry as there is a high-profit margin with high demand in it and hence, there is a need to analyze the profitability of the automobile Companies. Profitability analysis also allows companies to maximize their profit after detecting loopholes and thus also maximizes the opportunities that businesses can take benefit of in order to keep themselves successful and relevant in a very dynamic, highly competitive, and vibrant market. Ratio analysis is the common method to analyze the profitability of the company and it is easily understood by any stakeholders and common man thus the research study on "A STUDY ON PROFITABILITY ANALYSIS OF SELECTED AUTOMOBILE COMPANIES IN INDIA" is suitable.

4. OBJECTIVES OF THE STUDY

- To ascertain the overall profitability performance of selected leading automobile Companies in India.
- To examine and evaluate profitability related to sales of selected automobile companies.

- To evaluate the profitability related to the equity share of selected automobile companies in India.

5. JUSTIFICATION AND USE OF THE RESULTS

The research study shows the result of the profitability analysis of five leading automobile companies in India. The result will help the stakeholders to know the efficiency and performance of the relevant companies.

• The study is useful for internal and external stakeholders of the company.
• The study will guide academicians and research scholars.
• Provides useful information regarding the soundness of the company.

6. RESEARCH METHODOLOGY

6.1. DATA COLLECTION

Secondary data have been taken as a basis for profitability analysis for evaluation of empirical analysis. The five leading automobile companies of India have been taken for the analysis. The necessary data has been collected from different books, journals, magazines, annual reports, and various websites of selected automobile companies. For all the calculations Microsoft Excel is used.

6.2. SAMPLING DESIGN:

Sources List: Sample will be collected from secondary sources. It’s included the financial statement of the selected automobile companies, magazines, and other journals, articles, books published and unpublished documents, and other various websites that have been considered in the research.

- **Sample Period**: The research will be carried out for the period of 2014-15 to 2018-19.
- **Sample Size**: The researcher selects the five leading automobile companies of India.
- **Sample profiles**

Particular	Tata Motor Ltd.	Mahindra CIE Automotive Ltd.	MARUTI Suzuki India Ltd.	HERO MOTOCORP Ltd.	Bajaj Auto Ltd
YEAR OF INCORPORATION	1945	1945	1981	1984	1945
HEADQUARTER	Mumbai	Mumbai	New Delhi	New Delhi	PUNE
TYPES OF COMPANY	Public	Public	Public	Public	Public
REVENUE (Cr.)	3,01,938	1,05,806	8,86,301	34,658	31,804
PARENT COMPANY	TATA GROUP	MAHINDRA GROUP	Suzuki motors corporation	-	BAJAJ Group
WEBSITE	www.tatamotors.com	www.mahindra.com	www.marutisuzuki.com	www.heromotocorp.com	www.bajajauto.com

6.3.TOOLS FOR ANALYSIS

Ratio analysis is used to analyze the data. Following ratios are used to study the data. Net Profit Margin, Return on Net worth / Equity, Return on Capital Employed, Return on Assets, Asset Turnover Ratio is used to analyze the data.

In the present study statistical tools i.e., MEAN, STANDARD DEVIATION, COEFFICIENT OF VARIATION AND ANOVA test have been used to analyze the data during the study period.

Mean = sum of variable / N

Standard Deviation = √∑X2/ N - (∑X/N)

Coefficient of Variation = SD / Mean * 100

7. DATA ANALYSIS AND INTERPRETATION

7.1.PROFITABILITY RATIOS

NET PROFIT RATIO: Net profit ratio is a useful ratio to measure the overall profitability of the company or business. A high Net Profit ratio shows the efficient total quality management of the affairs of business also indicates the relationship between Net Profit and Net sales.

NET PROFIT RATIO = Net Profit / Net Sales

Table 1. Net profit margin

YEAR	TATA	MAHINDRA	MARUTI	HERO	BAJAJ
2014-15	-13.05	4.72	7.42	8.64	13.01
2015-16	-0.14	2.56	9.32	10.95	17.39
2016-17	-5.48	2.77	10.8	11.84	17.58
2017-18	-1.75	3.53	9.68	11.47	16.16
2018-19	2.91	1.4	8.71	10.05	15.45
MEAN	-3.50	3.00	9.19	10.59	15.92
S.D.	6.14	1.23	1.25	1.28	1.85
COV	-175.43	41	13.6	12.09	11.62

(Sources: computed by researcher)

The above Table.1 reveals that BAJAJ Ltd has highest Mean Value with 15.92 while TATA Industries ltd has lowest Mean Value -3.50 and other selected Automobile companies are maintaining moderate levels in Net profit ratio. The Standard Deviation of TATA is 6.14, the highest, which means a higher degree of variability and lowest variability of 1.23 was observed in Mahindra Industries ltd. The coefficient of variation of Net margin ratio of MARUTI ltd maximum while TATA Ltd the minimum.

Test of Hypothesis:

H0: There is no significant relationship between Net profit margin Ratio of selected companies.

H1: There is significant relationship between Net profit margin Ratio of Selected companies.

Table 2. ANOVA variance

Source of Variation	SS	DF	MS	F	P-value	F crit
Between Groups	1117.572	4	279.393	30.52728	2.92E-08	2.866081
Within Groups	183.0448	20	9.15224			
Total	1300.617	24				

(Sources: computed by researcher)

Conclusion: F-value (30.52728) is more than the table value (2.866081) therefore null hypothesis is rejected. Therefore, H1 is accepted. Hence, it is revealed that there is significant relationship between Net profit margin Ratio of Selected Automobile companies.

7.2.RATE OF RETURN RATIOS

It indicates that the relationship between profit earned by the company and total investments of the Company or firm. The important Rate of Return Ratio are as;

- Return on Equity/Net worth
- Return on Capital Employed

- Return on Assets

RETURN ON EQUITY: Return on equity (ROE) measures the profitability of owners' or shareholder's fund.

Return on equity (ROE) = PAT / Net worth

Table 3. Return on equity

YEAR	TATA	MAHINDRA	MARUTI	HERO	BAJAJ
2014-15	-31.93	3.36	15.65	36.47	26.31
2015-16	-0.26	1.31	17.95	39.42	29.62
2016-17	-11.48	1.43	20.17	33.39	22.46
2017-18	-5.13	1.98	18.49	31.41	21.29
2018-19	9.11	1	16.25	26.32	21.46
MEAN	-7.94	1.82	17.70	33.40	24.23
S.D.	15.38	0.93	1.81	4.99	3.63
COV	-193.7	51.1	10.23	14.94	14.98

(Sources: computed by researcher)

The above Table.3 reveals that HERO Ltd has highest Mean Value with 33.40 while TATA has lowest Mean Value -7.94 and other selected Automobile companies are maintaining moderate levels in Return on equity. The Standard Deviation of TATA is 15.38, the highest, which means a higher degree of variability and lowest variability of 0.93 was observed in MAHINDRA ltd. The coefficient of variation of Net margin ratio of MAHINDRA ltd maximum while TATA Ltd the minimum.

Test of hypothesis:

H_0: There is no significant relationship between return on equity of selected companies.

H_1: There is significant relationship between return on equity of selected companies.

Table 4. ANOVA variance

Source of Variation	SS	DF	MS	F	P-value	F crit
Between Groups	5621.776	4	1405.444	25.21458	1.44E-07	2.866081
Within Groups	1114.787	20	55.73933			
Total	6736.563	24				

(Sources: computed by researcher)

Conclusion: F-value (25.21458) is more than the table value (2.866081) therefore null hypothesis is rejected. Therefore, H1 is accepted. Hence, it is revealed that there is significant relationship between Return on Equity of Selected AUTOMOBILE companies.

RETURNS ON CAPITAL EMPLOYED: Return on Capital Employed (ROCE) Indicate that the relationship between Operating profit and Capital Employed of the Company.

Table 5. Return on capital employed

YEAR	TATA	MAHINDRA	MARUTI	HERO	BAJAJ
2014-15	-16.02	3.26	15	35.93	25.38
2015-16	5.31	1.27	17.35	37.77	28.67
2016-17	-1.19	1.39	26.42	44	30.32
2017-18	5.04	3.7	25.83	42.35	29.5
2018-19	11.57	7.17	21.6	37.15	28.28
MEAN	0.94	3.36	21.24	39.44	28.43
S.D.	10.50	2.39	5.05	3.52	1.88
COV	1117.02	71.13	23.78	8.92	6.61

(Sources: computed by researcher)

The above Table.5 reveals that HERO Ltd has highest Mean Value with 39.44 while TATA has lowest Mean Value 0.94 and other selected AUTOMOBILE companies are maintaining moderate levels in Return on equity. The Standard Deviation of TATA is 10.50, the highest, who mean a higher degree of variability and lowest variability of 1.88 it, observed in BAJAJ ltd. The coefficient of variation of Net margin ratio of TATA ltd maximum while BAJAJ Ltd the minimum.

Test of Hypothesis:

H_0: There is no significant relationship between return on equity of selected companies.

H_1: There is significant relationship between return on equity of selected companies.

Table 6. ANOVA variance

Source of Variation	SS	DF	MS	F	P-value	F crit
Between Groups	5409.97	4	1352.493	42.95078	1.51E-09	2.866081
Within Groups	629.7872	20	31.48936			
Total	6039.757	24				

(Sources: computed by researcher)

Conclusion: F-value (42.95078) is more than the table value (2.866) therefore null hypothesis is rejected. Therefore, H1 is accepted. Hence, it has revealed that there is significant relationship between Return on Equity of Selected AUTOMOBILE companies.

RETURN ON ASSET: Return on Asset Shows that the relationship between Net Profit margin and Total Assets of the Company.

Table 7. Return on assets

YEAR	TATA	MAHINDRA	MARUTI	HERO	BAJAJ
2014-15	-9.48	2.83	11.06	22.67	18.08
2015-16	-0.1	1.11	12.79	25.38	23.83
2016-17	-4.12	1.23	14.34	22.98	18.38
2017-18	-1.74	1.69	13	22.08	17.07
2018-19	3.31	0.84	11.91	19.18	17.07
MEAN	-2.43	1.54	12.62	22.46	18.89
S.D.	4.78	0.78	1.23	2.22	2.83
COV	-196.71	50.65	9.75	9.88	14.98

(Sources: computed by researcher)

The above Table 7 reveals that HERO Ltd has highest Mean Value with 22.46 while TATA has lowest Mean Value - 2.43 and other selected Automobile companies are maintaining moderate levels in Return on equity. The Standard Deviation of TATA is 4.78 the highest, which means a higher degree of variability and lowest variability of 0.78 was observed in MAHINDRA ltd. The coefficient of variation of Net margin ratio of MAHINDRA ltd maximum while TATA Ltd. the minimum.

Table 8. ANOVA variance

Source of Variation	SS	DF	MS	F	P-value	F crit
Between Groups	2325.547	4	581.3868	76.68679	7.67E-12	2.866081
Within Groups	151.6263	20	7.581316			
Total	2477.173	24				

(Sources: computed by researcher)

Conclusion: F-value (76.68679) is more than the table value (2.866) therefore null hypothesis is rejected. Therefore, H1 is accepted. Hence, it has revealed that there is significant relationship between Return on Equity of Selected automobile companies.

ASSET TURNOVER RATIO: It is measuring a company's ability to generate sales from its assets by comparing net sales with average total assets.

Table 9. Assets turnover ratio

YEAR	TATA	MAHINDRA	MARUTI	HERO	BAJAJ
2014-15	72.67	60.05	148.93	262.17	138.87
2015-16	75.59	43.47	137.19	231.74	137
2016-17	75.26	44.52	132.74	193.95	104.57
2017-18	99.35	47.9	134.34	192.54	105.64
2018-19	113.61	60.39	136.68	190.74	110.48
MEAN	87.30	51.27	137.98	214.23	119.31
S.D.	18.26	8.34	6.38	31.77	17.16
COV	20.92	16.27	4.62	14.83	14.38

(Sources: computed by researcher)

The above Table.9 reveals that HERO Ltd has highest Mean Value with 214.23 while TATA has lowest Mean Value 87.30 and other selected AUTOMOBILE companies are maintaining moderate levels in Return on equity. The Standard Deviation of HERO is 31.77, the highest, which means a higher degree of variability and lowest variability of 6.38, was observed in MAHINDRA ltd. The coefficient of variation of Net margin ratio of MAHINDRA ltd maximum while MARUTI Ltd the minimum.

Table 10. ANOVA variance

Source of Variation	SS	DF	MS	F	P-value	F crit
Between Groups	74880.64	4	18720.16	53.55901	2.09E-10	2.866081
Within Groups	6990.48	20	349.524			
Total	81871.12	24				

(Sources: computed by researcher)

Conclusion: F-value (53.55901) is more than the table value (2.866) therefore null hypothesis is rejected. Therefore, H1 is accepted. Hence, it is revealed that there is significant relationship between Return on Equity of Selected AUTOMOBILE companies.

8. LIMITATION OF THE STUDY

- The study is related to a period of only 5 years that is from 2014-15 to 21018-19, so the results of the study are only indicative and not conclusive.
- The present study is based on selected automobile companies in India only.
- The Analysis and interpretation are based on ratio analysis and ratio analysis is based on the historical cost which is the limitation itself.
- The present study is based on secondary sources hence it is a Limitation itself.

9. CONCLUSION

After analysing the profitability of the selected automobile company, it seems that the profitability of any company depends more or less upon the effective utilization of resources, cut-off expense and total quality management function in products, customer services, manpower, goodwill and market share. The conclusion of the study can be summarised as under:

The result of analysis discloses that leverage, size of the company, growth in sales, asset turnover ratio, index of industrial and production are the factors that determine profitability of automobile companies. In India too, automobile companies occupy a considerable position by contributing more job openings to the unemployed youth, Thus, in order to maintain for long period of time, automobile companies have to reduce their expenditure to a maximum extent. Further, automobile companies have to utilize their fixed assets at most select level (i.e.) fixed assets as if machinery should not be kept idle. Further, the result of study also discloses that company fortitude also depends on industrial situation that exist in a country. Hence, Government has to provide necessary financial and infrastructural endorse for the survival of automobile companies, thereby automobile companies may reach new height in the nearby future.

10. FUTURE SCOPE OF THE STUDY

At present the automobile industry highly influence the national economy. The automobile Industry in India has changed its strategies and has gone for a more well-planned marketing strategy of the products to inter both the rural and urban markets. The study will help to the management to take the effective decision and to improve the firm's profitability performance. The study will also help the various stakeholders of the company to understand the strength and weakness of the company. The research will be helpful to research scholars also.

BIBLIOGRAPHY

Shrabanti Pal (2015). Evaluation of financial performance in terms of financial ratios- an empirical study on Indian automobile industry. *International Journal of Business Management & Research, 5*(3), 1- 8.

Chakraborty, A. (2017). Performance evaluation of leading FMGC firms. *ICTACT Journal on Management Studies, 3*(3).

Dhingra, R., Dev, K. & Gupta, M. (2018). Performance Analysis of FMCG Sector in India. *International Journal of Business Analytics and Intelligence 6*(2) 12-23.

Kaur, A. (2018). A Study of Financial Resource Management in the Selected Indian Telecommunication Companies. *International Journal of Management Studies*.

Venkatesan, T. & Nagarajan, S. K. (2012). An empirical study of profitability analysis of selected steel companies in India. *International Journal of Marketing, Financial Services & Management Research, 1*(10).

Patel, N. B. (2016). A comparative study on profitability analysis of selected private, public and foreign sector banks in India. Thesis of Department of Business Studies, Sardar Patel University, Vallabh Vidya Nagar.

Saroja, A. (2019). Effectiveness of profitability performance of select FMGC companies during the pre and post-merger period. *IJRAR- International Journal of Research and*

Patel, M. V. (2016). A Study on Financial performance of public sector steel companies in India. *International journal of Research in Humanities & Soc. Science, 4*(2).

WEBSITE

www.tatamotors.com
www.mahindra.com
www.marutisuzuki.com
www.heromotocorp.com
www.bajajauto.com
www.moneycontrol.com
www.google.com
www.myaccountingcourse.com
www.iosrjournals.org
www.investropedia.com
www.hindiidustries.net

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AN EMPIRICAL STUDY ON THE IMPACT OF TENDER OFFER BUY BACK ON THE PROFITABILITY PARAMETERS OF THE SELECTED COMPANIES IN INDIA

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ABSTRACT

Share Buyback is a popular tool for corporate restructuring. Buyback is another best alternative after the cash dividend. In share Buyback the company distributes its access cash among the investors or shareholders by purchasing its own shares from the market on premium price. Generally, investors are expecting a good return by participating in share buyback offer. This study defines Impact of Tender Offer Buy Back on The Profitability Parameters of The Selected Companies in India which are listed in NSE and BSE. Study period has been taken of 5 years from 2017 to 2021. This research uses variables which are connected with the share price fluctuations, such variables are EPS, ROE, ROA and P/E. Study is based on secondary data. Data has been taken from the official websites. To determine the effect of tender offer share buyback on EPS, ROE, ROA and P/E paired t- test were applied which defines the relationship between the fluctuations before share buyback announcement (tender offer) and after share buyback. Result presents that there is no relationship or impact of tender offer buyback on EPS, ROE, ROA and P/E. Investors may participate in tender offer share buyback for good return within a short period of time because in long run buyback doesn't seems profitable but sometime share prices snapped by it.

(Key words: share buyback, tender offer method, shareholders, India)

INTRODUCTION

Shareholders wealth maximization is the ultimate aim of every company. Increasing shareholders returns usually implies that companies must first satisfy shareholders like customers, employees, suppliers, local communities. Furthermore, a company's worth cannot be enhanced if the management board ignores the interest of the company's shareholders. For so company returns handsome reward to their shareholders as a cash dividend or buyback its own shares from the market. These both methods will tend to attract existing investors to stuck up with their present portfolio. While sometime many of new investors would be ready to invest in particular company which has great plans for improve the shareholders wealth.

Let's understand that what is share buyback. So, when company re-acquired or purchase its own shares from the stock market it's called buyback of shares or stock repurchase. It's nothing but reverse of the process of share issue. In this case company offers to the investors to sell of their shares to the company. In stock repurchase company offers number of shares for buyback through specific method whether it's open market method or tender offer method. Shareholders who want to sell off their shares should apply within a specified period by the company. Number of accepted shares from offer will be credited in investor's bank account which linked with the Demat account within given period.

THERE ARE BASICALLY FOUR OPTIONS AVAILABLE TO THE COMPANY WITH EXCESS CASH

1. The company can invest in their present business by capital expenditures or other ways.
2. They can buy a firm or a portion of a company.
3. They have the option to deliver cash dividends to shareholders.
4. They can put the money for repurchase their shares, which is known as a share buyback.

TENDER OFFER METHOD OF SHARE BUYBACK

A Tender offer is a bid to buy the shares of shareholders in a company. To sell their shares at fixed price and within specified time period tender offers are usually made public and invite shareholders. Offered price is usually at a premium to the market price and often based on the minimum or maximum number of shares sold. The reason for offering the premium is to attract a large number of shareholders to sell their shares.

REVIEW OF LITERATURE

1. (Asim Mishra,2005) In research He examined " Empirical study on buy back shares announcement period price reaction" From the qualitative and quantitative analytical study he concluded that in India buybacks have not been very successful in terms of yielding any excess returns to the shareholders both from the market and by way of balance sheet figures.
2. (Shaveta Gupta, Neha Kalra, Rajesh Bagg, 2014) In this study of " Do Buybacks Still Hold their Signalling Strength? An Empirical Evidence from Indian Capital Market" she

concluded that there is no significant impact on the minds of the investors of buyback in India.

3. (Urvashi Varma, Harjit Singh, Alka Munjal,2018) made research on "Corporate Restructuring Through Share Buybacks: An Indian Experience" The research revealed that undervaluation of company and lack of investment opportunities do not act as a driver for buyback.

OBJECTIVES OF THE STUDY

The main objective of the present study is to analyse the impact of Tender offer share buyback on EPS, ROE, ROA, P/E.

RESEARCH METHODOLOGY

1. **Sample Period:** The period of study is of five years to examine the share price fluctuations because of tender offer buyback announcements' that is from March 2017 to March 2021.
2. **Sampling Technique:** Random sampling method has been selected to collect data.
3. **Sources of Data:** Present study is based on the secondary data and the data was collected from the official websites of selected sample companies, NSE, BSE, annual reports, research publications, various academic research reports, various finance-related textbooks and journals.
4. **Sample Design:** 15 companies listed on NSE and BSE were selected randomly to analyse stock price changes through tender offer buyback announcement.
5. **Tools for Analysis:** Ration Analysis and paired t-test two samples for means were selected for the treatment of data.

HYPOTHESIS

H_0: There is no significant difference between EPS mean before share buyback announcement and after share buyback

H_0: There is no significant difference between ROE mean before share buyback announcement and after share buyback.

H_0: There is no significant difference between ROA mean before share buyback announcement and after share buyback

H_0: There is no significant difference between P/E mean before share buyback announcement and after share buyback

DATA ANALYSIS AND INTERPRETATION

Sr. no.	Name of company	Buy back price (₹)	Record date	Open date	Close date
1	Aarti Drugs Limited	875	January 19, 2018	February 14, 2018	February 28,2018
2	Bharat Electronics	182.5	February 9, 2018	March 05, 2018	March 16, 2018
3	Balrampur Chini Mills	150	March 6, 2018	March 12,2018	March 23,2018
4	Mangalam Organics	230	April 4, 2018	April 23, 2018	May 7, 2018
5	Jagran Prakashan Ltd.	195	Jun 15,2018	July 10,2018	July 23,2018
6	TCS	2100	August 18, 2018	September 6, 2018	September 21,2018
7	HCL Technologies	1100	August 31, 2018	September 18, 2018	October 3, 2018
8	BHEL	86	November 6, 2018	December 13, 2018	December 21,2018
9	ONGC	159	January 4, 2019	January 29, 2019	February 11, 2019
10	NALCO	75	October 26, 2018	November 13,2018	November 28,2018
11	Wipro	325	June 21,2019	August 14,2019	August 28,2019
12	BSE	680	July 29, 2019	August 30,2019	September 16,2019
13	Just Dial Ltd.	700	July 3,2020	August 4,2020	August 17,2020
14	Triveni Engineering & Industries Ltd.	105	August 28,2020	October 5,2020	October 16,2020
15	NTPC	115	November 13,2020	December 7,2020	December 18,2020

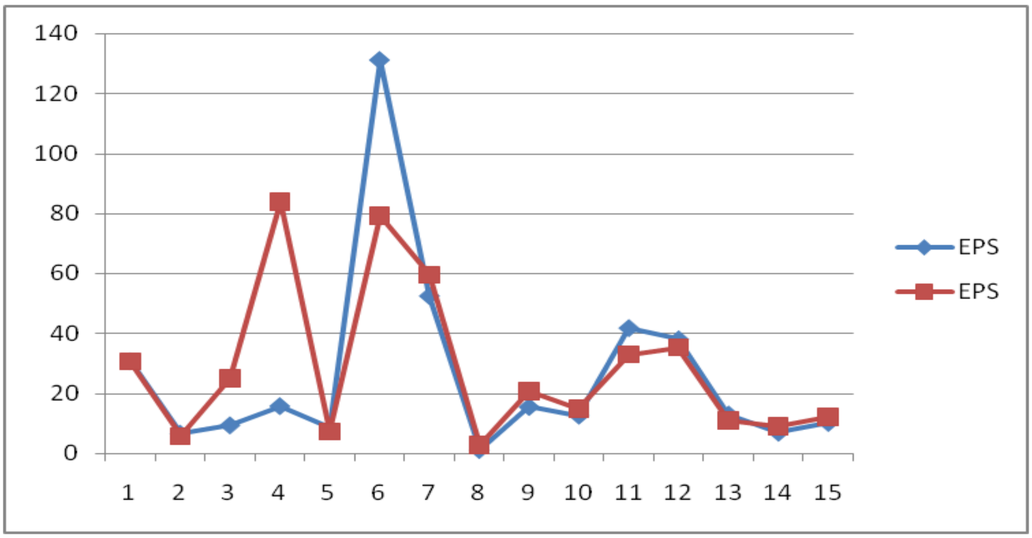
(source: investorzone.in)

IMPACT OF BUY BACK ON EPS

(Below stated EPS is **diluted EPS excluding extra ordinary items.)**

Sr. no	Name of company	Before share buyback	EPS	After share Buyback	EPS	% change (+/ -)
1	Aarti Drugs Limited	March 2017	30.78	March 2018	30.67	-0.35%
2	Bharat Electronics	March 2017	6.64	March 2018	5.70	-14.16%
3	Balrampur Chini Mills	March 2018	9.41	March 2019	24.98	+165.46%
4	Mangalam Organics	March 2018	15.82	March 2019	84.05	+431.29%
5	Jagran Prakashan Limited	March 2018	8.52	March 2019	7.30	-14.32%
6	TCS	March 2018	131.15	March 2019	79.34	-39.50%
7	HCL Technologies Limited	March 2018	52.50	March 2019	59.66	+13.64%
8	BHEL	March 2018	1.19	March 2019	2.76	+131.93%
9	ONGC	March 2018	15.54	March 2019	20.86	+34.23%
10	NALCO	March 2018	6.94	March 2019	9.06	+30.55%
11	Wipro	March 2019	12.67	March 2020	14.84	+17.13%
12	BSE	March 2019	38.08	March 2020	35.37	-7.12%
13	Just Dial Limited	March 2020	41.81	March 2021	33.00	-21.07%
14	Triveni Engineering & Industries Limited	March 2020	13.01	March 2021	11.14	-12.07%
15	NTPC	March 2020	10.22	March 2021	12.18	+19.18%

(source: moneycontrol.com, computed by researcher)



Above table and chart stated the percentage increment or decrement in EPS of particular company before buyback and after buyback. This shows the effect of tender offer buyback on EPS. In general terms it's one of the reasons of buyback share for increase the per share value (EPS), but out of all sample companies seven has negative figure which means that EPS has been affected by buyback negatively. In TCS Maximum decrement noted and it is (-39.50%). Further remaining eight companies EPS affect positively by buyback and EPS increases. Maximum increment noted in Mangalan Organics and it is (+431.29%). As far as study concern EPS will increase after tender offer buyback announcement because after buyback there were no. of shares decrease which increases the EPS but here almost half of the result shows negative effect of buyback on EPS.

Study of the Hypothesis:

H_0: There is no significant difference between EPS mean before share buyback announcement and after share buyback

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	26.28533	28.72733
Variance	1065.655	681.9745
Observations	15	15
Pearson Correlation	0.703326	
Hypothesized Mean Difference	0	
Df	14	
t Stat	-0.40385	
P(T<=t) one-tail	0.346213	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.692426	
t Critical two-tail	2.144787	

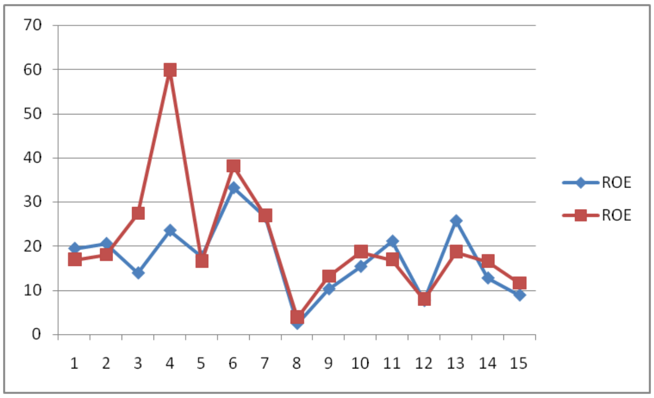
Interpretation:

The P value (Two Tail) in the preceding table is 0.692426, which is more than the significance value 0.05 (P value 0.05), indicating that the H0 Hypothesis is accepted and that there is no significant difference between EPS mean before and after share buyback.

IMPACT OF BUY BACK ON ROE

Sr. no	Name of company	Before share buyback	ROE	After share Buyback	ROE	% change (+/ -)
1	Aarti Drugs Limited	March 2017	19.50	March 2018	16.94	-13.13%
2	Bharat Electronics	March 2017	20.61	March 2018	18.02	-12.57%
3	Balrampur Chini Mills	March 2018	13.93	March 2019	27.39	+96.63%
4	Mangalam Organics	March 2018	23.61	March 2019	59.87	+153.58%
5	Jagran Prakashan Limited	March 2018	17.59	March 2019	16.52	-6.08%
6	TCS	March 2018	33.27	March 2019	38.10	+14.52%
7	HCL Technologies Limited	March 2018	26.70	March 2019	26.88	+0.67%
8	BHEL	March 2018	2.47	March 2019	3.84	+55.47%
9	ONGC	March 2018	10.31	March 2019	13.16	+27.64%
10	NALCO	March 2018	12.77	March 2019	16.52	+29.37%
11	Wipro	March 2019	15.41	March 2020	18.68	+21.22%
12	BSE	March 2019	7.65	March 2020	8.02	+4.84%
13	Just Dial Limited	March 2020	21.15	March 2021	16.94	-19.91%
14	Triveni Engineering & Industries Limited	March 2020	25.77	March 2021	18.67	-27.55%
15	NTPC	March 2020	8.90	March 2021	11.57	+30%

(source: moneycontrol.com, computed by researcher)



A buyback reduces the company's equity, but it also reduces the number of shareholders who have a share of the company. In reality, because buybacks reduce the amount of marketable business shares on the market, share prices tend to rise, leaving remaining shareholders with share that is more valuable than before. Above table shows the percentage increment and decrement of Return on Equity by tender offer buyback. Out of total sample companies five has negative figures which indicates that ROE affects negatively. Maximum decrement notes in Triveni Engineering & Industries Limited and it is (-27.55%). Remaining ten has positive effect by tender offer buyback. Maximum increment noted in Mangalam Organics at (+153.58%) as we have seen above that how buyback affects positively to the ROE. This helps to the investors while taking decisions regarding buyback participation.

Study of the Hypothesis:

H_0: There is no significant difference between ROE mean before share buyback announcement and after share buyback.

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	17.30933	20.74133
Variance	68.11291	184.559
Observations	15	15
Pearson Correlation	0.659436	
Hypothesized Mean Difference	0	
Df	14	
t Stat	-1.29841	
P(T<=t) one-tail	0.107564	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.215128	
t Critical two-tail	2.144787	

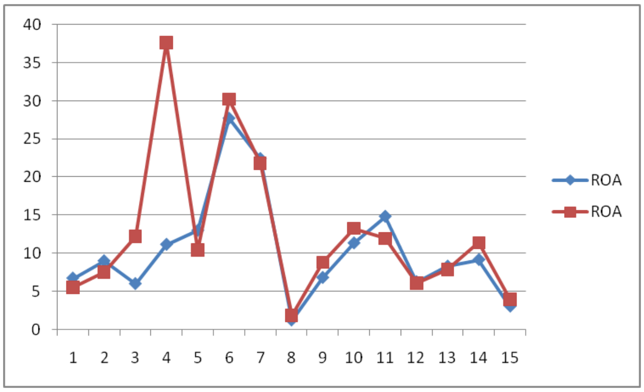
Interpretation:

The P value (Two Tail) in the preceding table is 0.215128, which is more than the significance value 0.05 (P value 0.05), indicating that the H0 Hypothesis is accepted and that there is no significant difference between ROE mean before and after share buyback.

IMPACT OF BUY BACK ON ROA

Sr. no	Name of company	Before share buyback	ROA	After share Buyback	ROA	% change (+/ -)
1	Aarti Drugs Limited	March 2017	6.76	March 2018	5.57	-17.60%
2	Bharat Electronics	March 2017	9.02	March 2018	7.55	-16.30%
3	Balrampur Chini Mills	March 2018	6.03	March 2019	12.25	+103.15%
4	Mangalam Organics	March 2018	11.18	March 2019	37.66	+236.85%
5	Jagran Prakashan Limited	March 2018	13.01	March 2019	10.45	-19.68%
6	TCS	March 2018	27.72	March 2019	30.21	+8.98%
7	HCL Technologies Limited	March 2018	22.43	March 2019	21.85	-2.59%
8	BHEL	March 2018	1.26	March 2019	1.87	+48.41%
9	ONGC	March 2018	6.84	March 2019	8.83	+29.09%
10	NALCO	March 2018	9.18	March 2019	11.43	+24.51%
11	Wipro	March 2019	11.36	March 2020	13.29	+16.99%
12	BSE	March 2019	6.29	March 2020	6.15	-2.23%
13	Just Dial Limited	March 2020	14.86	March 2021	11.99	-19.31%
14	Triveni Engineering & Industries Limited	March 2020	8.32	March 2021	7.90	-5.05%
15	NTPC	March 2020	3.08	March 2021	4.01	+30.19%

(source: moneycontrol.com, computed by researcher)



After buyback company's excess cash decrease because it was used as a buyback premium to the shareholders and by reduction in cash total assets reduced which leads to the increase in ROA. Above table shows the percentage increment and decrement in ROA by tender offer buyback. Out of total sample companies seven has been affected negatively and ROA decreases after buyback. Maximum decrement noted in Jagran Prakashan Limited (-19.68%) & Just Dial Limited (-19.31%) both has about to same change. but remaining eight affected positively and it's ROA increases. Maximum increment noted in Mangalam Organics and it is (+236.85%).

Study of the Hypothesis:

H_0: There is no significant difference between ROA mean before share buyback announcement and after share buyback

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	10.48933	12.734
Variance	48.54076	98.00863
Observations	15	15
Pearson Correlation	0.698144	
Hypothesized Mean Difference	0	
Df	14	
t Stat	-1.22649	
P(T<=t) one-tail	0.120121	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.240242	
t Critical two-tail	2.144787	

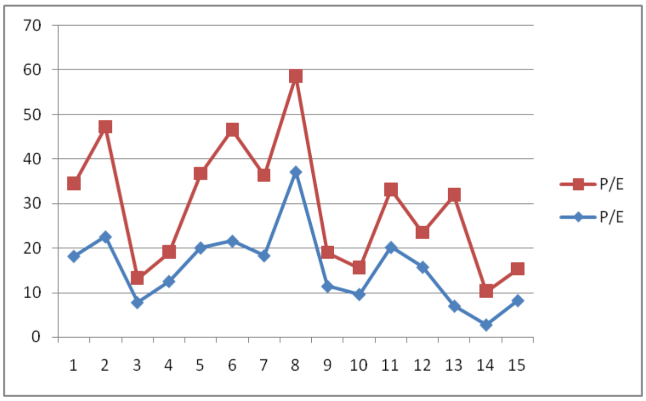
Interpretation:

The P value (Two Tail) in the preceding table is 0.240242, which is more than the significance value 0.05 (P value 0.05), indicating that the H0 Hypothesis is accepted and that there is no significant difference between ROA mean before and after share buyback.

IMPACT OF BUY BACK ON P/E

Sr. no	Name of company	Before share buyback	P/E	After share Buyback	P/E	%change (+ / -)
1	Aarti Drugs Limited	March 2017	18.21	March 2018	16.29	-10.54%
2	Bharat Electronics	March 2017	22.57	March 2018	24.75	+9.66%
3	Balrampur Chini Mills	March 2018	7.79	March 2019	5.47	-29.78%
4	Mangalam Organics	March 2018	12.56	March 2019	6.48	-48.41%
5	Jagran Prakashan Limited	March 2018	20.08	March 2019	16.67	-16.98%
6	TCS	March 2018	21.60	March 2019	25.00	+15.74%
7	HCL Technologies Limited	March 2018	18.32	March 2019	18.02	-1.64%
8	BHEL	March 2018	37.17	March 2019	21.60	-41.89%
9	ONGC	March 2018	11.44	March 2019	7.52	-34.27%
10	NALCO	March 2018	9.62	March 2019	5.97	-37.94%
11	Wipro	March 2019	20.20	March 2020	12.95	-35.89%
12	BSE	March 2019	15.75	March 2020	7.69	-51.17%
13	Just Dial Limited	March 2020	6.99	March 2021	24.94	+256.80%
14	Triveni Engineering & Industries Limited	March 2020	2.77	March 2021	7.48	+170.04%
15	NTPC	March 2020	8.24	March 2021	7.06	-14.32%

(source: moneycontrol.com, computed by researcher)



As we discussed above buyback improved the EPS which ultimately improves the P/E Ratio. Above table shows the P/E ratio increment and decrement which occurs by buyback. Only three companies had improvement in P/E ratio and maximum increment noted in Just Dial Limited (256.80%). Remaining has affected negatively and P/E declines. Maximum decrement noted in BSE (51.17%).

Study of the Hypothesis:

H_0: There is no significant difference between P/E mean before share buyback announcement and after share buyback

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	15.554	13.85933
Variance	72.9637	57.82985
Observations	15	15
Pearson Correlation	0.585934	
Hypothesized Mean Difference	0	
df	14	
t Stat	0.887663	
P(T<=t) one-tail	0.194859	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.389718	
t Critical two-tail	2.144787	

Interpretation:

The P value (Two Tail) in the preceding table is 0.389718, which is more than the significance value 0.05 (P value 0.05), indicating that the H0 Hypothesis is accepted and that there is no significant difference between PE mean before and after share buyback.

SUGGESTIONS

From the investors point of view, buyback returns handsome amount if any insider news they have otherwise there may few chances to earn profit. Buybacks may result in a short-term rise in stock price, but there may some insiders who enjoys profit while other investors are misled. This price increase may prove to be beneficial at first, but the benefit is usually temporary, but when equilibrium returning once, the market understands that the company has done nothing to raise its actual value. Those investors who invest after the price rise may lose their money. Some shareholders consider the tax benefit and for so they take much of interest in buyback but again here tax provisions also for buyback shares and profit from buyback also taxable.

From organisation's point of view, it might be good to employ excess cash for buyback but if for any tax benefit the company announce buyback by taking debt it would have adverse effects. While if we see the results there is no effect of buyback on EPS, ROE, ROA and P/E of a company, so there is no wealth increment of shareholders while wealth of investors increases the wealth of company. So, except the reason to increase the per share price, for other reasons company can choose this option to buy back shares.

CONCLUSION

Results reveal that there is no impact of tender offer buyback announcement and tender offer buyback on EPS, ROE, ROA and P/E of a company. Above stated hypothesis clears that there is no significant difference between means of variables before share buyback announcement and after buyback. Study concludes that if the company buybacks shares for increase the share valuation it may work for short period of time but in long run it wouldn't work anymore or negligible changes may occur.

LIMITATIONS OF THE STUDY

1. The study's primary limitations are related to the study's availability of data, time period and the size of the sample examined.
2. The current analysis is based on financial information gathered from official websites of selected sample companies, the NSE, BSE, and annual reports. As a result, the accuracy, and superiority of secondary data are directly responsible for the study's excellence.
3. Due to a lack of resources and data accessibility, the analysis could not be expanded over a longer period of time.
4. Due to limitations such as non-availability of data for certain companies, the number of companies chosen for the analysis was limited.
5. The current study is almost based on ratio analysis, which has its own limitations too.

FUTURE SCOPE OF THE STUDY

The present study analyses the impact of tender offer share buyback of selected Indian companies on EPS, ROE, ROA and P/E. Further there is a scope to analyse the impact of tender offer buyback between different industries or comparing different companies.

REFERENCES

1. Jariwala, Purnima P (2011), "*Buy Back of Shares in India Through Open Market Purchase."*
2. Harikrishna M (2018)," *Market Reactions to Share Buy Back A Study with Reference to Select Indian Companies."*
3. Asim Mishra, (2005)."*An Empirical Analysis of Share Buybacks in India". ICFAI Journal of Applied Finance"*, Volume 11, Issue 5, 5-24.
4. Shaveta Gupta, Neha Kalra, Rajesh Bagg, (2014). " *Do Buybacks Still Hold their Signalling Strength? An Empirical Evidence from Indian Capital Market*", Amity Business Review, Volume 15, Issue 1, 1-19.
5. Urvashi Varma, Harjit Singh, Alka Munjal, (2018). "*Corporate Restructuring Through Share Buybacks: An Indian Experience".* Australasian Accounting, Business and Finance Journal, Volume 12, Issue 2, 118-133.
6. https://www.kotaksecurities.com/ksweb/articles/sebi-regulations-and-guidelines-on-buyback-of-shares
7. https://corporatefinanceinstitute.com/resources/knowledge/finance/dividend-vs-share-buyback-repurchase/
8. https://www.sec.gov/Archives/edgar/data/802481/000119312506199094/dex996.htm
9. https://www.moneycontrol.com
10. https://m.economictimes.com/

ABBREVIATIONS

NSE: National Stock Exchange
BSE: Bombay Stock Exchange
EPS: Earning Per Share
ROE: Return on Equity
ROA: Return on Assets
P/E: Price to Earning
TCS: Tata Consultancy Services
BHEL: Bharat Heavy Electricals Limited
ONGC: Oil and Natural Gas Corporation
NTPC: National Thermal Power Corporation

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WORKING CAPITAL MANAGEMENT & ITS IMPACT ON PROFITABILITY OF THE SELECTED TEXTILE COMPANIES IN INDIA: AN EMPIRICAL STUDY

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ABSTRACT

One of the most important aspects of business management is working capital management. The impact of working capital management on the textile industry's profitability is investigated in this article. Papers were studied for five years, from 2016 to 2021. This research makes use of both dependent and independent variables. Return on Assets (ROA) is used to quantify profitability, whereas Average Collection Period (ACP), Inventory Conversion Period (ICP), Average Payment Period (APP), and Cash Conversion Cycle (CCC) are used as working capital management proxies. Control variables are Debt Ratio, Current Ratio, Sales Growth, and Firm Size. To quantify all of these variables, this study relies on secondary data collected over a five-year period, from 2016 to 2021. In order to determine the impact of these variables on profitability, descriptive statistics, correlation analysis, and regression analysis were employed in this study. The result of correlation analysis shows that ROA is negatively related with ACP, ICP, CCC and DR while ROA is positively related with APP, current Ratio and growth.

(**Key words**: Working Capital Management, Profitability, Textile Industry, India)

INTRODUCTION

Corporate Financial Management includes a component called working capital management. The link between current assets and current liabilities is known as the current asset-to-current liability ratio. Working capital management is critical for a company's day-to-day operations. Working capital management's goal is to guarantee that a company's operations run smoothly and that it has enough cash on hand to pay down short-term debt and cover upcoming operational needs. It primarily entails inventory management, accounts receivables, accounts payables, and cash management. The primary topic of working capital management is to strike a balance between the three proportions of working capital to offer appropriate support for smooth and effective day-to-day business operations. Liquidity, profitability, and risk are the three factors.[1]

Textile originally meant a woven or knitted fabric made from yarn. But apart from fibre, yarn and fabric or any other product made from these compounds is defined as textile. Fabrics are also associated with the production of clothing. Fibre is a raw material for textiles that can be natural or man-made. The textile industry is an industry that includes sections such as research, design, development, production and distribution of textiles, fabrics and clothing. The textile industry has essential labour-intensive nature capabilities, provides job in the short term and helps in growth of Indian economy. The sector offers unprecedented employment opportunities, especially for people in rural areas. The textile sector in India accounts for 10% of the country's manufacturing production, 5% of India's goods domestic product and 13% of India's exports earnings. Manufacturing progress is also likely to help eliminate regional disparities across the country by supporting rural and semi-urban industries and providing unskilled labour employment.[4]

Working capital management and profitability are intertwined in some way. There are numerous study studies on this relationship in India's various sectors. Working capital management is an essential component of any company's operations. As a result, working capital management is critical in the textile industry. The primary goal of this article is to determine whether "working capital management has any impact on the profitability of India's textile sector or not" Also, with reference to the Indian Textile Industry, the goal of this study is to add an important part of financial management known as working capital management. The remaining study is based on an analysis of literature reviews that are relevant to the topic and give information about the theoretical underpinning for the study, research technique, and sample size.2

REVIEW OF LITERACTURE

1. **Zbigniew golas (2020)** made a study on "Impact of working capital management on business profitability: Evidence from the polish dairy industry". The analyses found that in large companies, an increase in ROA is driven by a reduction in DSIs and CCCs.
2. **Ahmed chand, Sadafakram, Hamza Murad and Luqman Karen (2019)** made a research on "The impact of working capital management on firm profitability: A comparison between seasonal and non-seasonal business". The study concluded that a

negative impact of working capital management on firm profitability. Moreover, the study resulted no difference between seasonal and non- seasonal businesses in terms of WCM and firm profitability.

3. **Dina korent & silvije orsag (2018)** made research on "The impact of working capital management on profitability of Croatian software companies". The result show that after controlling for characteristics of the company and macroeconomic conditions working capital management affects the profitability of Croatian software firms.

OBJECTIVES OF THE STUDY

- ✓ To analyse data related to working capital management and profitability of textile industry firms in India
- ✓ To analyse the relationship of working capital management on profitability for the entities.
- ✓ To statistically infer on the relationship between working capital management and profitability in the Indian textile industry.

RESEARCH METHODOLOGY

Sample Period: This research will be conducted for the period of 2016-2017to 2020-2021. The study was conducted over a period of five years.

Sample Size: The researcher selects five textile companies randomly that is Arvind Ltd., Vardhman textile Ltd., Welspun India Ltd., Raymond Ltd. and Trident Ltd.

Sources of Data: The basic information about the research were taken from the journals, magazines, articles, newspaper and the reference books. The financial data for the study was taken from the annual reports of the selected textile companies in India.

Key Variables: Both dependent and independent variables are used to examine the impact of WCM on the profitability of the selected Textile Companies in India. Here the researchers have selected the one dependent and six independent variables along with one control variable. The following table shows the list of variables taken under the study.

NO.	Type of Variable	Name of the Variable	Measurement	Code
1.	Dependent Variable	Return of Assets	Net income/Total Assets	ROA
2.	Independent Variable	Average Collection Period	(Account Receivable/ Net Sales)*365	ACP
		Inventory Conversion Period	(Inventory/Cost of sales)*365	ICP
		Average Payment Period	(Account Payables/Cost of Sales)*365	APP
		Cash Conversion Period	ACP+ICP+APP	CCC
		Debt Ratio	Total Liabilities/Total Assets	DR
		Current Ratio	Current Assets/Current Liabilities	CR
3.	Control Variable	Sales Growth	$(Sales_t - Sales_{t-1})/ Sales_{t-1}$	Growth

HYPOTHESIS

H_0: There is no significant relationship between Return on Assets and Current Ratio of the selected textile companies in India

H_0: There is no significant relationship between Return on Assets and Average Collection Period of the selected textile companies in India

H_0: There is no significant relationship between Return on Assets and Inventory Conversion Period of the selected textile companies in India

H_0: There is no significant relationship between Return on Assets and Average Payment Period of the selected textile companies in India

H_0: There is no significant relationship between Return on Assets and Debt Ratio of the selected textile companies in India

H_0: There is no significant relationship between Return on Assets and Cash Conversion Period of the selected textile companies in India

DATA ANALYSIS & INTERPRETATION

DESCRIPTIVE STATISTICS ANALYSIS

Table below presents descriptive statistics for 5 textile firms of India for a period of five years from 2016-2017 to 2020-2021.

VARIABLE	Mean	Median	SD	Minimum	Maximum
ROA	0.81	0.81	0.1192	0.43	0.99
ACP	53.31	46.29	21.6317	21.63	122.04
ICP	158.62	149.38	69.1609	44.68	319.32
APP	75.66	53.91	61.913	25.6	247.15
CCC	136.31	114.02	83.76853	14.76	351.49
DR	0.29	0.16	0.32938	0.05	1.31
CR	6.95	1.08	27.7261	0.9	140
GROWTH	0.01	0.02	0.1433	-0.45	0.26

According to the above table, average return on assets for businesses is 8.12 percent of total assets, with median of 8.1 percent and standard deviation value of 11.92 percent. It means that productivity estimates can vary by 8.12 percent from plan to plan on both sides. Its minimum and maximum values are 4.33 percent and 9.9 percent, respectively.

The Average Collection Period (ACP) is used to assess collection policy. For the sampled firms, the ACP average value is 53.31 days. The ACP is interpreted as 53 days on average for organisations in the sample to collect cash from credit sales. for the sampled firms, the minimum and maximum ACP values are 21.63 and 122.04 days, respectively.

The inventory conversion period is use as proxy for inventory policy. The average value of ICP is 158.62 days. This means, firms in the sample needs on average 158.62 to sell inventory. As it is demonstrating in the above table, the standard deviation of inventory holding period is 69.16 days. To the sample firms the inventory holding time frame ranges between 44.58 and 319.32 days as minimum and maximum values respectively.

The average payment period is use as proxy for payment policy. The average value of APP is 75.66 days. The standard deviation of APP for the sample firms is 53.91 days. The period range is between 25.6 and 247.15 days respectively.

Additionally, cash conversion cycle, is 136.31 days on average and the SD is 114.02 days. The minimum value is 14.76 days demonstrates that a firm records a large inventory turnover from credit sales before making a single payment for credit purchases. It implies that the average collection period/or the ACP of the firm is long. On other hand the time for cash conversion period is 351.49 days which is a long period.

The above table also includes descriptive statistics for control variables used in the study. To investigate the firm's size and its relationship to profitability.

CORRELATION ANALYSIS

Pearson's correlation grid is used to examine the relationship between variables, such as working capital management and firm financial performance (profitability measure).

	ROA	*ACP*	*ICP*	*APP*	*CCC*	*DR*	*CR*	*GROWTH*
ROA	1							
ACP	-0.63	1						
ICP	-0.10	-0.32	1					
APP	0.21	0.06	0.10	1				
CCC	-0.41	-0.05	0.66	-0.63	1			
DR	-0.16	0.51	-0.65	-0.31	-0.17	1		
CR	0.19	-0.05	-0.09	0.01	-0.10	0.003	1	
GROWTH	0.69	-0.60	-0.16	-0.33	-0.04	0.03	0.21	1

Above table shows that ROA is negatively related with ACP, ICP, CCC and DR. The negative relation between ROA and ACP is consistent with the perspective that the less the time taken by clients to pay their bills, the more money is accessible to renew the inventory thus leading to more sales which result to an increase in profitability. ROA is positively related with APP, current Ratio and growth.

REGRESSION ANALYSIS

Regression analysis is used to estimate the causal relationship between profitability and other selected dependent variables.

Relationship between CR and ROA:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.19
R Square	0.038
Adjusted R Square	-0.002
Standard Error	0.11
Observations	25

ANOVA

	df	SS	MS	F
Regression	1	0.013	0.013	0.93
Residual	23	0.32	0.014	
Total	24	0.34		

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.8	0.024	32.69	8.75
CR	0.0008	0.0008	0.96	0.34

The CR and ROA have a positive association, as shown in the regression table above. The p value in the table above exceeds the 0.05 level of significance. As a result, we will accept the null hypothesis while rejecting the alternative. As a result, the correlation between CR and ROA is positive and significant.

Relationship between ACP and ROA:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.63
R Square	0.4
Adjusted R Square	0.37
Standard Error	0.094
Observations	25

ANOVA

	df	SS	MS	F
Regression	1	0.13	0.13	15.54
Residual	23	0.2	0.008	
Total	24	0.34		

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.99	0.05	19.6	7.5
ACP	-0.0035	0.0008	-3.94	0.0006

The above regression table indicates that ACP and ROA have a negative association. The p value in the table above is less than the 0.05 significance level. As a result, the null hypothesis will be rejected and the alternative hypothesis will be accepted. As a result, ACP and ROA have a substantial association.

Relationship between ICP and ROA:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.1
R Square	0.012
Adjusted R Square	-0.03
Standard Error	0.12
Observations	25

ANOVA

	df	*SS*	*MS*	*F*
Regression	1	0.004	0.004	0.28
Residual	23	0.33	0.014	
Total	24	0.3414		

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.84	0.061	13.65	1.6
ICP	-0.0001	0.0003	-0.53	0.6

The ICP and ROA have a positive association, as shown in the regression table above. The p value in the table above exceeds the 0.05 level of significance. As a result, we will accept the null hypothesis while rejecting the alternative. As a result, the correlation between ICP and ROA is positive and significant.

Relationship between APP and ROA:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.21
R Square	0.046
Adjusted R Square	0.004
Standard Error	0.11
Observations	25

ANOVA

	df	*SS*	*MS*	*F*
Regression	1	0.015	0.015	1.12
Residual	23	0.32	0.014	
Total	24	0.34		

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.78	0.038	20.51	2.76
APP	0.0004	0.0003	1.058	0.3

The APP and ROA have a positive association, as shown in the regression table above. The p value in the table above exceeds the 0.05 level of significance. As a result, we will accept the null hypothesis while rejecting the alternative. As a result, the correlation between APP and ROA is positive and significant.

Relationship between CCC and ROA:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.41
R Square	0.17
Adjusted R Square	0.13
Standard Error	0.11
Observations	25

ANOVA

	df	*SS*	*MS*	*F*
Regression	1	0.058	0.058	4.73
Residual	23	0.28	0.012	
Total	24	0.34		

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.89	0.043	20.74	2.18
CCC	-0.0005	0.0002	-2.17	0.04

The above regression table indicates that CCC and ROA have a negative association. The p value in the table above is less than the 0.05 significance level. As a result, the null hypothesis will be rejected and the alternative hypothesis will be accepted. As a result, CCC and ROA have a substantial association.

Relationship between Debt Ratio and ROA:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.16
R Square	0.02
Adjusted R Square	-0.01
Standard Error	0.12
Observations	25

ANOVA

	df	*SS*	*MS*	*F*
Regression	1	0.009	0.009	0.64
Residual	23	0.33	0.014	
Total	24	0.34		

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.82	0.032	25.5	2.27
DR	-0.05	0.074	-0.8	0.43

The Debt ratio and ROA have a positive association, as shown in the regression table above. The p value in the table above exceeds the 0.05 level of significance. As a result, we will accept the null hypothesis while rejecting the alternative. As a result, the correlation between Debt ratio and ROA is positive and significant.

CONCLUSION

According to the findings of this study, maintaining an effective level of working capital is critical in all industries, not only the textile industry. Profitability have a considerable relationship, according to the study's findings. ROA has a negative association with ACP, ICP, CCC and DR, according to the correlation analysis. Similarly, ROA is positively related to APP, CR and sales growth. CCC has a negative association with ROA, implying that a greater CCC reduces profitability and vice versa.

Regression analysis was used to check the significant impact on the profitability. The result shows that ROA has positive relationship between ICP, APP, CR and DR and negative relationship between ACP and CCC.

LIMITATIONS OF THE STUDY

This study is based on secondary data taken from published annual reports of leading textile companies and hence the secondary source of data is limitation of the study itself.

This study is only for a period of 5 years from 2016-17 to 2020-21 and therefore, the research only shows the results for that period.

Interpretation based on ratio analysis is based on historical costs which is a limitation in itself.

FUTURE SCOPE OF THE STUDY

The present study aims to find out the impact of working capital on the profitability of the selected textile companies in India still there is a scope to examine the impact of working capital on the Earning Per Share, liquidity, short term solvency of the firm.

REFERENCES

1. efinancemanagemnt. (2021, december). Retrieved from www.efinancemangement.com: www.efinancemanagement.com
2. icai. (2021, november). Retrieved from www.icai.org: https://www.icai.org
3. investopedia. (2021, december). Retrieved from www.investopedia.com: http://www.investopedia.com
4. textileapex. (2021, december). Retrieved from www.textileapex.blogspot.com: http://www.textileapex.blogspot.com
5. fiber2fashion. (2021, december). Retrieved from www.fiber2fashion.com: http://www.fiber2fashion.com
6. dhshtiias. (2021). Retrieved from www.dhshtiias.com: http://www.dhshtiias.com
7. ibef. (2021, december). Retrieved from www.ibef.com: http://www.ibef.com
8. explorable. (2021, november). Retrieved from explorable.com: https://explorable.com
9. libguides. (2021, november). Retrieved from libuides.usc.edu: https://libguides.usc.edu
10. rlf. (2021, november). Retrieved from www.rlf.org.uk: htts://ww.rlf.org.uk
11. Jatin Sankar T.S (2020), "The effect of working capital management on the profitability of firms in the oil and gas industry in India", International Journal of Management. Volume-11, Issue-11, November 2020. ISSN: 0976-6502.
12. Ahmed chand, Sadafakram, Hamza Murad and Luqman Karen (2019), "The impact of working capital management on firm profitability: A comparison between seasonal and Non-seasonal business" Research journal of finance and Accounting. Volume-10, Number-15,2019. ISSN-2222-1697.

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Neo Banking as a Paradigm Shift in the Indian Banking Sector

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ABSTRACT

With digitalization in India, everything is getting digitalized then why not banks. The landscape of banking is experiencing various changes in the last decade with the emergence of new competitors out of the development of the Fintech industry and technological developments. The disruptions are caused due to innovations in the technology which are impacting the business model of banks and its utilization is creating advanced technological bank models. As a result, the traditional business model of banks faces disruptions with the development of the Neo bank business model. The concept of neo banks does not have physical existence as it offers services in an entire digital mode. The concept of neo banking is completely different as customers are availing of all services offered by the traditional banks without physical existence like investment, money lending, money transfer and more. Various financial transactions occur at the banks, people save money and invest in banks. In today's world, it is significant for businesses to fulfil the needs and satisfaction level of customers for their survival but the approach of traditional banking is unable to fulfil the gap which is now filled by neo banking. In this paper, descriptive research is done using the qualitative method as the data is collected from both primary sources including Interviews and secondary sources like existing literature reviews, websites, journals, magazines, articles and research papers. In this paper, we found significant differences between traditional banks and the Neo banks model. The paper further emphasized significant neo banks of India and the services offered by them to customers. In the end, this paper will also put light on the challenges and opportunities of neo banking.

KEYWORDS: Traditional banking, neo banking, digitalization, neo banks, fintech, financial transactions.

INTRODUCTION

The development of technology is the main factor necessitating a change in how institutions function. In the banking sector, change is happening similarly quickly. The new banking companies are working hard to create services that are clear-cut, reasonably priced, easy to use, and practical. In addition to the basic services like receiving deposits and advancing loans, banks today provide a wide range of other services as well. Due to the intense competition in the market, banks also offer extra services to entice customers. Traditional banks have evolved into digital banks. Banks must provide their customers with cutting-edge services for them to increase their market share. Earlier, transactions used to take a very long time, but today they happen quickly and instantly. The digital payment banks can't keep up with the Neo banks. Neo banks are a subset of fintech companies since they are financial institutions that combine traditional and digital elements. These banks operate entirely online and don't have any physical locations. These banks collaborate with well-known banks because they are not regulated. Neo banking differs significantly from traditional banking in several ways. Due to the fact that traditional banking does not offer these kinds of capabilities, the services given are likewise unique in practically every way.

OBJECTIVES OF THE STUDY

- To look at the major Neo banks and their services in India
- To find out the difference between Neo banking and Traditional banking
- To study the opportunities and challenges linked to Neo banking

RESEARCH METHODOLOGY

Descriptive research is done using the qualitative method as the data is collected from both primary as well as secondary sources. Interviews were conducted for collecting the primary data with professionals working in the banking sector for the collection of information regarding present and future predictions regarding changes arising in the banking industry from the launch of neo banking. Secondary data is collected from different sources like existing literature reviews, websites, journals, magazines, articles and research papers. We used a comparative method for analysing traditional and Neo banking in India.

REVIEW OF LITERATURE

Due to the novelty of the concept and the paucity of existing information, studies tend to be futuristic. Previous research points to a novel idea. Komarov & Martyukova (2020) conducted a study to discover the most important requirements, possibilities, and benefits of neo-banking development in the Russian Federation. Retrospective analysis and comparative investigations were used by the researcher. Neo banking has been found to be crucial to the current worldwide digital transition. Shabu & Vasanthagopal (2022) investigated the prevalence of neo baking in India. They also looked at neo banking's prospects and problems from the perspective of the customers. Thematic analysis and content analysis are used to examine client responses on Twitter. Neo bank clients responded well, and this was discovered. This can be used to advance the goals of digitalization. Additionally, they discovered that the banking industry and regulatory organisations are actively developing a new product for the neo banking facility. Temelkov (2020) observed that neo banks and conventional banks were contrasted, and it was discovered that the fintech sector is upending the banking sector. The study also comes to the conclusion that conventional banks must employ modern technologies to protect themselves or risk having their continued existence threatened. Михайловна, (2020) concluded that neo banking is the key element of today's digitalization of banks, according to a poll done by the major Russian neo banks. Emily Soreson (2019) compares conventional banks to the brand-new Neo banking system. The article classifies neo banks as fintech solutions because of their ability to operate online and through applications. According to the report, neo banks are entirely digital in contrast to traditional banks, but as a result, they are only gradually gaining customer support. While traditional banks are subject to full bank licensure, the services offered by neo banks are determined by their licences. Neo banks don't have bank branches because the study distinguishes between the aforementioned banks based on their physical locations. Neo banks are more cost-effective, however, according to a poll, traditional banks provide a wider range of services than neo banks. Amruth Raj Nippatlapalli' (2013) study aims to evaluate the impact and performance of neo-banks on a global basis. It carries out research on the development of neo-banks and the legal systems of five different countries. The paper shed light on the state of the Indian banking sector at the moment and possible repercussions for the fintech sector as neo-banks enter the picture. It will enable potential clients to draught appropriate legislation and develop an understanding of how neo-banks ought to operate.

HOW DO NEO BANKS DIFFER FROM TRADITIONAL BANKS?

Neo banking process is completely online as transactions are done through web services or mobile apps; they have no physical setup for providing services but traditional banks have a physical setup (Rajitha & Sivakumar, 2019). Traditional banks take more time for the approval of any process like service requests or loan sanctions in comparison with neo banks. Traditional banks have their license but presently, neo banks do not have any licenses, they rely on licensed partners for providing banking services. In the traditional banking system, dealings are made through physical meetings but in neo banking, no face-to-face meetings take place for dealings. Traditional banks are costlier than neo banks as they charge some extra amount for the issue of debit cards and cheque books and also have some monthly charges but neo banks do not charge any such amount for keeping customer's money in e-wallet. The concept of neo banking is fully based on artificial intelligence and information technology which observes the activities of customers which is not present in traditional banks. Customers can use the services of neo banks any time without interruptions but traditional banks have time limits even while using their digital platforms. The concept of digital and neo bank is somehow similar as both are offering online services, the only difference between them is that neo banks are based on artificial intelligence and IT whereas digital banks are the digitalized format of traditional banks.

Basis	Traditional banking	Neo banking
Time duration of customer service	Service is provided within limited time frame	24*7 availability of service
Speed	Depends on experience and qualification of employees	Immediate service
Approach	Flexible but limited to less variety	Flexible and carried through convenience
Cost of maintenance	High cost is involved	Cost is low due to availability of free services
Scope	Limited branches	Unlimited and beyond geographical boundaries
Operations	Employees are key models as they maintain the departments	The software packages and servers constitute its significant part

NEO BANKS IN INDIA

At present there are five major Neo banks offering services in India which are:

- **NiYO-** It is Neo bank which is significant offers services to salary-based clients. It has tie-up with a round 3000 corporate sectors and has around 5,00,00 clients (Dokania, 2020). The bank launched the "Global Card" which offers ease in foreign transactions to customers heading for foreign trips. It offers advice and financial assistance to its customers regarding investment strategies and schemes. The bank offers an instant bank account opening service, no transaction charge on ATM and up to 7% rate of interest on saving account (Dokania, 2020).
- **OPEN-** It is a Neo bank launched in the year 2017 and focuses on SMEs. The bank partnered with ICICI Bank for offering services to its clients and currently, 11 banks are with its partnership (Rajitha & Sivakumar, 2019). Neo banking is an extension for solving the challenge of financial inclusion.
- **811 BY KOTAK-** 811 is an initiative by Kotak Mahindra bank to establish a digital platform to ease the business of banking (Jeník, Flaming & Salman, 2020). It is a Neo bank which offers an online platform to its clients for availing services without the need to visit the bank. This neo bank offers a virtual bank account with a 6% rate of interest on a saving account and a virtual card facility for fast processing of payment (Jeník, Flaming & Salman, 2020).
- **InstantPay-** This neo bank service was launched in the year 2020 and also focuses on SMEs for easing the transactions in a business including financial needs, payment and settlements etc (Shabu & Ramankutty, 2022). This banking solution is addressing the needs of SMEs by doing away with the hassles of conventional policies and processes of banking and offers a user-friendly and seamless experience.
- **YONO by SBI-** This neo bank is the most familiar one. It was launched in the year 2017 by the State Bank of India to establish digital platforms (Rawat, 2022). It offers banking services along with exploring lifestyle including cab services, online shopping etc. YONO allows cardless cash withdrawal from the ATM of SBI as it uses the API method which provides a reference number when a customer is withdrawing cash (Rawat, 2022).

INTERVIEWS

In this paper, we conducted interviews with two professionals in this field. The first interviewee is a Branch Manager of Kotak Mahindra Bank and the second Interviewee is the Head of a Department at State Bank of India having expertise in digital payment solutions. Both the interviewees have broad expertise in payment solutions and online banking. Both the professionals made it clear that there is a need of making changes in traditional banking by keeping up with the uprise of neo banks in their interview answers.

The big legacy system is the issue with traditional banks which is a barrier to digitalisation and automating various processes. Both the professionals said that traditional banks do not need to worry about the short-term future but they need to begin making changes for being able to compete and survive in long term. We asked the professionals if neo-banks need to introduce any changes for attracting the customers of traditional banks and if yes then what they should make for attracting customers. Both the professionals answered positively that neo banks are required to introduce some changes for their profitability. Some neo banks are presently facing losses and they are driven by venture capital as they are not generating enough revenue. They need to venture into other money-making activities for their long-term survival. Offering loans to customers is a smart option as it will help neo banks in earning money, but it comes with risks.

According to the Departmental Head, probably, there will be a natural shift in neo bank's customer base as the young generation is attracted towards it. The branch manager made a concluding comment that he is sure that conventional banks will quickly act after realising that neo-banking is an actual threat to their survival. The Departmental Head also point out that customers always feel the need for frictionless, fast, simple and easy work along with extra safety mechanism and authentication which considers neo banking as a boon in the banking sector.

CHALLENGES TO NEO BANKING

Every project has its limitations and flaws. Neo banking is subject to some limitations as any new venture since it follows a different paradigm.

- **Security:** The largest challenge with neo banks is security and safety owing to the surge in cyberfrauds. An ordinary consumer's faith is shattered when they learn about cyberbanking crimes.

- **Cash Payments**: The average Indian customer always chooses in-person transactions over online ones. Neo banks should be avoided by anyone who frequently makes monetary transactions (Agrawal, 2021).
- **No Interaction:** Some Indian clients find it challenging to comprehend that Neo banks just conduct business online and don't engage in any face-to-face interactions with customers.
- **Limited-Service Offerings**: Neo banks have very few services to offer their clients because they do not hold an RBI licence. The financial products they provide are hence somewhat constrained. Various deposit types may not be accepted by specific institutions.
- **Stolen or fake identities:** These banks are regularly the target of scammers. Unscrupulous individuals can easily create false identities or open several accounts using ones that have been stolen.
- **Internet fraud:** Given the persistent rise in online fraud, phishing, account takeovers, and mobile Trojans, many consumers continue to assume that using a digital bank to move money online is riskier. Neo banks are required to have integrated and meticulously maintained digital security and antifraud systems, including secure front-end systems, safe back-end systems, compliance, and reporting (Dokania, 2020). For neo banks, this may be much more crucial than it is for conventional banks. Neo banks must prove to their customers that they have enough efficient safeguards in place to protect their accounts from all types of fraud to acquire their trust.

OPPORTUNITIES TO NEO BANKING

Although the concept of neo banking is still relatively new, other departments and companies are embracing digitalization more rapidly and enthusiastically. All economies have embraced fintech and digitization in this decade of advancement and the imminent complete shift to artificial intelligence (Shabu & Vasanthagopal, 2022). The high degree of globalisation and involvement in international trade is another crucial element in the corporate culture of spontaneous adaptability. Here are a few of the main benefits of neo-banking that research papers and banks themselves have emphasised.

- **Convenience:** As many people visit their banks on a weekly or monthly basis, Neo banks will be a godsend for these people as they won't have to waste their precious time travelling to and from the bank (Shabu & Ramankutty, 2022).

- **Multi-Currency Accounts:** In contrast to conventional banks, neo banks allow customers to open and utilise bank accounts in two or more different currencies.
- **Beneficial for International Travelers:** International travellers will find the Neo banks to be helpful because they also offer an international debit card, which will appeal to those who frequently visit other countries.
- **Simple and convenient account creation process:** The customer may easily submit their documents online, have them verified, and immediately create their account with acknowledgement from any place.
- **Instantaneous transactions:** This is now a standard aspect of fintech, but neo banking has made it possible for large-scale transactions at the corporate level (Agrawal, 2021). All payments and transactions are instantly reflected on both parties' accounts. Through a mobile app, it is very simple to find and revoke if necessary.
- **Analytics:** To help clients monitor the activity of their accounts, accurate information about income and expenses is displayed to them with the use of charts, graphs, etc.

LIMITATIONS AND FUTURE RESEARCH

This study has some limitations. The snowballing method was not used in the literature review which could have led to a wide range of articles. Secondly, the professionals interviewed are working with different institutions which means that experience may vary and makes the generalization of results harder. An improvement can be interviewing the professionals from a set of neo banks. We interviewed only two professionals as the time is limited so the study and the perspective received from them are limited and could have impacted the results. We recommend that more research should be done regarding Neo banking as it is a new topic. Neo bank is in the early adoption stage so it will be interesting to investigate the socio-economic factors' impact on its adoption curve.

CONCLUSION

The future of the banking sector includes neo banks. It allows seamless banking services while eliminating the gap between customers and traditional banks. The age of digitalization makes it necessary for converting traditional banks into neo banks. Neo banks have strengths like the capability of swiftly adapting to changes in the preference of the customers, low cost of operations and ability to offer personalised services. Neo banking is offering a user-friendly interface which offers hassle-free transactions. SMEs are being targeted by neo banks as it is the suitable option of banking for the process of collection, fast payment and tax compliances. Neo banks have the potential of overtaking the market of traditional banks but still, they are in the early development stage and have to overcome various obstacles. Traditional banks should consider neo banks as a serious threat. The study found that the survival of neo bank is dependent upon the ability to keep pace with the available opportunities along with technological development and facing the challenges to strengthen its position in the financial market.

REFERENCES

Agrawal, S. (2021). CHAPTER-13 NEO-BANKING: THE NEXT GEN BANKING. *CHANGING SCENARIO OF BUSINESS AND MANAGEMENT*, 170.

Dokania, Y. (2020). NEO Bank-Revolution in Indian Banking Sector-A Critical Analysis. *Issue 6 Int'l JL Mgmt. & Human., 3,* 361.

Jeník, I., Flaming, M., & Salman, A. (2020). Inclusive digital banking: *Emerging markets case studies. Consultative Group to Assist the Poor Working Paper. Washington*, DC.

Konarov, A. v., & Martyukova, V. M. (2020). NEOBANKING A DIRECTION OF DEVELOPMENT OF MODERN FINANCIAL TECHNOLOGIES. *Vestnik Universiteta*, *3*, 134–142. https://doi.org/10.26425/1816-4277-2020-3-134-142

Rajitha, R., & Sivakumar, B. (2019). A Study on Neo Banking Trends in India. *Shanlax International Journal of Commerce, 7*(S1), 203-206.

Rawat, N. YONO SBI.

Samiti's, S. H. A. S. NEO BANK: A NEW LANDSCAPE.

Shabu, K., & Ramankutty, V. (2022). Neobanking in India: Opportunities and Challenges from Customer Perspective. *Available at SSRN 4037656.*

Shabu, K., & Vasanthagopal, R. (n.d.-a). *Neobanking in India: Opportunities and Challenges from Customer Perspective*. Retrieved July 3, 2022, from https://ssrn.com/abstract=4037656

Shabu, K., & Vasanthagopal, R. (n.d.-b). *Neobanking in India: Opportunities and Challenges from Customer Perspective*. Retrieved July 4, 2022, from https://ssrn.com/abstract=4037656

Temelkov, Z. (2020). DIFFERENCES BETWEEN TRADITIONAL BANK MODEL AND FINTECH BASED DIGITAL BANK AND NEOBANKS MODELS DIFFERENCES BETWEEN TRADITIONAL BANK MODEL AND FINTECH BASED DIGITAL BANK AND NEOBANKS MODELS DIFFERENCES BETWEEN TRADITIONAL BANK MODEL AND FINTECH BASED DIGITAL BANK AND NEOBANKS MODELS. In *Ltd*.

Михайловна, М. В. (n.d.). Комаров Алексей Валерьевич неОБАнКинГ КАК нАПРАВЛение РАЗВиТиЯ СОВРеМеннЫХ ФинАнСОВЫХ ТеХнОЛОГиЙ. *Вестник Университета №*, *3*, 2020. https://doi.org/10.26425/1816-4277-2020-3-134-142

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Significance of Educational Psychology for Teachers Education and Gujarat Rural Area Development

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Abstract: -

This research paper explains the importance of educational psychology for teacher education and development of rural Gujarat. The first is how well teachers can teach students the subject they have learned. It also talks about why educational psychology is so important in education. Development of rural area is as necessary as development of urban area. Rural people leave the village and move to the city. In such a situation, the village cannot develop. The people in the state of Gujarat are rich in economic, political, trade-business, education and other things. People in rural areas have access to agriculture and animal husbandry as a source of income. Children from 6 to 14 years of age are given free education in government schools. Along with education, importance is also given to the physical and mental health of the children. The children are given meals (which the government calls midday meals) for school meals. Students can get education up to Std-8 in the village, while the importance of education is not seen in Antaliyan village. The teacher must also be qualified to learn. | He can understand the child's grief along with the subject. The teacher should have proper training, psychology, traits. Now, every school needs to have a school counsellor.

Keywords: Education, Psychology, Teachers' Education, Development, Behaviour

Introduction: -

Gujarat is a state on the west coast of India. It is the fifth largest state in terms of area and the ninth largest in terms of population. Gujarat's economy is the fourth largest in India. Its capital is Gandhinagar, while its largest city is Ahmedabad. The Gujarat Board of Secondary and Higher Secondary Education (GSHSEB) is in charge of schools run by the Government of Gujarat. The Institute of Rural Management Anand (IRMA) is one of the leading regional institutes in rural management. IRMA is a unique organization in the sense that it provides vocational education to train managers for rural management. Gujarat has 252 talukas, comprising 18,618 villages and 242 towns.

Educational Psychology: -

Educational psychology is a branch of psychology that deals with the scientific study of human learning. The study of learning processes from both cognitive and behavioural perspectives allows researchers to understand individual differences in intelligence, cognitive development, impact, motivation. The concept of new strategies for learning processes in humans in the field of educational psychology involves the study of memory, conceptual processes, and individual differences (through cognitive psychology). School psychology began in the early 20th century with the concept of intelligence testing leading to provisions for special education students who could not adhere to a regular classroom curriculum. Johann Herbert (1776–1841) is considered the father of educational psychology. He thought that teachers should take into account existing mental groups of students which they already know when presenting new information or materials. Here are 5 steps teachers should take:

1) Review the material already learned by the student.

2) Prepare the student for new material by giving an overview of what they are learning next.

3) Introduce new content.

4) Combine new content with old content that has already been learned.

5) Demonstrate how students can apply new materials and what they will learn next.

Johann Pestalozzi (1746–1827), a Swiss educational reformer, emphasizes the child rather than school materials.

Nathaniel Gage (1917-2008) focused on improving teaching in educational psychology and understanding the processes involved in teaching. He edited the book Handbook of Research on Teaching (1963).

His opinion is as follows: -
1) The teaching processes
2) Teaching materials
3) Students' abilities and motivation levels
4) Classroom management

Definition of Educational Psychology:

"Educational psychology is the branch of psychology that deals with teaching and learning and also covers the whole range of personality and behaviour related to education." - **Skinner**

"While general psychology is pure science, educational psychology is its use in the field of education with the aim of socializing the individual and changing his behaviour." – **Anderson**

First, the purpose of science itself (for what this knowledge is learned and developed by experts), second, the purpose of the course to learn something. The following is an analysis of the ideas described by two leading psychologists (Lindgreen and Bernard): a. According to Lindgreen, "The purpose of educational psychology is to help teachers develop potential teachers in understanding the best educational process". B. According to Bernard, "Basically the purpose of educational psychology is to understand how the process of teaching and learning is more effective and appropriate to the goal or purpose." Educational psychology can help teachers better understand learning principles to create more engaging and effective lesson plans and classroom experiences. It can also promote a better understanding of how the learning environment, social factors and students 'motivation can influence students' learning.

Characteristics of Educational Psychology:

- It combines two fields i.e. education and psychology.

- It is a scientific study of human behaviour in educational situations.

- It relates to these factors, principles and techniques that relate to various aspects of the child's growth and development.

- It relates to the learning situation and process by which learning can become more efficient and effective.

Functions of Educational Psychology:

- To give complete knowledge of the nature of the child

- To provide an understanding of the nature, aims and objectives of education.

- To present principles under the measurement and evaluation of mental abilities, aptitudes, achievements, interests and personalities of the organization.

The teacher uses some appropriate teaching methods, appropriate motivational techniques and teaching tools that also contribute to educational psychology. Knowledge of psychology is required to study the problem, intelligent or retarded child. The problem of discipline in school can be dealt with psychologically.

Education: -

Teacher conducts research on classroom management and pedagogy to lay the foundation for education programs. Education is very important in our life Education helps in understanding various life events and forming opinions about them. Accumulated knowledge thus leads to the development of critical thinking. Students learn to develop an understanding of how to find the best solution to a problem. Education gives us skills, techniques, information and knowledge to know, understand and respect our duties towards our society, family and nation.

"Let the girls 'education campaign spread in every home, let the lamp of daughters' education be lit in every heart, only then the dream of a golden Gujarat will come true."

- Narendra Modi (Kanya Kelavani Mahotsav 2009)

The Minister of Education of India is **Shri Dharmendra Pradhan.** The Minister of Education of the State of Gujarat is Shri Jitubhai Savjibhai Waghani who is in charge of Education (Primary, Secondary, Adult), Higher and Technical Education, Science and Technology.

Schemes adopted for enhancing education: -
- Child Admission.
- Lunch plans
- Healthy hair
- Vidyalakshmi Bonds
- Vidya Deep Yojana
- Teacher Training and Distance Teacher Training Program

Aims for UEE (universalization of primary education) for children aged 6 to 14 years.

Education Department's 'Sarva Shikshan Abhiyan' (National Program) and other promotional schemes are managed by Gujarat Primary Education Council (GCEE).

Teacher Training: Educational psychologists can also act as consultants to design and create educational materials, classroom programs, and online courses. The government establishes teacher training centres and under education reform programs, school development institutions receive grants and teacher incentives to obtain advanced education certificates**.** One of the wonderful things about teaching is that teachers have different styles, approaches, personalities and backgrounds, and they all have valuable lessons and experiences that they can impart to students.

Schemes adopted for enhancing education: -

Primary education

1) Vidyalakshmi Bond Scheme

2) Vidyadeep Yojana

3) Poo. CM's The Girl Child Development Program

4) School-health check-up program

5) Computer training at primary education level

There are also other schemes: Department of Secondary and Higher Secondary, Self-employment programs for women in technical education, Girls' education.

2) Review of literature: -

In general, there are primarily educational psychology survey courses whose primary purpose is to cover as many theories as possible and as much information as possible in a short period of time. Surprisingly, the relevance of such courses has recently been challenged (Anderson, et al., 1995; Berliner, 1993; Hoy-Woolfok, 2000; O'Donnell and Levin, 2001; Weinstein and Way, 2003). In fact, where the importance of such courses was once acknowledged, educational psychology is now in a position to defend the inclusion of its content in teacher preparation programs (Anderson, et al., 1995; Weinstein & Way, 2003). Proposals for how to make educational psychology courses more relevant and useful are many and varied (see, for example, Anderson, et al., 1995; Hoy-Wolfock, 2000; Paulo, 2005; Reninger, 1996; Shuel, 1996).) According to Doyle & Carter (1996, p. 25), for example, "it is not enough to argue that educational psychology can be taught more effectively." Doyle and Carter emphasize the need for educational psychology to contribute to teachers' "action frames" or methods instruction. Methods can be the role of educational psychology in instruction; However, we do not find that this represents the central contribution of educational psychology to teacher preparation and professionalization. The type of knowledge that Doyle and Carter emphasize, while not unimportant, is largely procedural and vague and, therefore, not ideally suited for the development of types of reflective engagement with practice that would lead to generalizations and flexible principles. Essential practice for today's professional teachers. Instead, there is a need for solid grounding in the knowledge of learners and education (development, understanding, motivation, etc.).

Methods: -

1) To get facts about learning behaviour rather than opinions.
2) Getting good information so that the learner can get guidance.

Educational psychology as a science of education deals with the problems of teaching and learning and helps the teacher in his task of modifying the learners behaviour and bringing about an all-round development of his personality.

In knowing the learner, Enabling the teacher to know their self-strengths, limitations and to acquire essential teaching skills. Selection and organization of proper learning. Experiences suited to the individuality and developmental stages of the learner. Suggesting suitable methods and techniques for providing the desired learning experience. In arranging proper learner situation.

Conclusion: -

This research paper demonstrates the centrality of knowledge in the psychology of teacher education and how the government works in the progress of village development in the state of Gujarat. The knowledge of educational psychology can be obtained through websites, seminars, libraries, and others. Educated individuals help create more jobs for everyone. This in turn helps in solving the problem of unemployment in the country. Early childhood education is really important for a child's brain development, and it also helps them to learn important social and mental skills early in life. he primary focus of educational psychology is the study of how people learn. This includes exploring instructional processes, studying individual differences in how people learn, and developing teaching methods to help people learn more effectively.

Reference: -

L. M, Anderson, et, al. educational psychology for teachers: Reforming our courses, rethinking our roles. Educational Psychologist, 30, 3, 143157 (1995).
W.Doyle & K.Carter, Educational psychology and the education of teachers: a reaction. Educational Psychologist, 31, 1, 23-28(1996). A. Hoy-Woolfolk, Educational psychology in teacher education. Educational Psychologist, 35, 4, 257-270. O'Donnell, A. M. & Levin , J. R.
https://cyberleninka.org/article/n/1204895#:~:text=It%20is%20very%20essential%20for,has%20become%20a%20contended%20issue.
https://en.wikipedia.org/wiki/Education
https://www.verywellmind.com/what-is-educational-psychology-2795157#:~:text=Educational%20psychology%20is%20the%20study,people%20learn%20and%20retain%20information.

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Impact of Social Media on Children with Special Reference to Chetan Bhagat's 400 Days

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Abstract

Social media is a rapidly evolving platform for all the people to communicate with each other, express their views and share audios, videos and the content of all kinds. Spending time on social media has become almost a way of life for most of the people. But is it good for your children to have to same habit? The main aim of this research paper is to find out the answer of the above question. 400 days is the 10th novel and the third novel in detective Keshav series of Chetan Bhagat in which he tries to explain the bad effect of social media on children. This book has a message that are our children safe? We will not let our child speak to a stranger in the public place or in park. But today every child can be approached by almost anyone through this so called social media. In this novel Chetan Bhagat talks about technology, the dangers of social media and mobile addiction through the character of Siya, a thirteen years old child who gets kidnapped.

Key Words- Chetan Bhagat, 400 Days, Social media, Children

Introduction

Chetan Bhagat is a young and famous writer whose novels present the problems of current time. A.R. Rahman, in time magazine on Chetan inclusion in the time 100 most influential people in the world said, "Many writers are successfully at expressing in what's in their heart or articulating a particular point of view. Chetan Bhagat's books do both and more." This is the era of social media. Everyone has got used to spending all their time on social media. But this habit is not good for children. According to a study the children younger than 11 years old who use Instagram and any social media app, there may be changed in their daily behavior like - increased irritability, increased anxiety, lack of self-esteem.

Chetan Bhagat in his 400 days discuss about the dangers of social media and the mobile addiction to children. In older times, children were kidnapped by giving them lollipops. But this is the age of technology. Today the lollipop can be an emoji or a video game. Who is talking to you its very easy to hide behind fake accounts. If your child is on Instagram anybody can DM (direct message) this is the idea that Chetan Bhagat gave in his 10th novel 400 days.

The book starts with Keshav Rajpurohit who is preparing for IPS. He also runs a detective agency along with his best friend Saurabh, who stays with Keshav and his parents in their new apartment in a gated community called Icon. One day Keshav is contected by Alia Arora, who lived in the same residential complex as him. Alia wants keshav's help in finding Siya, her thirteen years old daughter who has kidnapped nine months ago. Alia informed Keshav that her missing daughter's case has already been investigated by the police in the past. But despite the police’s efforts, Siya is not found. So she comes to Keshav with a renowned sense of hope and asks him for assistance. Keshav agrees.

Keshav and Saurabh start investigated this case. They check siya's phone and got many shocking data. They found that she was chatting with someone named Roy on telegram. she also used to send him her obscene pictures. They got to know that Siya was very disturbed due to the fight between her parents. Siya's father, Manish Arora has an extra merital affair with one of his office girl. That's why her mother fights with him. As we can see through the chatting of Siya:

> Siya: I hate my parents.
> Roy: what happened?
> Siya: They fight all the time.
> Roy: and ignore you?
> Siya: Yes it's like I don't exist. Or they don't care if I do.
> Roy: What do they fight about?
> Siya: My grandmother. Oh I think my father has a girlfriend in office.
> Roy: Really. your mother knows.
> Siya : Yes they had a big blowout last night. Gosh I feel like running away.

Through the above chatting of Siya with Roy we can see that when parents repeatedly fight with each other, some children can become distraught, worried and hopeless. Whatever they want from their parents they start looking from someone else. That's what happened with Siya. Siya started searching all these care with social media people and when she started getting this care from Roy, she felt that Roy is better than his parents. She liked talking to her. Roy took advantages of this and started asking her obscene pictures.

Roy: Send me a picture of your cute feet.
Siya: Yor are weird.
Roy: Just one please!
Siya: Really my feet? Why?
Roy: They are beautiful. Like the rest of you.

Roy asked Siya to marry him. But She refused and said that she don't like this so called marriage. She said that she sees her parents, they fight all the time. Therefore, she don't want to marry. At this, Roy said that they would be different if they get married. He said that he will be caring her and loving her. But by saying all these he was just making fool of her. He just want her obscene pictures. As we can see through the following chats between them:

Roy: Welcome. I wish you were old. I would marry you.
Siya: I don't want to get married. Marriage sucks. Seen my parents.
Roy: We would be different. Anyway, my pic?
Siya: Okay. Wait.

After some days of investigation, they learn that Roy is 50 years old man who loves talking to teenage girls. He set a rate, five hundreds rupees per pictures, one thousand for a video, ten thousand if someone connected him to any girl on social media. They also got to know that Roy is not his real name, he use this name only on social media.

In the end, Keshav is able to find Siya. She was kidnapped by her family priest. The priest on home his family trusted so much, he kidnapped her and locked her in a lonely place so far from the city. Then married her and also made physical relationship with her.

Conclusion

After studying 400 days by Chetan Bhagat two main things came in our mind. The first one is the effect of social media on children. This is the age of social media and teens spend a lot of time trying to live up to the unrealistic expectation and falsified pictures. But it is not good for the children. Parents should be worried about it. They should continuously check the phone of their children and should talk to them about your friends and about their life, if they do not talk to any stranger on social media.

The second most important thing is the effect of parents fighting on children's mental health. A home is a child's refugee of love and care. Children need to feel love, secure and comfortable to express them fully. If children see parents fighting at home, they started feeling frightened and helpless. They become confused. They don't know how to react to the situation. The care that they want from them, they start looking from any other. If Siya had got the care and love from her parents, she might not have turn to social media. So both the things are very important for the right development to social media so we should be careful with all that.

References

Bhagat, Chaten. 400 Days. New Delhi: Replica Press Pvt. Ltd. 2021.

THE IMPACT OF PERSONALITY PERSPECTIVES ON LEARNING APPROCHES

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Abstract:

The first aim of this study was to examine the relationship between the personality perspectives and learning approaches. Approaches to learning are the intentions a student has when faced with a learning task. Personality Describe a person's dispositional and distinctive pattern of thoughts, feelings, and behavior across various situations. In any given moment, personality traits may be poor predictors of behavior, but by comparing reactions over a wide range of contexts, consistencies are likely to appear. Personality traits thus serve as indications of likely patterns of behavior. Personality traits may thus be expressed in learning styles, which in turn create learning strategies and produce a certain learning outcome. The aim of this study is to show the impact of personality perspectives related to approaches to learning.

Key words*:* personality perspective, learning approaches*,*

Introduction:

Human beings often make decisions based on personality. We choose to hire live with, work with, or even spend the rest of our live with someone based on personality. One could even assert that we have become a personality obsessed culture; from the Myers-Briggs (MBTI) assessment, there are numerous assessment on the market that help people mine through the complexities of their character. These tools tell them everything they may want to know about who they are, what they motivations are, and how they make decisions. With such incredible insight on character traits, it's a surprise that the education system hasn't sooner adopted these principles to understand student's learning styles and capabilities. This oversight becomes even more surrounding the influence of personality types on learning outcome. Personality traits are expresses in learning style, which are in turn reflected in learning strategies, which eventually produce a certain learning outcome. (De Raad @ Schouwenburg, 1996). Personality traits serve as directors or blocks for motivation and learning strategies. (Mumford & Gustafson 1988 in bickle, 1996).

Conscientiousness and openness to experience are of special educational interest. (de Fruyt & Mervielde, 1996). Conscientiousness is related to work discipline, interest in subject matter, concentration and considering studying as quite easy. (Schouwenburg, 1995). Different ways of learning in higher education have been describe by Entwistle & Tait (1996). Students using the strategic approach are good at Organizing their work, managing their time and work hard in their studies. They care about their working conditions and have clear goals for their studies. (Entwistle & Tait 1996). They have an intrinsic motivation and positive study attitude (Entwistle, 1988).

The 4 Major Personality Perspectives:

The study of personality is one of the major topics of interest in psychology. Numerous personality theories exist and most of the major ones fall into one of four major perspectives.

Each of these perspectives on personality attempts to describe different patterns form and how people differ on an individual level.

Learn more about the four major perspectives of personality, the theorist associated with each theory, and the core ideas that are central to each perspective.

(The 4 major personality Perspective)

Psychoanalytic Perspective:

The psychoanalytic perspective of personality emphasizes the importance of early childhood experiences and the unconscious mind. This perspective on personality was created by psychiatrist

Sigmund Freud who believed that things hidden in the unconscious could be revealed in a number of different ways, including through dreams, free association, and slips of the tongue.

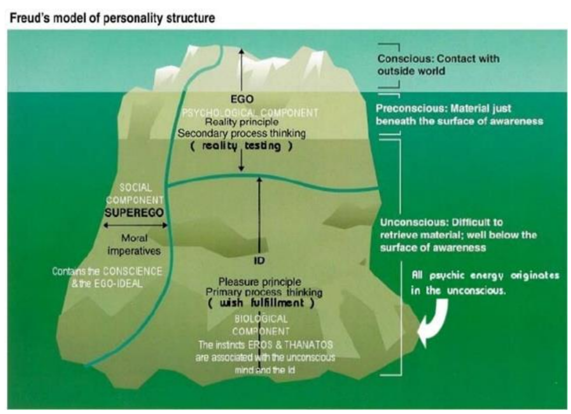
Neo-Freudian theorists, including Erik Erikson, Carl Jung, Alfred Adler, and Karen Horny, believed in the importance of the unconscious but disagree with other aspects of Freud's theories.

Major Theorists:

Below are the most prominent psychoanalytic perspective theorists:

Sigmund Freud:

Stressed the importance of early childhood events, the influences of the unconscious, and sexual instincts in the development and formation of personality.



(Sigmund Freud's psychoanalytical model: Id, Ego, Super Ego).

Erik Erikson:

Emphasized the social elements of personality development, the identity crisis, and how personality is shaped over the course of the entire lifespan.

Carl Jung:

Focused on concepts such as the collective unconscious, archetypes, and psychological types.

Alfred Adler:

Believed the core motive behind personality involves striving for superiority, or the desire to overcome challenges and move closer to achieve superiority stems from underlying feelings of inferiority that Adler believed were universal.

Karen Horney:

Focused on the need to overcome basic anxiety, the sense of being isolated and alone in the world. She emphasized the societal and cultural factors that also play a role in personality, including the importance of the parent-child relationship.

Humanistic Perspective:

The humanistic perspective of personality focuses on psychological growth, free will, and personal awareness. It takes a more positive outlook on human nature and is centered on how each person can achieve their individual potential.

Major Theorists:

The following are the most influential humanistic perspective theorists:

Carl Rogers:

Believed in the inherent goodness of people and emphasize the importance of free will and psychological growth. He suggested that the actualizing tendency is the driving force behind human behavior.

Abraham Maslow:

Suggested that people are motivated by a hierarchy of needs. The most basic needs are centered on things necessary for life such as food and water, but as people move up the hierarchy these needs become centered on things such as esteem and self-actualization.

***Trait perspective*:**

The trait perspective of personality is centered on identifying, describing, and measuring the specific traits that make up human personality. By understanding these traits, researchers believe they can better comprehend the differences between individuals. In psychology, trait theory is an approach to the study of human personality. Trait theorists are primarily interested in the measurement of trait, which can be define as habitual patterns of behavior, thought, and emotion. According to this perspective, traits are aspects of personality that are relatively stable over time, differ across individuals are relatively consistent over situation, and influence behavior. Traits are in contrast to states, which are more transitory dispositions.

Major Theorists:

Below are the most important trait perspective theorists:

Hans Eysenck:

Suggested that there are three dimensions of personality:-
@ Extroversion-Introversion
@Emotional stability-Neuroticism
@Psychoticism

Raymond Cattell:

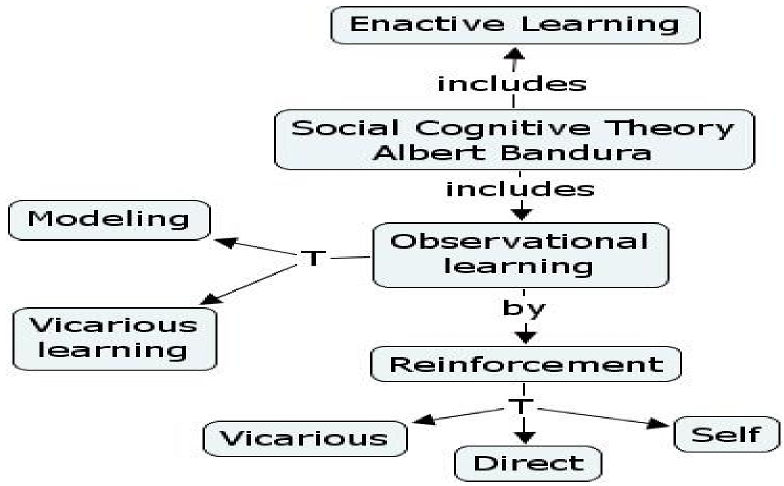
Identified 16 personality traits that he believed could be utilized to understand and measure individual difference personality.

Robert McCare and Paul Costa

Introduced the big five theory, which identifies five key dimensions of personality:
@extraversion
@neuroticism
@openness to experience
@conscientiousness
@agreeableness

Social Cognitive Perspective

The social cognitive perspective of personality emphasizes the importance of observational learning, self-efficacy, situational influences, and cognitive processes.



(Bandura's social Cognitive Theory Model)

Major Theorists:

Albert Bandura:

Emphasized the importance of social learning, or learning through observation. His theory emphasized the role of conscious thoughts including self- efficacy, or our own beliefs in our abilities .Albert Bandura expanded cognitive personality theory by describing processes of observational or vicarious learning and the role of belief structures such as self-efficacy. Bandura agreed that the people develop and change as a consequences of the direct reward and punishment they receive from the environment. These rewards and punishments occur as a consequences of their actions (the basis of operant conditioning). However, we also learn by operant observing others (models) and noting the consequences that result from their behavior. The first set of beliefs relates to the individual's locus of control expectancies, but by themselves these belief will not determine whether the goal seeking behavior will be performed. The critical factor is the individual's beliefs regarding his or her ability to perform the necessary behavior successfully.

Self-efficacy beliefs depend on a number of factors, including previous direct experience, observational learning, social persuasion, and self-assessment and interpretation of current and past emotional states. Conditions that lead to the development of healthy self-efficacy include the positive factors of family interaction and peer networks (similar models, access to activities, and social motivation), as well as negative factors such as competition and stress. Like Locus of control, self-efficacy is largely domain specific (e.g., academic self-efficacy, social self-efficacy, and athletic self-efficacy can all differ for a given person).

Bandura (1977, 19950 has studied a number of cognitive and personal factors that affect learning and personality development, and most recently has focused on the concept of self-efficacy. Self-efficacy is our level of confidence in our own abilities, developed through our social experiences.

Self-efficacy:

Bandura’s (1977, 1995) has studied a number of cognitive and personal factors that affect learning and personality development, and most recently has focused on the concept of self-efficacy. Self-efficacy is our level of confidence in our own abilities, developed through our social experiences. Self-efficacy affects how we approach challenges and reach goals. In observational learning, self-efficacy is a cognitive factor that affects which behaviors we choose to imitate as well as our success in performing those behaviors.

People who have high self-efficacy believe that their goals are within reach, have a positive view of challenges seeing them as tasks to be mastered, develop a deep interest in and strong commitment to the activities in which they are involved, and quickly recover from setbacks. Conversely, people with low self-efficacy avoid challenging tasks because they experience setbacks. Feelings of self-efficacy can be specific to certain situations. For instance, a student might feel confident in her ability in English class but much less so in math class.

Locus Of Control:

Julian Rotter developed a social learning theory that emphasized the role of the cognitive expectancy of reward in determining behavior. The major contribution of this theory to the psychology of personality was the proposal of a generalized cognitive expectancy that rotter called locus of control. Individuals differ to the extent that they generally believe their own actions are related to personal outcomes. Those with an internal locus of control have a strong expectation that success or failure will result from their own efforts. Those with an external locus of control generally believe that success or failure is determined by fate, chance or the will of others.

Cognitive Style:

Harman A. Witkin observed that individuals differ in their general models of intellectual and perceptual functioning along a number of dimensions. Some of the dimensions that have been shown to be useful predictors of individual differences are tolerance for ambiguity, impulsivity versus reflectively, field dependence versus field independence, cognitive complexity versus simplicity, and the more motivational ”need for cognition”. Tolerance for ambiguity relates to open versus close-mindedness and the ability and individual’s willingness to accommodate their schemata to new experience. Impulsivity versus reflectivity refers to the extent to which one will consider consequence versus independence refers to global as opposed to analytic style of perceiving. Field-independent perceptions are more analytical and somewhat independent of the complexity versus simplicity refers to the usual number or interrelated schemata that are applied to experiences. /need for cognition refers to individual difference in the desire to be challenged to think and reflect. It is currently believe that many of these dimensions along which individuals differ are generally based or at least congenital and somewhat difficult to modify.

Learning Approaches:

In contrast to the psychodynamic approaches of Freud and the Neo- Freudians, which related personality to inner (and hidden) processes, the learning approaches focus only on observable behavior. This illustrates one significant advantage of the learning approaches over psychodynamics: Because learning approaches involve observable, measurable phenomena, they can be scientifically tested.

Learning Approaches to personality:

In contrast to the psychodynamic approaches of Freud and the Neo-Freudians, which relate personality to inner processes, the learning approaches focus only on observable behavior. This illustrates one significant advantage of the learning approaches over psychodynamics: Because learning approaches involve observable, measurable phenomena, they can be scientifically tested. Many components of psychodynamic theory cannot be quantified and therefore cannot be tested empirically.

The Behavioral perspective:

Behaviorists do not believe personality characteristics are based on genetics or inborn predispositions. Instead, they view personality as shaped by the reinforcements and consequence outside of the organism. In other words, people behave in a consistent manner based on prior learning B.F. Skinner, a strict behaviorist, believed that environment was solely responsible for all behavior, including the enduring, consistent behavior that they could perfectly control a person environment, then they could impart any type of personality on any individual they choose. Behaviorists also did not think it was necessary to understand anything that was happening in a person head, since thoughts and feelings could not be perfectly objectively quantified.

As you may recall from your study on the psychology of learning, skinner proposed that we demonstrate consistent behavior patterns because we have developed certain response tendencies (Skinner1953). In other words, we learn to behave in particular ways. We increase the behaviors

That lead to negative consequences, Skinner disagreed with Freud's idea that personality is fixed in childhood. He argued that personality develops over our entire life, not only in the first few years. Our responses can change as we come across new situations; therefore, we can expect more variability own time in personality than Freud would anticipate. For example, consider a young woman, Greta, a risk taker. She drives fast and participates in dangerous sports such as hand gliding and kiteboarding. But after she gets married and has children, the system of reinforcements and punishments in her environment changes.

Reciprocal Determinism:

In contrast to skinner's idea that the environment alone determines behavior, Bandura (1990) proposed the concept of reciprocal determinism, in which cognitive processes, behavior, and context all interact, each factor influencing and being influenced by the others simultaneously. Cognitive processes refer to all characteristic previously learned, including beliefs, expectations, and personality characteristics. Behavior refers to anything that we do that may be rewarded of punished. Finally, the context in which the behavior occurs refers to the environment or situation, which includes rewarding/punishing stimuli.

Your behavior can also impact both the cognitive and situational factors. If you choose not to bungee jump it may cause you to change how you think about risk taking, to justify your choose, and many change the feeling of the situation by causing others to back out as well. Again, the important insights is that all three interact components interact reciprocally to determine personality characteristics.

Observational Learning:

Bandura's key contribution to learning theory was the idea that much learning is vicarious. We learn by observing someone else's behavior and its consequences, which Bandura called observational learning. He felt that this type of learning also plays a part in the development of our new behavior patterns when we see them performed by other people or models. Drawing on the behaviorists' idea about reinforcement, Bandura suggested that whether we choose to imitate a model's behavior depends on whether we see the model reinforced or punished. Though observational learning, we come to learn to what behaviors are acceptable and rewarded in our culture, and we also learn to inhibit deviant or socially unacceptable behaviors by seeing what behaviors are punished.

Summary

Behavioral theorists view personality as significantly shaped and impacted by the reinforcements and consequences outside of the organism. People behave in consequences outside of the organism. People behave in a consistent manner based on prior learning. B. F. skinner, a prominent behaviorist, said that we demonstrate consistent behavior patterns, because we have developed certain response tendencies. Albert Bandura said that one's environment can determine behavior, but at the same time, people can influence the environment with both their thoughts and behaviors, which is known as reciprocal determinism.

References:

Bandura, A. (1977). Self-efficacy: Toward a Unifying theory of behavioral change.Psychological review, 84, 191-24-15.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1995). Self-efficacy in changing societies. Cambridge, England: Cambridge University press.

Bouton, M. E. (2018). Conditioning and learning. In R. Biswas-Diener % E. Diener (Eds), Noba textbook series: Psychology. Champaign, IL: DEF publishers. DOI: nobaproject.com.

Heinstrom, Jannica (2000) "The impact of personality and approaches to learning on information behavior". Information Research, 5(3) Available at: http://informationr,net/ir/5-3/paper78.html.

Mischel, W., (1968). Personality and assessment. New York, NY: Wiley.

Myers, I.B., & McCauley, M.H. (1985). A guide to the development of the Myers-Briggs type indicator. Palo Alto, CA: Consulting Psychologists press.

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Skinner, B. F. (1953). Science and human behavior. NEW YORK, NY; The Free Press.

https://www.google.com/search?q=types+of+4+major+personality+perspectives+image&tbm=isch&ved=2ahUKEwixhY6Iqub4AhUq7nMBHZf8BGgQ2

https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQXQoiCUnA2tdpbpv33_yrbbP9Ois9XbO5BJw&usqp=CAU

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