CHAPTER 4

DATA ANALYSIS & INTERPRETATION

Index of Chapter 4

4.0 Introduction

Data is a fundamental component of any research, as the reliability and accuracy of findings relies on the techniques used for analysis and interpretation. The significance of a study is not only based on data collection but also on how effectively the information is processed, interpreted, and presented. Statistical outputs, tables, and charts are valuable only when they are systematically analyzed and explained in an easily understandable manner.

The previous chapter provided a detailed discussion of the data collection methodology. This research gathered responses from 1,270 women from various categories in the Rajkot district of Gujarat through a structured questionnaire. The collected information was carefully organized, arranged in tables, and analyzed using different statistical methods to understand women's views on e-commerce. The subsequent sections present the analysis through graphical representations and statistical evaluations, offering a clear understanding of the observed trends and relationships.

Section A

4.1 Demographic profile of respondents

Age Group	No. of Respondents	%
< than 30 years	742	58.43
31- 40 years	240	18.90
41-50 years	172	13.54
51-60 years	62	4.88
Above 60	54	4.25
Total	1270	100.00

Table 4.1.1: Age wise respondents

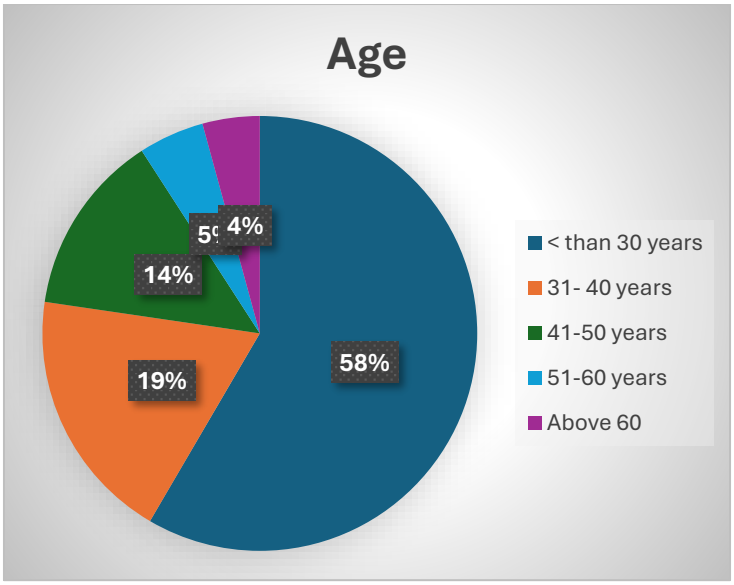


Figure 4.1.1: Age wise respondent

Interpretation

The figure 4.1.1 represents age wise data of respondents. It clearly represents that almost more than 50% data collected from age group less than 30 and then it is in decreasing mode from 31 to 40 age group have 19% and then continued in decreasing manner.

Educational Qualification	No. of Respondents	%
Higher Secondary	132	10.39
Under-Graduate	432	34.02
Post-Graduate	558	43.94
Doctorate	98	7.72
Others	50	3.94
Total	1270	100.00

Table 4.1.2: Educational Qualification wise respondents

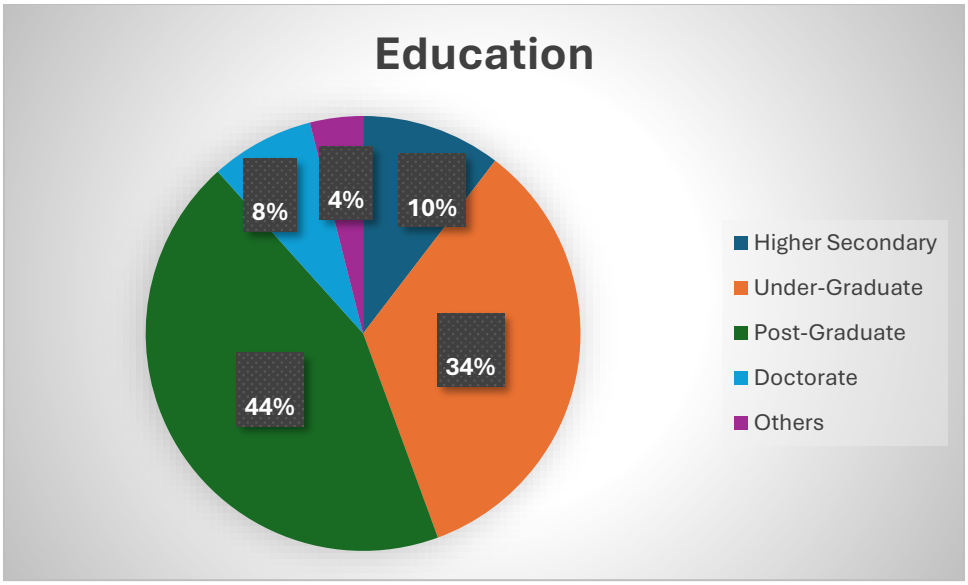


Figure 4.1.2: Educational Qualification wise respondents

Interpretation

Figure 4.1.2 shows that 44% of respondents are post-graduate and 34% are under-graduate, that is almost above 75% or total respondents.

Occupation	No. of Respondents	%
Business	160	12.60
Employed	340	26.77
Home maker	90	7.09
Professional	154	12.13
Retired	90	7.09
Others	436	34.33
Total	1270	100.00

Table 4.1.3: Occupation wise respondents

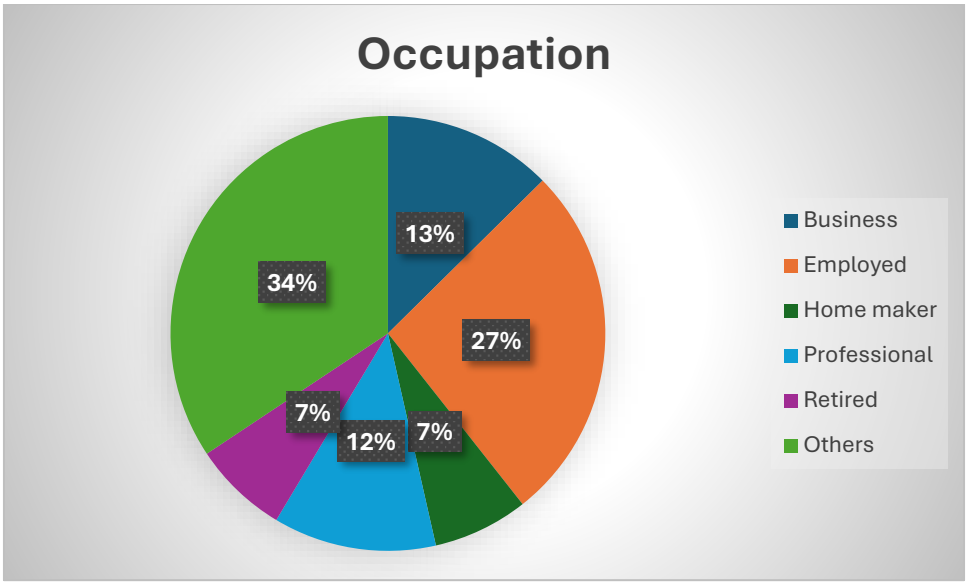


Figure 4.1.3: Occupation wise respondents

Interpretation

Figure 4.1.3 indicates that the highest proportion of respondents, approximately 34%, fell under the "Other" category in the occupation profile. Following this, employed respondents constituted the second-largest group, accounting for around 27% of the total responses in the study.

Annual Income	No. of Respondents	%
< 3 lacs	696	54.80
3-6 lacs	286	22.52
6-9 lacs	124	9.76
9-12 lacs	70	5.51
> 12 lacs	94	7.40
Total	1270	100.00

Table 4.1.4: Annual Income wise respondents

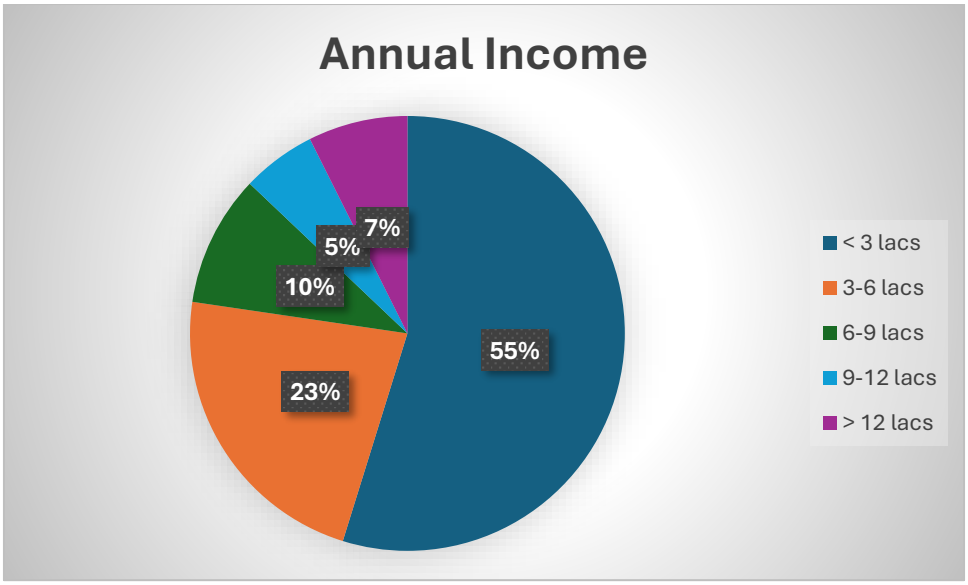


Figure 4.1.4: Annual Income wise respondents

Interpretation

The figure 4.1.4 depicts a declining trend, indicating that the number of respondents decreases as the annual income category increases. The most of respondents, approximately 55%, had an annual income of less than 3 lakhs. The second-largest group, comprising around 23% of respondents, reported an annual income between 3 to 6 lakhs. It is evident that more than half of the respondents had an annual income below 3 lakhs.

Frequency of Transaction	No. of Respondents	%
Occasionally	552	43.46
Weekly	194	15.28
Monthly	366	28.82
Yearly	158	12.44
Total	1270	100.00

Table 4.1.5: Frequency of Transaction

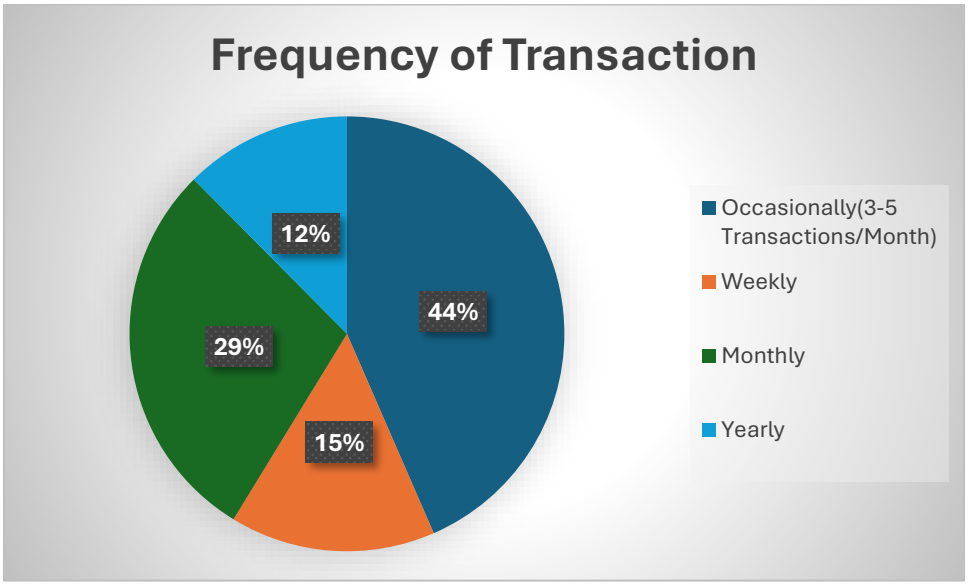


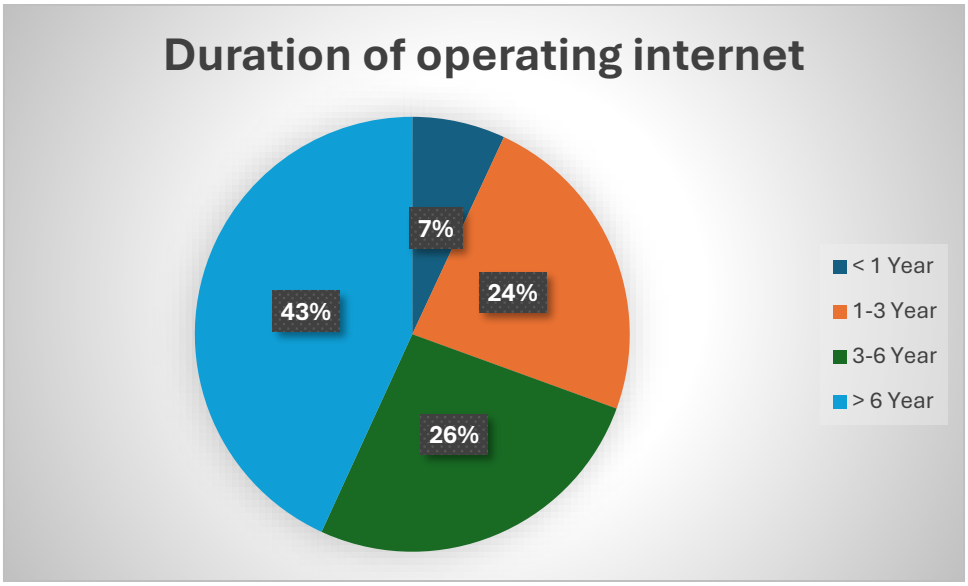
Figure 4.1.5: Frequency of Transaction

Interpretation

The figure 4.1.5 clears that most of respondents approx. 44% total 552 women do online transactions occasionally while around 29% respondents do online transaction monthly.

Period of Operating Internet	No. of Respondents	%
< 1 Year	88	6.93
1-3 Year	300	23.62
3-6 Year	334	26.30
> 6 Year	548	43.15
Total	1270	100.00

Table 4.1.6: Period of Operating Internet



Graph 4.1.6: Period of Operating Internet

Interpretation

The figure 4.1.6 presents an increasing trend, indicating that approximately 43% of respondents have been using the internet for over six years. Additionally, around 26% have been using it for three to six years. This suggests that nearly 69% of respondents have notable internet exposure.

Buying Preference	No. of Respondents	%
Offline Retailers	834	65.67
Internet	436	34.44
Total	1270	100.00

Table 4.1.7: Buying Preference wise respondents.

If the product has same price both in the retail market shop and on the internet,then where do you prefer to buy it?

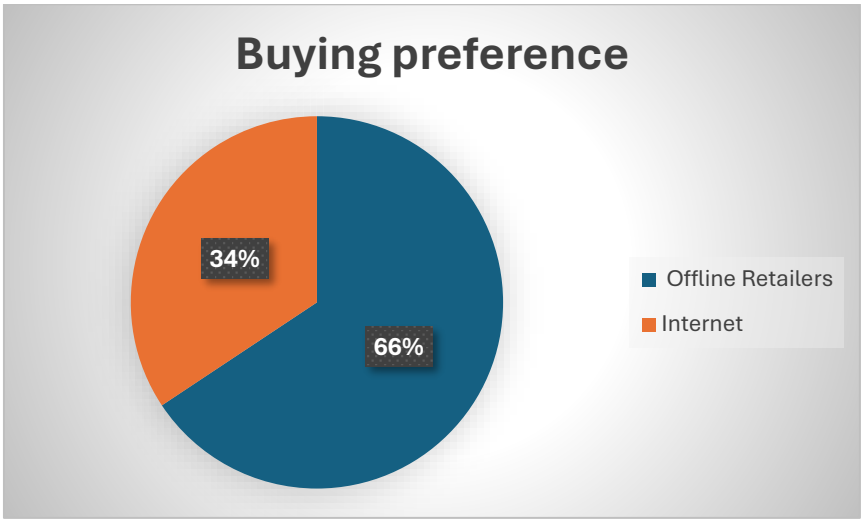


Figure 4.1.7: Buying Preference wise respondents

Interpretation

The figure 4.1.7 clearly illustrates that 66% of respondents prefer shopping from offline retailers rather than online platforms when the price factor is same, while only 34% prefer making purchases over the internet.

Section B

4.2 Research area

Do you Trust in online shopping and internet?

Level of Trust	No. of Respondents	%
Yes	980	77.17
No	290	22.83

Total	1270	100.00

Table 4.2.1: Level of Trust of respondents

Graph 4.2.1: Level of Trust of respondents

Interpretation

Figure 4.2.1 indicates that 77% of respondents trust online shopping, while only 23% lack confidence in it.

Which method would you prefer for payment?

Method of Payment	No. of Respondents	%
Credit-Card	180	14.17
Debit-Card	330	25.98
Net-Banking	201	15.825
E wallets - UPI	475	37.39

Cash on delivery	84	6.62
Total	1270	100

Table 4.2.2: Method of Payment of respondents

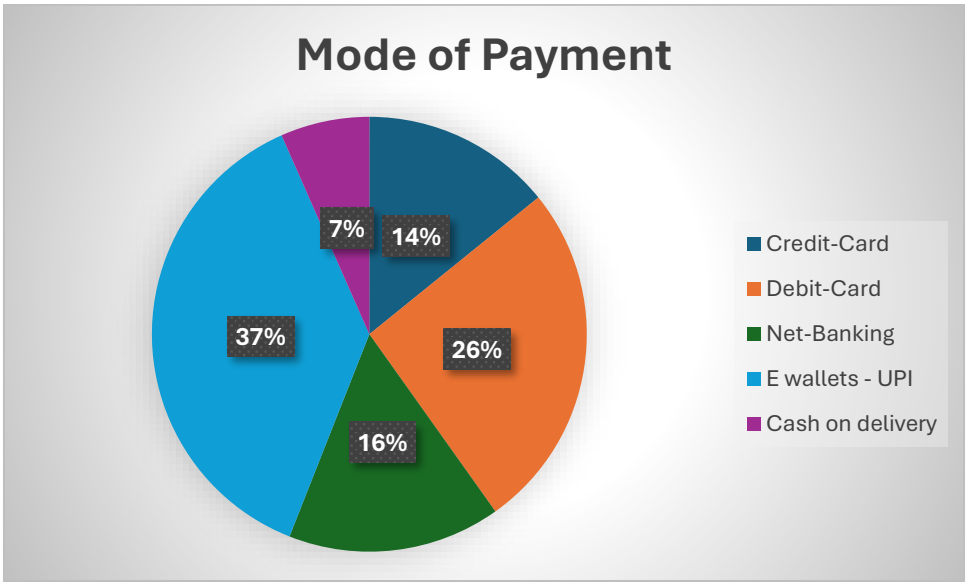


Figure 4.2.2: Method of Payment of respondents

Interpretation

Figure 4.2.2 highlights that top two preferred payment methods for online shopping, namely E wallets – UPI and debit card.

Which Category of products would you like to purchase from theInternet?

Product	No. of Respondents	%
Air/Train/Bus Vehicle booking	156	12.29
Cosmetics Items and cloths	478	37.64
Books and Magazines	74	5.83
Electronics items, Gadgets and	228	17.95

Communication items		
Home Appliances	20	1.57
Luxurious items	20	1.57
Food items	34	2.68
Other	260	20.47
Total	1270	100

Table 4.2.3: Product category wise respondents from the Internet

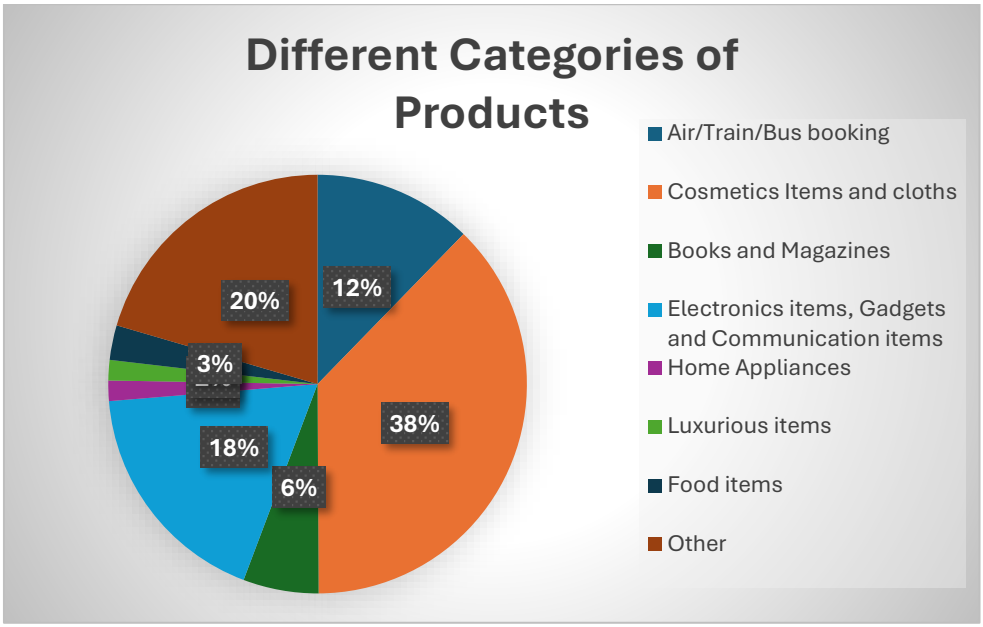


Figure 4.2.3: Product category wise respondents from the Internet

Interpretation

The most preferred product categories for online shopping among respondents include clothing and cosmetics, electronics, communication devices, various booking services, and other miscellaneous products.

Choose the Category of service (s) you would like to avail from Internet?

Services	No. of Respondents	%
Educational Services	240	18.90

Medical services	94	7.40
Insurance services	104	8.19
Hospitality services	152	11.97
Entertainment and Recreational services	196	15.43
Banking services	214	16.85
e-Governance services	140	11.02
All the Above	124	9.76
Other	6	0.47
Total	1270	100.00

Table 4.2.4: Services wise respondents from Internet

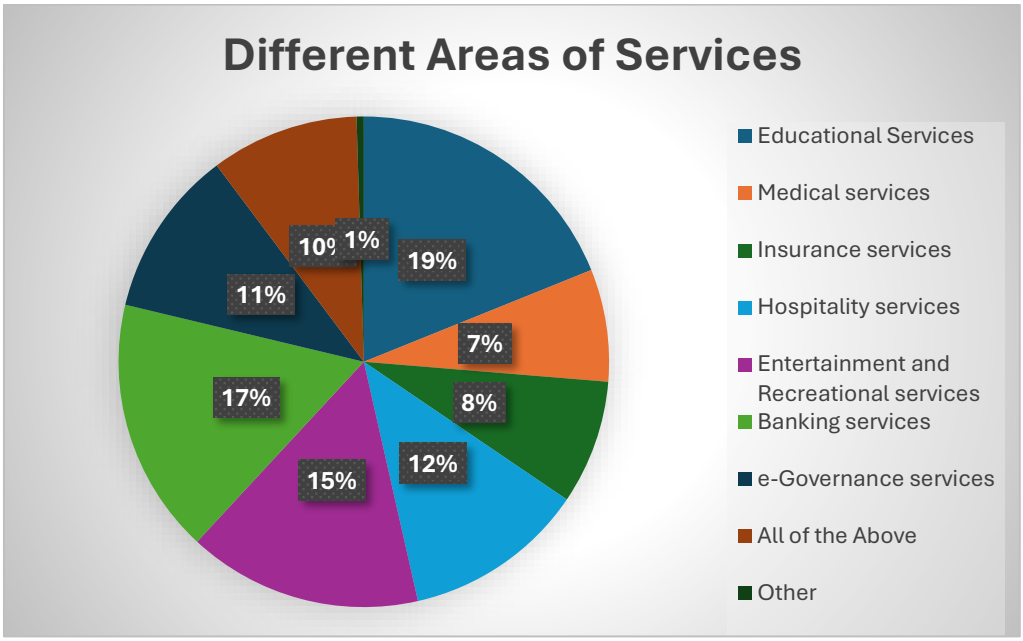


Figure 4.2.4 Services wise respondents from Internet

Interpretation

The top three service categories preferred for online use by respondents are educational services (around 19%), banking services (approximately 17%), and entertainment services (about 15%). Following these, hospitality services and e-governance services are also favored by respondents.

4.3 Descriptive Statistics

(Chi-Square test, t-test, ANOVA and factor analysis)

Table 4.3.1 presents the mean and standard deviation of 60 items based on responses from 1,270 participants. The mean represents the average value, calculated by sum of all observations and dividing by the total number of items.

The data was collected using a **5-point Likert scale**, where:

- A **mean below 3** suggests that respondents **disagreed** with the statements.
- A **mean above 3** indicates that respondents **agreed** with the statements.

Sr. No.	Items	Mean	Std. Deviation
1	Security of personal information is well maintained.	1.98	1.018
2	Online sharing of bank card details is secure.	2.79	1.292
3	Privacy of personal information is protected.	2.24	1.104
4	Cash discounts are frequently offered by suppliers	2.02	.843
5	Exchange offers are easily available.	2.29	.971
6	Various promotional schemes (e.g., cash cards, bonus points, freebies, combo-offers) are beneficial	2.29	.930
7	Many products are available exclusively online at an economic price.	2.05	.856
8	Digital content is more economically priced compared to print content.	2.26	.891
9	The cash on delivery (COD) option is widely available.	1.69	.866
10	Various payment methods are accessible	1.77	.810

11	Interest-free EMI options are beneficial	2.30	.984
12	Online shopping saves time	2.01	.983
13	Online shopping is convenient	2.02	.920
14	Lesser effort is required for online shopping	2.05	.926
15	Ease of use encourages online shopping	2.15	.846
16	Mobile/desktop shopping applications enhance the shopping experience	1.97	.906
17	24/7 shopping availability is beneficial	1.70	.889
18	24/7 real-time transactional assistance is helpful	1.89	.880
19	The online order and billing process is easy.	2.12	.937
20	Online shopping is a social status symbol	2.81	1.232
21	Online transactions are enjoyable.	2.63	1.028
22	Detailed information about products and services is available online	1.90	.875
23	Products and services unavailable in local markets are accessible online	2.02	.920
24	Genuine and reliable products are available online	2.29	.941
25	Free home delivery service is beneficial.	1.87	.917
26	The latest trends and fashion items are easily available online	1.91	.867
27	Various second-hand products are available online	2.55	.982
28	Off-seasonal products and services are easily accessible online	2.08	.880
29	Vendors/suppliers provide effective online assistance	2.43	.909

30	Internet merchants/delivery agents provide necessary support	2.31	.894
31	After-sales services provided by vendors/suppliers are satisfactory	2.47	.997
32	After-sales services provided by internet merchants/delivery agents are satisfactory	2.49	1.056
33	Vendors and delivery agents resolve grievances in a reasonable time	2.48	.975
34	Communicating with vendors and suppliers online is easy	2.69	1.022
35	Refund options provided by internet merchants are satisfactory.	2.14	1.001
36	Buy-back options offered by suppliers are useful.	2.43	.938
37	Purchase return options by internet merchants are convenient	2.27	.941
38	Replacement options are available within a short span of time	2.30	1.016
39	Delivery time taken by vendors and suppliers is reasonable	2.29	.893
40	Order tracking facility enhances the shopping experience	2.03	.883
41	Online services and products comparisons are easier.	1.94	.913
42	Genuine and unbiased customer reviews are available online.	2.39	.982
43	Online ratings of shopping websites help in decision-making.	2.19	.887
44	Online prices of many products and services are low as compared to the local market	2.03	.939
45	Pre-purchase services provided by internet	2.37	.915

	merchants are useful.		
46	Legal jurisdiction of online shopping disputes is well-defined.	2.67	.997
47	Comments and reviews on social media influence online shopping	2.27	.968
48	Online shopping experiences shared by others help in decision-making	2.15	.892
49	The website appearance and layout enhance usability	2.27	1.024
50	The screen design of online stores is visually appealing	2.37	.972
51	The availability of an e-Cart facility improves the shopping experience	2.29	.904
52	Online transactions are risk-free.	2.93	1.115
53	Availing online services through government and private websites is mandatory.	2.42	.989
54	The reputation of e-vendors and suppliers is important for online shopping.	2.23	.892
55	The quality of products and services purchased online is satisfactory	2.17	.930
56	The brand image of online products influences purchasing decisions.	2.16	.905
57	Online advertisements are effective	2.31	.927
58	previous online shopping experience was satisfactory	2.09	.905
59	I am satisfied with my online transactions.	2.15	.911
60	I will continue purchasing products and services online in the future.	1.94	.877

Table 4.3.1: Descriptive Statistics

From the table, it is evident that all 60 items have mean values below 3, indicating **overall disagreement** among respondents. A possible explanation for this could be concerns related to online shopping and e-commerce, such as the risk of fraud or other uncertainties, which may have influenced respondents' perceptions negatively.

The standard deviation measures how much data deviates from the mean, with higher values indicating greater variability. In Table 4.3.1, the standard deviation for all 60 items is close to their mean values, showing moderate consistency.

4.4 Testing and Hypothesis development with interpretation:

This section outlines the formulation of hypotheses, the statistical techniques employed for testing, and the interpretation of the findings.

4.4.1 Chi-Square test

The Chi-Square test was employed to examine the association between categorical variables in the study.

H1: There is a significant association between the frequency of online transactions and demographic variables (Women Age, Educational Qualification, Annual Income, Occupation, Duration of women's internet usage etc.) -

Age and Frequency of online transactions:

Ho: There is no relationship between the women's age and frequency of online transaction.

Count		I Do Online Transactions				
		Occasionally	Weekly	Monthly	Yearly	Total
Age	< than 30 years	316	130	234	62	742
	31- 40 years	92	40	68	40	240
	41-50 years	86	16	46	24	172
	51-60 years	36	6	10	10	62
	Above 60	22	2	8	22	54

Total	552	194	366	158	1270

Table 4.4.1: Online Transaction Frequency by Age Group

	Value	df
Pearson Chi-Square	77.65	12

Table 4.4.2: Chi-Square Test of Independence between Age and Frequency of Online Transactions

1. Observed Frequencies (O)

The given data table provides the observed frequency of online transactions across different age groups.

2. Expected Frequencies (E)

Each expected frequency is calculated as: E = (row total * column total) / grand total.

where:

- Row Total = total for each age group
- Column Total = total for each transaction frequency category
- Grand Total = 1270

3. Chi-Square Formula

$$\chi^2 = \sum(O_{ij} - E_{ij})^2/E_{ij}$$

where:

- Oij = observed value
- Eij = expected value

4. Degrees of Freedom (df)

df = (number of rows - 1) * (number of columns - 1)

Chi-Square Test Results:

- Chi-square statistic (χ^2) = 77.65
- Degrees of freedom (df) = 12
- p-value = 1.15×10^{-11}

The above Chi-Square test table presents the results, showing **χ^2 = 77.65** and a **p-value of 0.0000000000115**, which is below the significance level of **0.05**. As a result, the **null hypothesis is rejected**, indicating a statistically notable relationship between a women's age and the frequency of online transactions.

Education Qualification and Frequency of online transactions:

Ho: There is no relationship between the women's educational qualification and their frequency of online transaction.

Count		I Do Online Transactions				Total
		Occasionally	Weekly	Monthly	Yearly	
Educational Qualification	Higher Secondary	48	14	42	28	132
	Under-Graduate	206	62	114	50	432
	Post- Graduate	226	106	182	40	558
	Doctorate	44	6	18	30	98
	Others	28	6	10	6	50
Total		552	194	366	158	1270

Table 4.4.3: Educational Qualification and Frequency of Online Transactions

	Value	df
Pearson Chi-Square	76.26	12

Table 4.4.4: Chi-Square Test of Independence between Educational Qualification and Online Transaction Frequency

1. Observed Frequencies (O)

The given data table provides the observed frequency of online transactions across different educational qualification groups.

2. Expected Frequencies (E)

Each expected frequency is calculated as: E = (row total * column total) / grand total.

where:

- Row Total = total for each educational qualification group
- Column Total = total for each transaction frequency category
- Grand Total = 1270

3. Chi-Square Formula

$$\chi^2 = \sum(O_{ij} - E_{ij})^2/E_{ij}$$

where:

- Oij = observed value
- Eij = expected value

4. Degrees of Freedom (df)

df = (number of rows - 1) * (number of columns - 1)

Chi-Square Test Results:

- Chi-square statistic (χ^2) = 76.26
- Degrees of freedom (df) = 12
- p-value = 2.12×10^{-11}

The above Chi-Square test table presents the results, showing **χ^2 = 76.26** and a **p-value of 0.0000000000212**, which is below the significance level of **0.05**. As a result, the **null hypothesis is rejected**, indicating a statistically notable relationship between a women's educational qualification and the frequency of online transactions.

Occupation and Frequency of online transactions:

Ho: There is no relationship between the women's occupation and their frequency of online transaction.

Count		I Do Online Transactions				Total
		Occasionally	Weekly	Monthly	Yearly	
Occupation	Business	54	28	68	10	160
	Employed	154	58	92	36	340
	Home-Maker	44	12	16	18	90
	Professional	60	30	44	20	154
	Retired	46	6	14	24	90
	Others	194	60	132	50	436

Total	552	194	366	158	1270

Table 4.4.5: Occupation and Frequency of Online Transactions

	Value	df
Pearson Chi-Square	30.012[a]	15

Table 4.4.6: Chi-Square Test of Independence between Occupation and Online Transaction Frequency

1. Observed Frequencies (O)

The given data table provides the observed frequency of online transactions across different occupation groups.

2. Expected Frequencies (E)

Each expected frequency is calculated as: E = (row total * column total) / grand total.

where:

- Row Total = total for each occupation group
- Column Total = total for each transaction frequency category
- Grand Total = 1270

3. Chi-Square Formula

$$\chi^2 = \sum(O_{ij} - E_{ij})^2/E_{ij}$$

where:

- Oij = observed value
- Eij = expected value

4. Degrees of Freedom (df)

df = (number of rows - 1) * (number of columns - 1)

Chi-Square Test Results:

- Chi-square statistic (χ^2) = 60.02
- Degrees of freedom (df) = 15

  p-value = 2.50×10^{-7}

The above Chi-Square test table presents the results, **χ^2 = 60.02** and a **p-value of 0.000000.25**, which is below the significance threshold of **0.05**. Therefore, we reject the **null**

hypothesis and conclude that there is a statistically notable relationship between a women's occupation and the frequency of online transactions.

Annual Income and Frequency of online transactions:

Ho: There is no relationship between the women's annual income and their frequency of online transaction.

Count		I Do Online Transactions				Total
		Occasionally	Weekly	Monthly	Yearly	
Annual Income	< 3 lacs	310	112	196	78	696
	3-6 lacs	130	32	88	36	286
	6-9 lacs	58	24	26	16	124
	9-12 lacs	28	6	32	4	70
	> 12 lacs	26	20	24	24	94
Total		552	194	366	158	1270

Table 4.4.7: Annual Income and Frequency of Online Transactions

	Value	df
Pearson Chi-Square	42.20	12

Table 4.4.8: Chi-Square Test of Independence between Annual Income and Online Transaction Frequency

1. Observed Frequencies (O)

The given data table provides the observed frequency of online transactions across different annual income groups.

2. Expected Frequencies (E)

Each expected frequency is calculated as: E = (row total * column total) / grand total.

where:

- Row Total = total for each annual income group
- Column Total = total for each transaction frequency category
- Grand Total = 1270

3. Chi-Square Formula

$$\chi^2 = \sum(O_{ij} - E_{ij})^2/E_{ij}$$

where:

- Oij = observed value
- Eij = expected value

4. Degrees of Freedom (df)

df = (number of rows - 1) * (number of columns - 1)

Chi-Square Test Results:

- Chi-square statistic (χ^2) = 42.20
- Degrees of freedom (df) = 12
- p-value = 3.08×10^{-5}

The above Chi-Square test table presents the results, **χ^2 = 42.20** and a **p-value of 0.0000308**, which is very below then significance level of **0.05**. As a result, we reject the **null hypothesis** and conclude that there is a statistically notable relationship between women's annual income and the frequency of online transactions.

Duration of women's internet usage and Frequency of online transaction:

Ho: There is no relationship between the duration of women's internet usage and their frequency of online transaction.

Count		I Do Online Transactions				Total
		Occasionally	Weekly	Monthly	Yearly	
Duration of women's internet usage	< 1 Year	22	16	20	30	88
	1-3 Year	132	22	94	52	300
	3-6 Year	140	46	108	40	334
	> 6 Year	258	110	144	36	548
Total		552	194	366	158	1270

Table 4.4.9: Duration of Women's Internet Usage and Frequency of Online Transactions

	Value	df
Pearson Chi-Square	89.00	9

Table 4.4.10: Chi-Square Test of Independence between Duration of Women's Internet Usage and Online Transaction Frequency

1. Observed Frequencies (O)

The given data table presents the observed frequency of online transactions based on the duration of women's internet usage.

2. Expected Frequencies (E)

Each expected frequency is calculated as: E = (row total * column total) / grand total.

where:

- Row Total = total based on the duration of women's internet usage
- Column Total = total for each transaction frequency category
- Grand Total = 1270

3. Chi-Square Formula

$$\chi^2 = \sum(O_{ij} - E_{ij})^2/E_{ij}$$

where:

- Oij = observed value
- Eij = expected value

4. Degrees of Freedom (df)

df = (number of rows - 1) * (number of columns - 1)

Chi-Square Test Results:

- Chi-square statistic (χ^2) = 89.00
- Degrees of freedom (df) = 9
- p-value = 2.58×10^{-15}

The above Chi-Square test table presents the results, **χ^2 = 89.00** and a **p-value of 0.00000000000000258**, which is below the significance threshold of **0.05**. Therefore, we reject the **null hypothesis** and conclude that there is a statistically notable relationship between the duration of a women's internet usage and the frequency of online transactions.

H2: There is a significant association between buying preferences and demographic

variables: (Age, Educational Qualification, Annual Income, Occupation, Duration of women's internet usage) -

Age and Buying preference:

Ho: There is no relationship between the women's age and their buying preference (if price of product / services is same at the Offline retaileror Internet shop).

If your product has the same price both in the retail market shop and on the internet, then, where do you prefer to buy it?

Count				
		OfflineRetailers	Internet	Total
Age Year	< than 30	460	282	742
	31- 40	148	92	240
	41-50	126	36	172
	51-60	52	10	62
	Above 60	48	6	54
Total		834	436	1270

Table 4.5.1: Purchase Preference by Age When Product Prices Are the Same in Retail and Online Stores

	Value	df
Pearson Chi-Square	38.84	4

Table 4.5.2: Chi-Square Test of Independence between Age and Purchase Preference When Product Prices Are the Same in Retail and Online Stores

The above Chi-Square test table presents the results, $\chi^2 = 38.84$ and a **p-value of** 7.50×10^{-8}, which is below the significance level of **0.05**. Therefore, we reject the **null**

hypothesis and conclude that there is a statistically notable relationship between a women's age and their buying preference, specifically regarding whether they would choose an offline retailer or an online store when the price of a product or service is the same.

Education qualification and Buying preference:

Ho: There is no relationship between the women's education qualification and their buying preference (if price of product / services is same at the Offline retailer or Internet shop).

If your product has the same price both in the retail market shop and on the internet, then, where do you prefer to buy it?

Count				Total
		OfflineRetailers	Internet	
Educational Qualification	Higher Secondary	100	32	132
	Under-Graduate	280	152	432
	Post-Graduate	354	204	558
	Doctorate	64	34	98
	Others	36	14	50
Total		834	436	1270

Table 4.5.3: Purchase Preference by Educational Qualification When Product Prices Are the Same in Retail and Online Stores

	Value	df
Pearson Chi-Square	8.22	4

Table 4.5.4: Chi-Square Test of Independence between Educational Qualification and Purchase Preference When Product Prices Are the Same in Retail and Online Stores

The above Chi-Square test table presents the results, $\chi^2 = 4.111$ and a **p-value of 0.0838**, which is greater than the significance level of **0.05**. Therefore, we fail to reject the **null hypothesis** and conclude that there is insufficient evidence to suggest a statistically notable relationship between a women educational qualification and their buying preference when the price of a product or service is the same at both offline retailers and online stores.

Occupation and Buying preference:

Ho: There is no relationship between the women occupation and their buying preference (if price of product / services is same at the Offline retailer or Internet shop).

If the price of your product is the same in both the retail store and online, where would you prefer to purchase it?

Count				Total
		OfflineRetailers	Internet	
Occupation	Business	122	38	160
	Employed	210	130	340
	Home-Maker	72	18	90
	Professional	90	64	154
	Retired	76	14	90
	Others	264	172	436
Total		834	436	1270

Table 4.5.5: Purchase Preference by Occupation When Product Prices Are the Same in Retail and Online Stores

	Value	df
Pearson Chi-Square	41.15	5

Table 4.5.6: Chi-Square Test of Independence between Occupation and Purchase Preference When Product Prices Are the Same in Retail and Online Stores

The above Chi-Square test table presents the results, χ^2 = **41.15** and a **p-value of** 8.75×10^{-8}, which is below the significance level of **0.05**. Therefore, we reject the **null hypothesis** and conclude that there is a statistically notable relationship between a women's occupation and their buying preference, specifically regarding whether they would choose an offline retailer or an online store when the price of a product or service is the same.

Annual Income and Buying preference:

Ho: There is no relationship between the women's annual income and their buying preference (if price of product / services is sameat the Offline retailer or Internet shop).

If your product has same price both in the retail market shop and on the internet, then, where do you prefer to buy it?

Count				Total
		OfflineRetailers	Internet	
Annual Income	< 3 lacs	446	250	696
	3-6 lacs	186	100	286
	6-9 lacs	88	36	124
	9-12 lacs	46	24	70
	> 12 lacs	68	26	94
Total		834	436	1270

Table 4.5.7: Purchase Preference by Annual Income When Product Prices Are the Same in Retail and Online Stores

	Value	df
Pearson Chi-Square	4.23	4

Table 4.5.8: Chi-Square Test of Independence between Annual Income and Purchase Preference When Product Prices Are the Same in Retail and Online Stores

The above Chi-Square test table presents the results, $\chi^2 = 4.23$ and the p-value is $p = 0.376$, which is greater than 0.05. Therefore, we fail to reject the null hypothesis. This suggests that there is not enough evidence to support a statistically notable association between women's annual income and their buying preference (when the price of the product or service is the same at both offline retailers and online stores).

Duration of women's internet usage and buying preference:

Ho: There is no relationship between the Duration of women's internet usage of women and their buying preference (if price ofproduct / services is same at the Offline retailer or Internet shop).

If your product has same price both in the retail market shop and on the internet, then,where do you prefer to buy it?

Count				Total
		High Street Retailers	Internet	
Duration of women's internet usage	< 1 Year	74	14	88
	1-3 Year	194	106	300
	3-6 Year	210	124	334
	> 6 Year	356	192	548
Total		834	436	1270

Table 4.5.9:

Purchase Preference by Duration of Women's Internet Usage When Product Prices Are the Same in Retail and Online Stores

	Value	df
Pearson Chi-Square	14.66	3

Table 4.5.10:

Chi-Square Test of Independence between Duration of Women's Internet Usage and Purchase Preference When Product Prices Are the Same Online and in Retail Stores

The above Chi-Square test table presents the results, $\chi^2 = 14.66$ and the p-value is $p = 0.0021$, which is below the significance level of **0.05**. Therefore, we reject the **null hypothesis** and conclude that there is a statistically notable relationship between duration of women's internet usage and their buying preference, specifically regarding whether they would choose an offline retailer or an online store when the price of a product or service is the same.

H3: There is a significant association between trust in online shopping and demographic variables: (Women's Age, Educational Qualification, Annual Income, Occupation, Duration of women's internet usage etc.) -

Age and Trust

Ho: There is no notable relationship between the age of women and trust in online shopping.

Do you Trust in online shopping?

Count				Total
		Yes	No	
Age Year	< than 30	606	136	742
	31- 40	188	52	240
	41-50	116	56	172
	51-60	40	22	62
	Above 60	30	24	54
Total		980	290	1270

Table 4.6.1: Trust in Online Shopping by Age Group of Respondents

	Value	df
Pearson Chi-Square	37.91	4

Table 4.6.2: Chi-Square Tests for Age and Trust in online shopping.

The above Chi-Square test table presents the results, $\chi^2 = 37.91$ and the p-value is $p = 1.17x10^{-7}$, which is less than 0.05. Therefore, we can reject the null hypothesis and conclude that there is a statistically notable relationship between women's age and their trust in online shopping.

Education Qualification and Trust

Ho: There is no relationship between the women's education qualificationand trust in online shopping.

Do you Trust inonline shopping?

Count				Total
		Yes	No	
Educational Qualification	Higher Secondary	90	42	132
	Under-Graduate	334	98	432
	Post-Graduate	442	116	558
	Doctorate	68	30	98
	Others	46	4	50
Total		980	290	1270

Table 4.6.3: Trust in Online Shopping by Educational Qualification

	Value	df
Pearson Chi-Square	16.99	4

Table 4.6.4: Chi-Square Tests for Educational Qualification and Trust in online shopping

The above Chi-Square test table presents the results, $\chi^2 = 16.99$ and the p-value is $p = 0.00195$, which is less than 0.05. Therefore, we can reject the null hypothesis and conclude that there is a statistically notable relationship between women's education qualification and their trust in online shopping.

Occupation and Trust

Ho: There is no relationship between the women's occupationand trust in online shopping.

Do you Trust in online shopping?

Count				Total
		Yes	No	
Occupation	Business	108	52	160
	Employed	288	52	340
	Home-maker	52	38	90
	Professional	118	36	154
	Retired	60	30	90
	Others	354	82	436
Total		980	290	1270

Table 4.6.5: Trust in Online Shopping by Occupation

	Value	df
Pearson Chi-Square	48.32	5

Table 4.6.6: Chi-Square Tests for Occupation and Trust in online shopping

The above Chi-Square test table presents the results, $\chi^2 = 48.32$ and the p-value is $p = 3.05x10^{-9}$, which is less than 0.05. Therefore, we can reject the null hypothesis and assume that there is a statistically notable association between women's occupation and their belief in online shopping.

Annual Income and Trust:

Ho: There is no relationship between the annual income of women and trust in online shopping.

Do youTrust in online shopping?

Count				Total
		Yes	No	
	< 3 lacs	540	156	696

AnnualIncome	3-6 lacs	228	58	286
	6-9 lacs	84	40	124
	9-12 lacs	62	8	70
	> 12 lacs	66	28	94
Total		980	290	1270

Table 4.6.7: Trust in Online Shopping by Annual income

	Value	df
Pearson Chi-Square	15.13	4

Table 4.6.8: Chi-Square Tests for Annual income and Trust in online shopping

The above Chi-Square test table presents the results, $\chi^2 = 15.13$ and the p-value = 0.00445, which is less than 0.05. Therefore, we can reject the null hypothesis and conclude that there is a statistically notable association between women's annual income and their trust in online shopping.

Duration of women's internet usage and trust

Ho: There is no relationship between the Duration of women's internet usage and their trust in online shopping.

Do you Trust in onlineshopping?

Count				Total
		Yes	No	
Duration of women's internet usage	< 1 Year	46	42	88
	1-3 Year	214	86	300
	3-6 Year	260	74	334
	> 6 Year	460	88	548
Total		980	290	1270

Table 4.6.9: Trust in Online Shopping by Annual income Duration of women's internet

	Value	df
Pearson Chi-Square	51.10	3

Table 4.6.10: Chi-Square Tests for

Duration of women's internet usage and Trust

The above Chi-Square test table presents the results, $\chi^2 = 51.10$ and the p-value = $4.65x10^{-11}$, which is less than 0.05. Therefore, we reject the null hypothesis and conclude that there is a statistically notable relationship between the duration of women's internet usage and their trust in online shopping.

4.4.1.1 Summary of Chi-Square Test:

S. No.	Null Hypothesis (H0)	'α' (level of significance)	p-value	Decision
Demographic Variables and Frequency of Online Transaction				
1	There is no relationship between women's age and their frequency of online transaction.	.05	0.0000000000115	Reject
2	There is no relationship between the women's education qualifications and their frequency of online transaction.	.05	0.0000000000212	Reject
3	There is no relationship between the women's occupation and their frequency of online transaction.	.05	0.00000025	Reject
4	There is no relationship between the women's annual income and their frequency of online transaction.	.05	0.0000308	Reject
5	There is no relationship between the Duration of women's internet usage and their frequency of online	.05	0.000000000000000258	Reject

	transaction.			
Demographic Variables and Buying Preference				
6	There is no relationship between the women's age and their buying preference (if price of product / services is same at the Offline retailer or Internet shop).	.05	0.000000075	Reject
7	There is no relationship between the women's qualifications and their buying preference (if price of product / services is same at the high street retailer or Internet shop).	.05	0.0838	Accept
8	There is no relationship between the women's occupation and their buying preference (if price of product / services is same at the high street retailer or Internetshop).	.05	0.0000000875	Reject
9	There is no relationship between the women's annual income and their buying preference (if price of product / services is same at the Offline retailer or Internet shop).	.05	0.376	Accept
10	There is no relationship between the Duration of women's internet usage of women and their buying preference (if price of product / services is same at the Offline retailer or Internet shop).	.05	0.0021	Reject
Demographic Variables and Trust in Online Shopping				

11	There is no relationship between women's age and trust in online shopping.	.05	0.000000117	Reject
12	There is no relationship between the women's education qualification and trust in online shopping.	.05	0.00195	Reject
13	There is no relationship between women's occupation and trust in online shopping.	.05	0.00000000305	Reject
14	There is no relationship between women's annual income and trust in online shopping.	.05	0.00445	Reject
15	There is no relationship between the Duration of women's internet usage of women and their trust in online shopping.	.05	0.0000000000465	Reject

Table 4.7: Summary Table for Chi-Square Test

The above table 4.7 represented the summary results of Chi-square test to achieve the objective.

A total of 18 hypotheses were formulated using variables derived from Part A and Part B of the questionnaire. The level of significance was set at 5%. Hypotheses were tested based on the p-values, following the conventional rule: if $p < 0.05$, the null hypothesis was rejected; if $p > 0.05$, the null hypothesis was accepted.

4.4.2 t-test

A t-test was conducted to compare the means between two groups.

H4: Level of Trust and its relationship with six contributing factors (Convenience, Post Sales Services, Online Assistance, Reliability & Communication, Security & Privacy and User-friendly)

Null Hypothesis (H_0): There is no significant difference in women's perception of e-commerce factors (Convenience, Post Sales Services, Online Assistance, Reliability & Communication, Security & Privacy, and User-friendliness) based on their level of trust.

Factor	Trust in Online Shopping?	N	Mean	Std. Deviation	Corrected Std. Error Mean
Convenience	Yes	980	1.8423	0.56915	0.01818
	No	290	2.2266	0.73107	0.04293
Post Sales Services	Yes	980	2.3086	0.61870	0.01976
	No	290	2.6993	0.79935	0.04694
Online Assistance	Yes	980	2.3224	0.71905	0.02297
	No	290	2.6736	0.79395	0.04662
Reliability and Communication	Yes	980	2.6395	0.80793	0.02581
	No	290	3.1195	0.79220	0.04652
Security and Privacy	Yes	980	2.2782	0.79615	0.02543
	No	290	2.5195	0.98982	0.05812
User-friendly	Yes	980	2.4571	0.80337	0.02566
	No	290	2.5770	0.84916	0.04986

Table 4.8: Group Statistics for Level of Trust and Its Relationship with Six Contributing Factors

Factor	Equal Variances Assumed	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval (Lower)	95% Confidence Interval (Upper)
Convenience	Yes	34.333	0.000	-9.372	1268	0.000	-0.3843	0.04662	-0.47568	-0.29292
	No			-9.046	398.181	0.000	-0.3843	0.04662	-0.47568	-0.29292
Post Sales Services	Yes	35.849	0.000	-8.807	1268	0.000	-0.3907	0.05093	-0.49052	-0.29088
	No			-8.542	396.868	0.000	-0.3907	0.05093	-0.49052	-0.29088
Online Assistance	Yes	6.795	0.009	-7.839	1268	0.000	-0.3512	0.05197	-0.45307	-0.24933
	No			-7.642	438.688	0.000	-0.3512	0.05197	-0.45307	-0.24933
Reliability and Communication	Yes	0.036	0.850	-10.040	1268	0.000	-0.4800	0.05320	-0.58427	-0.37573
	No			-10.015	480.832	0.000	-0.4800	0.05320	-0.58427	-0.37573
Security and Privacy	Yes	26.464	0.000	-4.955	1268	0.000	-0.2413	0.06344	-0.36565	-0.11695
	No			-4.802	405.858	0.000	-0.2413	0.06344	-0.36565	-0.11695
User-friendly	Yes	2.897	0.089	-3.230	1268	0.001	-0.1199	0.05608	-0.22982	-0.00998
	No			-3.125	452.985	0.002	-0.1199	0.05608	-0.22982	-0.00998

Table 4.9: Levene's Test and Independent Samples T-Test Results for Women's Trust in E-Commerce Factors

Table 4.9 Indicates results of Levene's Test and t-test under the independent sample test for six factors and level of trust:

Level of Trust and Convenience

Levene's Test for Equality of Variances reports F = 34.333 and p = 0.000, which is less than

0.05. This leads us to reject the null hypothesis and conclude that the variance in the Convenience factor, based on women's level of trust, is significantly different. Similarly, the t-test for Equality of Means provides a p-value of 0.000 ($p < 0.05$), confirming that women's perceptions of Convenience in e-commerce vary significantly based on their level of trust.

Level of Trust and Post Sales Services

Levene's Test for Equality of Variances reports $F = 35.849$ and $p = 0.000$, which is below 0.05. This leads us to reject the null hypothesis, indicating that the variance in the Post-Sales Services factor of e-commerce, based on women's level of trust, differs significantly. The t-test for Equality of Means also reveals a p-value of 0.000, leading us to reject the null hypothesis. This confirms that the mean scores of women's perceptions regarding e-commerce, based on their trust levels, vary significantly for the Post-Sales Services factor.

Level of Trust and Online Assistance

Levene's Test for Equality of Variances reports $F = 6.795$ and $p = 0.009$, which is less than 0.05. This leads us to reject the null hypothesis and conclude that the variance in Online Assistance, based on women's level of trust, is significantly different. Similarly, the t-test for Equality of Means provides a p-value of 0.000 ($p < 0.05$), confirming that women's perceptions of Online Assistance in e-commerce vary significantly based on their level of trust.

Level of Trust and Reliability and Communication

Levene's Test results ($F = 0.036$, $p = 0.850$) indicate that variances are not significantly different. The t-test for Equality of Means, however, reveals a p-value of 0.000, leading us to reject the null hypothesis. This suggests that the mean scores for Reliability and Communication significantly differ based on women's trust in e-commerce.

Level of Trust and Security and Privacy

With $F = 26.464$ and $p = 0.000$, Levene's Test confirms a significant difference in variances. The t-test also supports rejecting the null hypothesis ($p = 0.000$), implying that women's perceptions of Security and Privacy in e-commerce are notably influenced by their trust level.

Level of Trust and User-friendly

Levene's Test gives $F = 2.897$ and $p = 0.089$, which is greater than 0.05, suggesting equal variances. The t-test result ($p = 0.001$) allows us to reject the null hypothesis, confirming significant differences in women's perceptions of e-commerce usability based on trust.

H5: Buying Preference and its relationship with six factors (Convenience, Post Sales Services, Online Assistance, Reliability & Communication, Security & Privacy and User-friendly)

H0: There is no statistically notable difference between the mean scores of women's perception towards e-commerce with convenience factors

H0: There is no statistically notable difference between the mean scores of women's perception towards e-commerce with Post Sales Services factors

H0: There is no statistically notable difference between the mean scores of women's perception towards e-commerce with Online Assistance factors

H0: There is no statistically notable difference between the mean scores of women's perception towards e-commerce with Reliability & Communication factors

H0: There is no statistically notable difference between the mean scores of women's perception towards e-commerce with Security & Privacy factors

H0: There is no statistically notable difference between the mean scores of women's perception towards e-commerce with User-friendliness factors

Factors	If your product has same price both in the retail market shop and on the internet, then, where do you prefer to buy it?	N	Mean	Std. Deviation	Std. Error Mean
Convenience	Retailers	834	1.9894	0.64722	0.03169
	Internet	436	1.8165	0.58141	0.03938
Post Sales Services	Retailers	834	2.4686	0.71212	0.03487
	Internet	436	2.2624	0.60425	0.04093
Online	Retailers	834	2.4564	0.7502	0.03674

Assistance	Internet	436	2.2997	0.74287	0.05031
Reliability and Communication	Retailers	834	2.8545	0.81134	0.03973
	Internet	436	2.5474	0.82588	0.05594
Security and Privacy	Retailers	834	2.3605	0.88844	0.04351
	Internet	436	2.2813	0.76892	0.05208
User-friendly	Retailers	834	2.5204	0.8241	0.04036
	Internet	436	2.4159	0.79445	0.05381

Table 4.10: Group Statistics for Buying preference and Its Relationship with Six Contributing Factors

Factor	**Equal Variances Assumed**	**F**	**Sig.**	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**95% Confidence Interval Lower**	**95% Confidence Interval Upper**
Convenience	Yes	3.447	0.064	4.678	1268	0.000003	0.1729	0.0357	0.1028	0.2430
	No			4.572	798.12	0.000005	0.1729	0.0378	0.0987	0.2471
Post Sales Services	Yes	10.803	0.001	5.424	1268	0.000000073	0.2062	0.0380	0.1317	0.2807
	No			5.312	732.45	0.000000091	0.2062	0.0394	0.1289	0.2835

Online Assistance	Yes	0.185	0.668	3.546	1268	0.0004	0.1567	0.0441	0.0704	0.2430
	No			3.498	799.78	0.0005	0.1567	0.0448	0.0689	0.2445
Reliability and Communication	Yes	0.453	0.501	6.365	1268	0.000000003	0.3071	0.0485	0.2120	0.4022
	No			6.289	762.34	0.000000005	0.3071	0.0491	0.2105	0.4037
Security and Privacy	Yes	7.079	0.008	1.651	1268	0.0991	0.0792	0.0480	-0.0148	0.1732
	No			1.628	730.21	0.1045	0.0792	0.0486	-0.0157	0.1741
User-friendly	Yes	0.147	0.702	2.172	1268	0.0300	0.1045	0.0476	0.0113	0.1977
	No			2.134	789.62	0.0328	0.1045	0.0481	0.0096	0.1994

Table 4.11: Independent Samples Test for Buying Preference Factor Wise

Table 4.11 indicates results of Levene's Test and t-test under the independentsample test for six factors and buying preference:

Buying Preference and Convenience

Levene's Test for Equality of Variances reports F = 3.447 and p = 0.064, which is greater than 0.05. This suggests that the variances in Convenience for Retailers and Internet are not significantly different, so we can assume equal variances. The t-test for Equality of Means provides a p-value of 0.000003 ($p < 0.05$), which allows us to reject the null hypothesis. Therefore, we conclude that there is a significant difference in Convenience between Retailers and Internet users, with Retailers perceiving the product as more convenient.

Buying Preference and Post Sales Services

Levene's Test for Equality of Variances reports F = 10.803 and p = 0.001, which is less than 0.05. This indicates that the variance in Post Sales Services is significantly different between Retailers and Internet users. The t-test for Equality of Means yields a p-value of 0.000000073 ($p < 0.05$), confirming that the mean scores for Post Sales Services differ significantly. Retailers report better post-sales services compared to Internet users.

Buying Preference and Online Assistance

Levene's Test for Equality of Variances reports F = 0.185 and p = 0.668, which is greater than 0.05. This suggests that the variances in Online Assistance are not significantly different between Retailers and Internet users, so we assume equal variances. The t-test for Equality of Means provides a p-value of 0.0004 ($p < 0.05$), indicating that there is a significant difference in Online Assistance between the two groups. Retailers perceive Online Assistance to be more effective than Internet users.

Buying Preference and Reliability and Communication

Levene's Test for Equality of Variances reports F = 0.453 and p = 0.501, which is greater than 0.05. This suggests that the variances in Reliability and Communication are not significantly different between Retailers and Internet users, allowing us to assume equal variances. The t-test for Equality of Means yields a p-value of 0.0000000003 ($p < 0.05$), leading us to reject the null hypothesis. There is a significant difference in Reliability and Communication, with Retailers rating it higher than Internet users.

Buying Preference and Security and Privacy

Levene's Test for Equality of Variances yielded an F-value of 7.079 and a p-value of 0.008, indicating a significant difference in variances related to Security and Privacy between Retailers and Internet users. However, the t-test for Equality of Means produced a p-value of 0.0991 ($p > 0.05$), suggesting that the difference in Security and Privacy perceptions between the two groups is not statistically significant, although a marginal variation is observed.

Buying Preference and User-friendliness

Levene's Test for Equality of Variances reports $F = 0.147$ and $p = 0.702$, which is greater than 0.05. This indicates that the variances in User-friendliness are not significantly different between Retailers and Internet users, so equal variances are assumed. The t-test for Equality of Means yields a p-value of 0.0300 ($p < 0.05$), allowing us to reject the null hypothesis. There is a significant difference in User-friendliness, with Retailers perceiving the product as more user-friendly compared to Internet users.

4.4.2.1 Summary of Item-Wise Hypothesis Testing Results for the t-Test.

Ho: Hypotheses	Test	'α' level of significance	Results
Factor One: Convenience as a Factor and Its Relationship with Various Demographic Variables			
No significant difference was found in the mean scores of women's perceptions of E-commerce, based on their level of trust, specifically for the factor of 'Convenience.'	t-test	0.000	Not Accepted
No significant difference was observed in the mean scores of women's perceptions of e-commerce, based on their buying preferences (Offline via retailers or Internet), with respect to the factor of 'Convenience.'	t-test	0.000003	Not Accepted
Factor Two: Post-Sales Services and Their Relationship with Various Demographic Variables			
No significant difference between the mean scores of women's perceptions based on their level of trust in E-commerce for factors namely 'Post Sales Services.'	t-test	0.000	Not Accepted

No significant difference between the mean scores of buying preference wise (Offline via retailers or Internet) women's perception of e-commerce for factors namely 'Post Sales Services.'	t-test	0.000000073	Not Accepted
Factor Three: Online Assistance and Its Relationship with Various Demographic Variables			
No significant difference was found in the mean scores of women's perceptions of e-commerce, based on their level of trust, specifically for the factor of 'Online Assistance.'	t-test	0.000	Not Accepted
No significant difference was observed in the mean scores of women's perceptions of e-commerce, based on their buying preferences (Offline via retailers or Internet), with respect to the factor of 'Online Assistance.'	t-test	0.0004	Not Accepted
Factor Four: Reliability and Communication in Relation to Various Demographic Variables			
No significant difference was found in the mean scores of women's perceptions of e-commerce, based on their level of trust, specifically for the factors of 'Reliability and Communication.'	t-test	0.000	Not Accepted
No significant difference was observed in the mean scores of women's perceptions of e-commerce, based on their buying preferences (Offline via retailers or Internet), with respect to the factors of 'Reliability and Communication.'	t-test	0.0000000003	Not Accepted
Factor Five: Security and Privacy in Relation to Various Demographic Variables			

No significant difference was found in the mean scores of women's perceptions of e-commerce, based on their level of trust, specifically for the factors of 'Security and Privacy.'	t-test	0.000	Not Accepted
No significant difference was observed in the mean scores of women's perceptions of e-commerce, based on their buying preferences (Offline via retailers or Internet), regarding the factors of 'Security and Privacy.'	t-test	0.0991	Accepted
Factor Six: User-Friendliness and Its Relationship with Various Demographic Variables			
No significant difference was found in the mean scores of women customers' perceptions of E-commerce, based on their level of trust, specifically for the factor of User-Friendliness.	t-test	0.001	Not Accepted
No significant difference was observed in the mean scores of women's perceptions of E-commerce, based on their buying preferences (Offline via retailers or Internet), with respect to the factor of User-Friendliness.	t-test	0.0300	Not Accepted

Table 4.12 Summary Table of t-test

Conclusion Based on t-test Summary Table:

From the results of the t-test in Table 4.12, we can see that for the factor "Post Sales Services," two out of three hypotheses were not accepted, while one was accepted at the 5% level of significance. This means there is a significant difference in how women perceive e-commerce based on their level of trust and buying preferences (whether they shop through retailers or online platforms) when it comes to Post Sales Services.

Based on this, we can say that trust and buying preferences are very important in how women view e-commerce. Therefore, businesses that sell their products and services online need to focus on these two aspects.

Since customers can't touch or try products before buying online, businesses must ensure they deliver high-quality products as promised. When customers receive what they expect, they feel happy and satisfied, which increases their trust in online shopping.

Also, offering a wide variety of products online helps customers find more options, which can reduce the chances of them switching to other platforms. Satisfied customers often share their good experiences with friends, neighbors, and family, which also helps in positive word-of-mouth publicity.

Businesses should also make sure that their online platforms are easy to use, so that even someone with less experience can use them comfortably. The portals should be user-friendly and convenient. Providing online help or support is also important, especially for customers who are not familiar with online shopping. This will make their shopping experience smoother.

Another important point is after-sales service. Businesses should handle complaints and issues properly, so that customers feel supported even after making a purchase. This helps in gaining customers' trust and building a long-term relationship.

In addition, communication with customers should be simple and reliable, so they can reach out easily and get the help they need.

Finally, the biggest concern in online shopping is fraud and data security. So, businesses must provide a secure platform that protects customers' personal information and privacy. When customers feel safe and secure, they are more likely to shop online with confidence.

4.4.3 ANOVA test and Post-Hoc test:

This section applies ANOVA to assess variations between group means, with post-hoc tests conducted to determine which groups differ significantly.

H6: There is a significant difference in women's perceptions of six e-commerce factors (Convenience, Post-Sales Services, Online Assistance, Reliability and Communication, Security and Privacy, and User-Friendliness) across different age groups.

Age Group wise women's Perception and Convenience

Ho: There is statistically no notable difference between the mean scores ofage group wise women's perception towards e-commerce for factor namely 'Convenience'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Convenience	Between Groups	11.300	4	2.825	3.614	.006
	WithinGroups	492.484	1265	0.389		
	Total	503.784	1269			

Table 4.13: ANOVA for Convenience and Age Groups

Interpretation

The ANOVA table (Table 4.13) presents a significance value of 0.006 (p = 0.006), which is below the commonly accepted threshold of 0.05. This indicates a statistically significant difference in the mean scores related to the convenience factor in e-commerce across different groups. In this context, the factor "Convenience" likely represents perceptions measured across distinct categories, such as age groups or other demographic segments. The F-value of 3.614 supports this finding, suggesting that the variation between the groups is greater than the variation within them.

The results show that the Between Groups Sum of Squares is 11.300 with 4 degrees of freedom, indicating the presence of five comparison groups. The Within Groups Sum of Squares is 492.484 with 1265 degrees of freedom, pointing to a substantial amount of unexplained variance within the individual groups. Despite this, the statistically significant result confirms that the differences between group means are not due to random chance but reflect real disparities in how participants perceive the convenience factor.

However, while the ANOVA test identifies that at least one group's mean is significantly different from the others, it does not indicate which specific groups differ. To determine where these differences lie, a post-hoc multiple comparison test (such as Tukey HSD or Bonferroni) would be necessary. These follow-up analyses can provide more detailed insights into how specific categories—such as different age groups—perceive convenience in e-commerce, helping to guide more targeted strategies or interventions.

Post Hoc Tests

Multiple Comparisons
Tukey HSD

Dependent Variable	(I) Age	(J) Age	Mean Difference(I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Convenience	< 30	31- 40	-.08558	.06566	.689	-.2652	.0940
		41-50	-.08641	.07482	.777	-.2911	.1183
		51-60	-.08443	.11688	.951	-.4042	.2353
		Above 60	-.45463*	.12462	.003	-.7955	-.1137
	31- 40	< than 30	.08558	.06566	.689	-.0940	.2652
		41-50	-.00083	.08833	1.000	-.2425	.2408
		51-60	.00115	.12596	1.000	-.3434	.3457
		Above 60	-.36905*	.13317	.045	-.7334	-.0047
	41-50	< than 30	.08641	.07482	.777	-.1183	.2911
		31- 40	.00083	.08833	1.000	-.2408	.2425
		51-60	.00198	.13097	1.000	-.3563	.3603
		Above 60	-.36822	.13792	.060	-.7455	.0091
	51-60	< than 30	.08443	.11688	.951	-.2353	.4042
		31- 40	-.00115	.12596	1.000	-.3457	.3434
		41-50	-.00198	.13097	1.000	-.3603	.3563
		Above 60	-.37020	.16457	.163	-.8204	.0800
	Above 60	< than 30	.45463*	.12462	.003	.1137	.7955
		31- 40	.36905*	.13317	.045	.0047	.7334
		41-50	.36822	.13792	.060	-.0091	.7455
		51-60	.37020	.16457	.163	-.0800	.8204
The mean difference is notable at the 0.05 level.							

Table 4.14: Post Hoc Tests for Convenience and Age groups

Interpretation

Table 4.14 shows the results of a test (Tukey HSD) that was done to find out if women of different age groups think differently about how convenient e-commerce is. The results show that women above 60 years have different opinions compared to some younger women. For example, there is a clear difference between women under 30 and those above 60 ($p = 0.003$), and also between women aged 31–40 and those above 60 ($p = 0.045$). These

differences are marked with a star (*) in the table to show they are important.

The star symbol (*) in the table helps us easily see which age groups think differently from each other. In this case, only the age group "above 60" shows a different opinion when compared to younger groups. This means women above 60 may find e-commerce less convenient or may have different experiences using it compared to younger women.

For all the other age groups, there are no big differences in how they see the convenience of e-commerce. Women under 30, 31–40, 41–50, and 51–60 mostly have similar opinions. So, in general, most women see e-commerce convenience in the same way, but older women (above 60) may feel differently, which shows they might need more support or better design for online shopping.

Age Group wise women's Perception and Post Sales Services

Ho: There is statistically no notable difference between the mean scores ofage group wise women's perception towards e-commerce for factor namely 'Post Sales Services'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Post Sales Services	Between Groups	12.720	4	3.180	6.943	.008
	WithinGroups	579.834	1265	0.458		
	Total	592.554	1269			

Table 4.15 ANOVA for Post sales services and Age groups

Interpretation

The ANOVA table (Table 4.15) shows a significance value of 0.008 (p = 0.008). This value is below the 0.05 threshold, indicating statistical significance. It suggests a notable difference in women's perceptions of post-sales services across age groups.

The F-value of 6.943 indicates a strong variation between group means. The Between Groups Sum of Squares is 12.720 with 4 degrees of freedom. The Within Groups Sum of Squares is 579.834 with 1265 degrees of freedom.

This means there is more variation within groups, but the between-group difference is still significant. The Mean Square Between Groups is 3.180, compared to 0.458 Within

Groups. These findings confirm that perceptions of post-sales services differ by age. It highlights the need for age-targeted strategies in enhancing post-sales e-commerce support.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Post Sales Services	< than 30 years	31- 40 years	-.16415	.07124	.145	-.3590	.0307
		41-50 years	-.17318	.08119	.207	-.3953	.0489
		51-60 years	-.29538	.12683	.137	-.6423	.0516
		Above 60	-.26766	.13522	.277	-.6376	.1023
	31- 40 years	< than 30 years	.16415	.07124	.145	-.0307	.3590
		41-50 years	-.00903	.09584	1.000	-.2712	.2532
		51-60 years	-.13124	.13667	.873	-.5051	.2427
		Above 60	-.10352	.14450	.953	-.4988	.2918
	41-50 years	< than 30 years	.17318	.08119	.207	-.0489	.3953
		31- 40 years	.00903	.09584	1.000	-.2532	.2712
		51-60 years	-.12221	.14211	.911	-.5110	.2666
		Above 60	-.09449	.14965	.970	-.5039	.3149
	51-60 years	< than 30 years	.29538	.12683	.137	-.0516	.6423
		31- 40 years	.13124	.13667	.873	-.2427	.5051
		41-50 years	.12221	.14211	.911	-.2666	.5110
		Above 60	.02772	.17857	1.000	-.4608	.5162
	61 years and above	< than 30 years	.26766	.13522	.277	-.1023	.6376
		31- 40 years	.10352	.14450	.953	-.2918	.4988
		41-50 years	.09449	.14965	.970	-.3149	.5039
		51-60 years	-.02772	.17857	1.000	-.5162	.4608
The mean difference is notable at the 0.05 level.							

Table 4.16 Post Hoc Test for Post sales services and Age groups

Interpretation

Table 4.16 shows the results of a test (Tukey HSD) that compares how women of different age groups feel about post-sales services in e-commerce. The table checks if the opinions between the groups are very different or mostly the same. In this case, **none** of the comparisons between age groups showed a significant difference, because **all the p-values are above 0.05**.

Even though the table shows some small differences in average opinions (called "mean differences"), they are **not big enough to be considered important or meaningful**. For example, the difference between women under 30 and those above 60 has a p-value of 0.277, which means it is not statistically significant. That's why we cannot say that one group feels very differently from another.

In short, this test tells us that women across all age groups have **similar opinions** about post-sales services in e-commerce. No age group stands out as having a very different experience or perception, which means post-sales services are likely seen in a similar way by women of all ages.

Age Group wise Women's perception and Online Assistance

Ho: There is no notable difference between the mean scores ofage group wise women's perception towards e-commerce for factor namely 'Online Assistance'.

ANOVA Table

Factor	Groups	Sum of Squares	df	Mean Square	F	Sig.
Online Assistance	Between Groups	5.393	4	1.348	2.393	0.051
	WithinGroups	712.615	1265	0.563		
	Total	718.008	1269			

Table 4.17: ANOVA for Online Assistance and Age groups

Interpretation

The ANOVA table (Table 4.17) shows a significant value of 0.051 (p = 0.051). This value is slightly above the standard 0.05 threshold for statistical significance. It suggests that there is no statistically significant difference in group means.

The F-value of 2.393 indicates only minor variation among the age groups. The Between Groups Sum of Squares is 5.393 with 4 degrees of freedom.

The Within Groups Sum of Squares is 712.615 with 1265 degrees of freedom. This shows that most of the variability is within the groups rather than between them. The Mean Square for Between Groups is 1.348, while for Within Groups it is 0.563.

These values support the conclusion that differences in perception are not meaningful. Thus, women's perceptions of "Online Assistance" in e-commerce do not vary significantly with age.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Age Year	(J) Age Year	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Online Assistance	< than 30	31- 40	-.02599	.07880	.997	-.2416	.1896
		41-50	-.09556	.08980	.825	-.3412	.1501
		51-60	-.16120	.14029	.780	-.5450	.2226
		Above 60	-.26395	.14957	.395	-.6731	.1452
Online Assistance	31-40	< than 30	.02599	.07880	.997	-.1896	.2416
		41-50	-.06957	.10601	.965	-.3596	.2204
		51-60	-.13522	.15118	.899	-.5488	.2784
		Above 60	-.23796	.15983	.570	-.6752	.1993
Online Assistance	41-50	< than 30	.09556	.08980	.825	-.1501	.3412
		31- 40	.06957	.10601	.965	-.2204	.3596
		51-60	-.06564	.15719	.994	-.4957	.3644
		Above 60	-.16839	.16553	.847	-.6212	.2844
Online Assistance	51-60	< than 30	.16120	.14029	.780	-.2226	.5450
		31- 40	.13522	.15118	.899	-.2784	.5488
		41-50	.06564	.15719	.994	-.3644	.4957
		Above 60	-.10275	.19752	.985	-.6431	.4376

Online Assistance	Above 60	< than 30	.26395	.14957	.395	-.1452	.6731
		31- 40	.23796	.15983	.570	-.1993	.6752
		41-50	.16839	.16553	.847	-.2844	.6212
		51-60	.10275	.19752	.985	-.4376	.6431
The mean difference is notable at the 0.05 level.							

Table 4.18: Post Hoc Tests for Online Assistance and Age groups

Interpretation

The table 4,18 presents a comparison of how women in different age groups feel about the online assistance provided in e-commerce. The analysis looks at whether there are significant differences in opinions between any two age groups. In this case, none of the comparisons show statistically significant differences, as all the p-values are above 0.05.

This means that although there are small differences in the average responses (mean differences), they are not large enough to be meaningful. For example, the difference between women under 30 and those above 60 has a p-value of 0.395, which is much higher than the 0.05 mark. This tells us that even if the numbers are different, these differences could have occurred by chance.

In simple terms, the test results suggest that women of all age groups have similar views about online assistance in e-commerce. There are no strong signs that any one age group feels much more positive or negative than others.

Age Group wise women's Perception and Reliability & Communication

Ho: There is statistically no notable difference between the mean scores ofage group wise women's perception towards e-commerce for factor namely 'Reliability and Communication'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Reliability and Communication	Between Groups	14.270	4	3.568	5.270	.034
	Within Groups	856.438	1265	0.677		
	Total	870.708	1269			

Table 4.19 ANOVA for Reliability and Communication and Age groups

Interpretation

The ANOVA table (Table 4.19) indicates a significance value of 0.034 (p = 0.034). This value is below the 0.05 threshold, suggesting a statistically significant difference. It shows that women's perceptions of the "Reliability and Communication" factor vary by age group. The F-value of 5.270 further supports the presence of meaningful differences among group means.

The Between Groups Sum of Squares is 14.270 with 4 degrees of freedom. The Within Groups Sum of Squares is 856.438 with 1265 degrees of freedom. This indicates more variability within groups but still a significant difference between them.

The Mean Square for Between Groups is 3.568, compared to 0.677 for Within Groups. These results confirm that age has an effect on how women perceive reliability and communication in e-commerce.

Thus, age-based differences in perception for this factor are statistically supported by the data.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Age Year	(J) Age Year	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Reliabilityand Communication	< than 30	31- 40	-.09233	.08658	.824	-.3292	.1445
		41-50	-.16836	.09867	.431	-.4383	.1016
		51-60	-.01069	.15414	1.00	-.4324	.4110
		Above 60	-.47226	.16434	.034	-.9218	-.0227
Reliabilityand Communication	31-40	< than 30	.09233	.08658	.824	-.1445	.3292
		41-50	-.07603	.11648	.966	-.3947	.2426
		51-60	.08163	.16610	.988	-.3728	.5360
		Above 60	-.37994	.17561	.195	-.8604	.1005
Reliabilityand Communication	41-50	< than 30	.16836	.09867	.431	-.1016	.4383
		31- 40	.07603	.11648	.966	-.2426	.3947
		51-60	.15766	.17271	.892	-.3148	.6302

		Above 60	-.30390	.18187	.453	-.8015	.1936
Reliabilityand Communication	51-60	< than 30	.01069	.15414	1.00	-.4110	.4324
		31- 40	-.08163	.16610	.988	-.5360	.3728
		41-50	-.15766	.17271	.892	-.6302	.3148
		Above 60	-.46157	.21703	.210	-1.0553	.1322
Reliabilityand Communication	Above 60	< than 30	.47226	.16434	.034	.0227	.9218
		31- 40	.37994	.17561	.195	-.1005	.8604
		41-50	.30390	.18187	.453	-.1936	.8015
		51-60	.46157	.21703	.210	-.1322	1.0553
The mean difference is notable at the 0.05 level.							

Table 4.20: Post Hoc Tests for Reliability and Communication and Age groups

Interpretation

This analysis compares how women in different age groups feel about the reliability and communication in e-commerce. According to the results, there is only one significant difference: women under 30 and women above 60 have noticeably different views ($p = 0.034$). This suggests that younger and older women may not have the same experience or satisfaction when it comes to communication and trust in online shopping.

For all other age group comparisons, there were **no significant differences**, as the p-values were much higher than 0.05. This means that, for example, women aged 31–40, 41–50, or 51–60 did not report very different opinions from one another or from the under-30 group. The differences in average responses (mean differences) are small and could have happened by chance.

In short, the findings show that **most age groups share similar opinions** on reliability and communication in e-commerce, **except for women under 30 compared to those above 60**. These two groups appear to have different experiences, with the older group possibly having lower satisfaction or different expectations.

Age Group wise Women's perception and Security & Privacy

Ho: There is statistically no notable difference between the mean scores ofage group wise women's perception towards e-commerce for factor namely 'Security and Privacy'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Security and Privacy	Between Groups	9.724	4	2.431	3.396	.150
	Within Groups	905.386	1265	0.716		
	Total	915.112	1269			

Table 4.21: ANOVA for Security and Privacy and Age groups

Interpretation

The ANOVA table (Table 4.21) presents a significant value of 0.150 (p = 0.150). This value is well above the 0.05 threshold, indicating no statistical significance. It suggests that women's perceptions of security and privacy in e-commerce do not differ notably across age groups.

The F-value of 3.396 shows some variation, but not enough to be meaningful at the 5% level. The Between Groups Sum of Squares is 9.724 with 4 degrees of freedom. The Within Groups Sum of Squares is 905.386 with 1265 degrees of freedom.

This indicates most of the variation is due to differences within the groups rather than between them. The Mean Square for Between Groups is 2.431, while for Within Groups it is 0.716.

These values support the conclusion that perceptions are relatively consistent across age categories.

Therefore, age does not have a significant effect on women's views regarding security and privacy in e-commerce.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Age Year	(J) Age Year	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound

Security and Privacy	< than 30	31- 40	-.05538	.08902	.972	-.2989	.1882
		41-50	.01057	.10145	1.000	-.2670	.2881
		51-60	-.35852	.15848	.159	-.7921	.0750
		Above 60	-.22112	.16897	.686	-.6834	.2411
Security and Privacy	31-40	< than 30	.05538	.08902	.972	-.1882	.2989
		41-50	.06596	.11976	.982	-.2617	.3936
		51-60	-.30314	.17078	.389	-.7704	.1641
		Above 60	-.16574	.18056	.890	-.6597	.3282
Security and Privacy	41-50	< than 30	-.01057	.10145	1.000	-.2881	.2670
		31- 40	-.06596	.11976	.982	-.3936	.2617
		51-60	-.36909	.17758	.231	-.8549	.1167
		Above 60	-.23170	.18700	.728	-.7433	.2799
Security and Privacy	51-60	< than 30	.35852	.15848	.159	-.0750	.7921
		31- 40	.30314	.17078	.389	-.1641	.7704
		41-50	.36909	.17758	.231	-.1167	.8549
		Above 60	.13740	.22314	.973	-.4731	.7478
Security and Privacy	Above 60	< than 30	.22112	.16897	.686	-.2411	.6834
		31- 40	.16574	.18056	.890	-.3282	.6597
		41-50	.23170	.18700	.728	-.2799	.7433
		51-60	-.13740	.22314	.973	-.7478	.4731
The mean difference is notable at the 0.05 level.							

Table 4.22: Post Hoc Tests for Security and Privacy and Age groups

Interpretation:

Table 4.22 presents a comparison of perceptions across different age groups concerning the security and privacy factor in e-commerce. Based on the results, **there are no significant differences** in opinions between any age groups. All p-values are much higher than 0.05, which means that the differences in responses could have happened by chance and are **not statistically meaningful**.

For example, the difference in opinion between women under 30 and those above 60 had a p-value of 0.686, which is not significant. Similarly, comparisons between other age groups — such as 31–40 vs. 51–60, or 41–50 vs. above 60 — also show no major differences in how these groups view online security and privacy.

In short, **women of all age groups tend to feel similarly** about the security and privacy

aspects of online shopping. No single age group stands out with a clearly different opinion in this area.

Age Group wise Women's perception and User-friendly

Ho: There is statistically no notable difference between the mean scores ofage group wise women's perception towards e-commerce for factor namely 'User-friendly'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
User-friendly	Between Groups	3.860	4	0.965	1.457	.214
	Within Groups	835.860	1265	0.662		
	Total	839.720	1269			

Table 4.23: ANOVA User friendly and Age groups

Interpretation

The ANOVA table (Table 4.23) shows a significance value of 0.214 (p = 0.214). This value is above the 0.05 threshold, indicating no statistically significant difference. It suggests that women's perceptions of the "User-friendly" nature of e-commerce do not differ by age group.

The F-value of 1.457 indicates only slight variation between group means. The Between Groups Sum of Squares is 3.860 with 4 degrees of freedom. The Within Groups Sum of Squares is 835.860 with 1265 degrees of freedom.

This shows that the majority of variation is within the groups rather than between them.

The Mean Square for Between Groups is 0.965, compared to 0.662 for Within Groups. These values confirm that age does not significantly influence perceptions of user-friendliness.

Hence, the usability of e-commerce platforms is perceived similarly across all age groups of women.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Age Year	(J) Age Year	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
User-friendly	< than 30	31- 40	-.07478	.08546	.906	-.3086	.1590
		41-50	-.07969	.09739	.925	-.3461	.1867
		51-60	.06034	.15214	.995	-.3559	.4765
		Above 60	-.35503	.16221	.185	-.7988	.0887
User-friendly	31-40	< than 30	.07478	.08546	.906	-.1590	.3086
		41-50	-.00491	.11497	1.000	-.3194	.3096
		51-60	.13513	.16395	.923	-.3134	.5836
		Above 60	-.28025	.17333	.487	-.7544	.1939
User-friendly	41-50	< than 30	.07969	.09739	.925	-.1867	.3461
		31- 40	.00491	.11497	1.000	-.3096	.3194
		51-60	.14004	.17047	.924	-.3263	.6064
		Above 60	-.27534	.17951	.541	-.7664	.2158
User-friendly	51-60	< than 30	-.06034	.15214	.995	-.4765	.3559
		31- 40	-.13513	.16395	.923	-.5836	.3134
		41-50	-.14004	.17047	.924	-.6064	.3263
		Above 60	-.41537	.21421	.298	- 1.0014	.1706
User-friendly	Above 60	< than 30	.35503	.16221	.185	-.0887	.7988
		31- 40	.28025	.17333	.487	-.1939	.7544
		41-50	.27534	.17951	.541	-.2158	.7664
		51-60	.41537	.21421	.298	-.1706	1.0014
The mean difference is notable at the 0.05 level.							

Table 4.24: Post Hoc Tests for User friendly and Age groups

Interpretation

Table 4.24 presents a comparison of perceptions across different age groups regarding

the user-friendly factor in e-commerce.

The results show that **there are no significant differences** between any of the age groups. All the p-values (labeled as "Sig.") are well above 0.05, which means the small differences we see in scores are not strong enough to be considered statistically important.

For example, the biggest difference was between women under 30 and those above 60, but the p-value was 0.185 — still above the 0.05 mark. Other comparisons, like between women aged 31–40 and 51–60 or between 41–50 and 51–60, also show no meaningful differences.

In short, **women from all age groups generally share similar views** on how easy and user-friendly online shopping platforms are. No age group feels much more strongly or differently than the others.

H7: Duration of women's internet usage wise women's Perception and six factors (Convenience, Post Sales Services, Online Assistance, Reliability & Communication, Security & Privacy and User-friendly)

Duration of women's internet usage wise women's' Perception and Convenience

Ho: There is statistically no notable difference between the mean scores of Duration of women's internet usage wise women's perception towards e-commerce for factor namely 'Convenience'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Convenience	Between Groups	4.530	3	1.510	3.852	.009
	Within Groups	496.272	1266	.392		
	Total	500.802	1269			

Table 4.25: ANOVA for Convenience and Duration of Online Shopping Experience

Interpretation

The ANOVA table (Table 4.25 presents a significance value of 0.009 (p = 0.009), which is below the 0.05 threshold. This indicates a statistically significant difference in women's perceptions of the "Convenience" factor in e-commerce across different age groups. The F-value of 3.852 suggests that the variation between group means is greater than would

be expected by chance.

The Between Groups Sum of Squares is 4.530 with 3 degrees of freedom, while the Within Groups Sum of Squares is 496.272 with 1266 degrees of freedom. The Mean Square Between Groups is 1.510, and the Mean Square Within Groups is 0.392. These values show that although there is variability within age groups, the differences between age groups are statistically significant. Therefore, age appears to influence how women perceive the convenience of using e-commerce platforms.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) I'm Operating Internet Since	(J) I'm Operating Internet Since	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Convenience	< 1 Year	1-3 Year	.10905	.10734	.740	-.1675	.3856
		3-6 Year	.13794	.10610	.563	-.1354	.4112
		> 6 Year	.26668*	.10169	.044	.0048	.5286
	1-3 Year	< 1 Year	-.10905	.10734	.740	-.3856	.1675
		3-6 Year	.02889	.07043	.977	-.1525	.2103
		> 6 Year	.15764	.06359	.064	-.0062	.3214
	3-6 Year	< 1 Year	-.13794	.10610	.563	-.4112	.1354
		1-3 Year	-.02889	.07043	.977	-.2103	.1525
		> 6 Year	.12875	.06147	.156	-.0296	.2871
	> 6 Year	< 1 Year	-.26668*	.10169	.044	-.5286	-.0048
		1-3 Year	-.15764	.06359	.064	-.3214	.0062
		3-6 Year	-.12875	.06147	.156	-.2871	.0296
The mean difference is notable at the 0.05 level.							

Table 4.26: Post Hoc Tests for Convenience and Duration of Online Shopping Experience

Interpretation

This table no 4.26 shows the results of a comparison to find out if women's views on how convenient e-commerce is change depending on how long they've been using the internet.

The test looked at four groups: those using the internet for less than 1 year, 1–3 years, 3–6 years, and more than 6 years.

The only significant difference was found between women who have used the internet for **less than 1 year** and those who have used it for **more than 6 years**. The p-value here was **0.044**, which is less than 0.05, showing a meaningful difference. This means that these two groups do not feel the same way about the convenience of online shopping.

Women with more than 6 years of internet experience found e-commerce to be more convenient than women who are newer to the internet. This may be because experienced users are more familiar with how to search for products, compare prices, and complete online purchases easily.

No other group comparisons showed any significant differences. For example, the opinions of women using the internet for 1–3 years, 3–6 years, or between those groups and the <1 year or >6 years groups were very similar. So overall, the biggest difference in views about convenience was seen between the most experienced and the least experienced internet users.

Periods of Online Shopping Experience*Post Sales Services:

Ho: There is statistically no notable difference between the mean scores of Durations of women's internet usage wise women's perception towards e-commerce for factor namely 'Post Sales Services'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Post Sales Services	Between Groups	4.614	3	1.538	3.327	.019
	Within Groups	584.892	1266	0.462		
	Total	589.506	1269			

Table 4.27: ANOVA for Post sales services and Duration of Online Shopping Experience

Interpretation

The ANOVA table (Table 4.27) reveals a significant value of 0.019 (p = 0.019), which is below the 0.05 threshold, indicating a statistically significant difference in women's perceptions of post-sales services in e-commerce across various age groups. The F-value of

3.327 supports the presence of meaningful differences among the age categories.

The Between Groups Sum of Squares is 4.614 with 3 degrees of freedom, while the Within Groups Sum of Squares is 584.892 with 1266 degrees of freedom. The Mean Square Between Groups is 1.538, and the Mean Square Within Groups is 0.462. Although variability exists within the groups, the between-group differences are statistically notable. This suggests that women in different age groups perceive post-sales services in e-commerce differently.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) I'm Operating Internet Since	(J) I'm Operating Internet Since	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Post Sales Services	< 1 Year	1-3 Year	.16752	.11656	.477	-.1327	.4678
		3-6 Year	.18944	.11521	.354	-.1073	.4862
		> 6 Year	.30358*	.11042	.031	.0192	.5880
	1-3 Year	< 1 Year	-.16752	.11656	.477	-.4678	.1327
		3-6 Year	.02192	.07648	.992	-.1751	.2189
		> 6 Year	.13607	.06905	.200	-.0418	.3139
	3-6 Year	< 1 Year	-.18944	.11521	.354	-.4862	.1073
		1-3 Year	-.02192	.07648	.992	-.2189	.1751
		> 6 Year	.11414	.06674	.319	-.0578	.2861
	> 6 Year	< 1 Year	-.30358*	.11042	.031	-.5880	-.0192
		1-3 Year	-.13607	.06905	.200	-.3139	.0418
		3-6 Year	-.11414	.06674	.319	-.2861	.0578
The mean difference is notable at the 0.05 level.							

Table 4.28: Post sales services and Duration of Online Shopping Experience

Interpretation

Table 4.28 shows how women with different levels of online shopping experience perceive post-sales services in e-commerce. The only statistically significant difference was found between women who had been shopping online for less than 1 year and those with more than

6 years of experience. This is shown by a mean difference marked with an asterisk (*) and a p-value of 0.031, which is less than the standard 0.05 level—indicating a real difference in their perceptions.

For women with less than one year of experience, their views were not significantly different from those who had 1–3 years (p = 0.477) or 3–6 years (p = 0.354) of experience. This means their perception of post-sales services is generally similar to those who are still relatively new to online shopping.

Among women with 1–3 years of online shopping experience, there were no notable differences in perception when compared with any other group—including those with less than 1 year (p = 0.477), 3–6 years (p = 0.992), or more than 6 years (p = 0.200). This suggests a consistent experience among mid-level users.

Similarly, women with 3–6 years or more than 6 years of experience also showed no significant differences in perception when compared to other groups, except for the earlier mentioned difference between the least experienced (<1 year) and the most experienced (>6 years). This may indicate that over time, expectations or awareness of post-sales services improve with greater experience.

Duration of women's internet usage and Online Assistance

Ho: There is statistically no notable difference between the mean scores of Duration of women's internet usage wise women's perception towards e-commerce for factor namely 'Online Assistance'.

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ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Online Assistance	Between Groups	5.919	3	1.973	3.543	.014
	Within Groups	709.162	1266	0.557		
	Total	711.081	1269			

Table 4.29: ANOVA for Online Assistance and Duration of Online Shopping Experience

Interpretation

The ANOVA table (Table 4.29) shows a significant value of 0.014 (p = 0.014), which is below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Online Assistance" factor in e-commerce across different age groups. The F-value of 3.543 further supports the presence of meaningful variation among the group means.

The Between Groups Sum of Squares is 5.919 with 3 degrees of freedom, while the Within Groups Sum of Squares is 709.162 with 1266 degrees of freedom. The Mean Square for Between Groups is 1.973, and for Within Groups, it is 0.557. These values highlight differences in perceptions of online assistance exist between age groups. Therefore, age appears to play a role in shaping women's experiences with online support in e-commerce.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Duration of women's internet usage	(J) Duration of women's internet usage	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Online Assistance	< 1 Year	1-3 Year	.18758	.12796	.459	-.1420	.5172
		3-6 Year	.29700	.12647	.088	-.0288	.6228
		> 6 Year	.34578*	.12121	.023	.0335	.6580
	1-3 Year	< 1 Year	-.18758	.12796	.459	-.5172	.1420
		3-6 Year	.10942	.08396	.561	-.1068	.3257
		> 6 Year	.15820	.07580	.158	-.0371	.3535
	3-6 Year	< 1 Year	-.29700	.12647	.088	-.6228	.0288
		1-3 Year	-.10942	.08396	.561	-.3257	.1068
		> 6 Year	.04878	.07327	.910	-.1400	.2375
	> 6 Year	< 1 Year	-.34578*	.12121	.023	-.6580	-.0335
		1-3 Year	-.15820	.07580	.158	-.3535	.0371
		3-6 Year	-.04878	.07327	.910	-.2375	.1400
The mean difference is notable at the 0.05 level.							

Table 4.30: Post Hoc Tests for Online Assistance and Duration of Online Shopping Experience

Interpretation

Table 4.30 explores differences in perceptions of online assistance among women with varying durations of internet usage. A statistically major difference was light on between women who have used the internet for less than 1 year and those who have used it for more than 6 years. The mean difference is 0.34578, with a p-value of 0.023, which is below the 0.05 threshold—indicating a notable difference in perception between these two groups.

Women with less than one year of internet experience did not show significant differences when compared to those with 1–3 years (p = 0.459) or 3–6 years (p = 0.088) of usage, since their p-values exceed 0.05. However, the trend suggests that as internet experience increases, perceptions of online assistance tend to become more positive, even if not all comparisons reached significance.

Women in the 1–3 year group also did not exhibit any notable differences in their perceptions when compared with any other group. This includes women with less than 1 year (p = 0.459), 3–6 years (p = 0.561), and over 6 years of experience (p = 0.158). This suggests a relatively consistent view of online assistance among users in the early to mid stages of internet familiarity.

Women with 3–6 years and those with more than 6 years of internet use showed no significant differences between each other (p = 0.910) or with any other group, except for the notable comparison between >6 years and <1 year users. This emphasizes that extended internet usage may lead to more favorable perceptions of online assistance, possibly due to increased familiarity and confidence in using digital platforms.

Duration of women's internet usage and Reliability & Communication

Ho: There is statistically no notable difference between the mean scores of Duration of women's internet usagewise women's perception towards e-commerce for factor namely 'Reliability and Communication'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Reliability and Communication	Between Groups	8.220	3	2.740	4.048	.007
	WithinGroups	856.182	1266	.677		
	Total	864.402	1269			

Table 4.31: ANOVA for Reliability and Communication and Duration of Online Shopping Experience

Interpretation

The ANOVA table (Table 4.31) presents a significance value of 0.007 (p = 0.007), which is below the 0.05 threshold, indicating a statistically significant difference in women's perceptions of the "Reliability and Communication" factor in e-commerce across various age groups. The F-value of 4.048 further confirms that the variation between group means is meaningful and not due to random chance.

The Between Groups Sum of Squares is 8.220 with 3 degrees of freedom, while the Within Groups Sum of Squares is 856.182 with 1266 degrees of freedom. The Mean Square for Between Groups is 2.740, compared to 0.677 for Within Groups. This suggests that while variability exists within each group, the differences between age groups are significant enough to indicate differing perceptions. Therefore, age plays an important role in how women evaluate reliability and communication in e-commerce platforms.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) I'm Operating Internet Since	(J) I'm Operating Internet Since	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Reliability and Communication	< 1 Year	1-3 Year	.24465	.14106	.307	-.1187	.6080
		3-6 Year	.32925	.13942	.086	-.0299	.6884
		> 6 Year	.42247*	.13362	.009	.0783	.7667
	1-3 Year	< 1 Year	-.24465	.14106	.307	-.6080	.1187
		3-6 Year	.08460	.09255	.797	-.1538	.3230
		> 6 Year	.17783	.08357	.145	-.0374	.3931
	3-6 Year	< 1 Year	-.32925	.13942	.086	-.6884	.0299
		1-3 Year	-.08460	.09255	.797	-.3230	.1538
		> 6 Year	.09322	.08077	.656	-.1148	.3013

	> 6 Year	< 1 Year	-.42247*	.13362	.009	-.7667	-.0783
		1-3 Year	-.17783	.08357	.145	-.3931	.0374
		3-6 Year	-.09322	.08077	.656	-.3013	.1148
The mean difference is notable at the 0.05 level.							

Table 4.32: Post Hoc Tests for Reliability and Communication and Duration of Online Shopping Experience

Interpretation

Table 4.32 compares women's perceptions of reliability and communication in online shopping based on how long they've been using the internet. A significant difference was found between women who have been using the internet for less than 1 year and those with more than 6 years of experience. The mean difference is 0.42247, and the p-value is 0.009, which is below 0.05. This suggests that more experienced internet users perceive reliability and communication more positively than newer users.

Women with less than 1 year of internet experience did not show significant differences when compared to those with 1–3 years (p = 0.307) or 3–6 years (p = 0.086). While the difference with the 3–6 year group was close to significance, it still exceeded the 0.05 level. This indicates that the major shift in perception occurs between the least experienced and the most experienced users.

For women in the 1–3 year category, no notable differences were found in comparison with any other group. This includes comparisons with <1 year (p = 0.307), 3–6 years (p = 0.797), and >6 years (p = 0.145), showing fairly stable perceptions of reliability and communication in this group.

Similarly, women with 3–6 years or more than 6 years of internet use showed no statistically significant differences between each other or other groups (except for the <1 year vs. >6 years comparison). Overall, the findings suggest that internet experience positively impacts perceptions of reliability and communication, with the most experienced users expressing significantly more favorable views than newcomers.

Duration of women's internet usage and Security & Privacy

Ho: There is statistically no notable difference between the mean scores ofDuration of women's internet usage wise women's perception towards e-commerce for factor namely 'Security and Privacy'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Security and Privacy	BetweenGroups	3.403	3	1.134	1.576	.194
	WithinGroups	911.520	631	0.720		
	Total	914.922	1269			

Table 4.33: ANOVA for Security and Privacy and Duration of Online Shopping Experience

Interpretation

The ANOVA table (Table 4.33) shows a significance value of 0.194 (p = 0.194), which is well above the 0.05 threshold. This indicates that there is no statistically significant difference in women's perceptions of the "Security and Privacy" factor in e-commerce across different age groups. The F-value of 1.576 supports this, showing that any variation between the groups is likely due to chance.

The Between Groups Sum of Squares is 3.403 with 3 degrees of freedom, while the Within Groups Sum of Squares is 911.520 with 1266 degrees of freedom. The Mean Square Between Groups is 1.134, while the Mean Square Within Groups is 0.720. These values show that the majority of variation lies within the groups, rather than between them. Therefore, it can be concluded that women across all age groups generally share similar views regarding security and privacy in e-commerce.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) I'm Operatin g Internet Since	(J) I'm Operating Internet Since	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Securityand	< 1 Year	1-3 Year	.14586	.14545	.748	-.2288	.5205
		3-6 Year	.18300	.14376	.581	-.1873	.5533

Privacy		> 6 Year	.26510	.13778	.219	-.0898	.6200
	1-3 Year	< 1 Year	-.14586	.14545	.748	-.5205	.2288
		3-6 Year	.03714	.09544	.980	-.2087	.2830
		> 6 Year	.11924	.08617	.510	-.1027	.3412
	3-6 Year	< 1 Year	-.18300	.14376	.581	-.5533	.1873
		1-3 Year	-.03714	.09544	.980	-.2830	.2087
		> 6 Year	.08210	.08329	.758	-.1324	.2966
	> 6 Year	< 1 Year	-.26510	.13778	.219	-.6200	.0898
		1-3 Year	-.11924	.08617	.510	-.3412	.1027
		3-6 Year	-.08210	.08329	.758	-.2966	.1324
The mean difference is notable at the 0.05 level.							

Table 4.34: Post Hoc Tests for Security and Privacy and Duration of Online Shopping Experience

Interpretation

Table 4.34 compares women's perceptions of security and privacy in online shopping according to their internet usage experience. The analysis shows that there are no statistically significant differences between any of the groups, as all p-values are above 0.05. This suggests that women's views on security and privacy do not differ significantly based on how long they've been using the internet.

For women who have used the internet for less than one year, the comparisons with those who have used it for 1–3 years (p = 0.748), 3–6 years (p = 0.581), and more than 6 years (p = 0.219) all yielded non-significant results. Although the mean difference with the >6 years group was slightly larger (0.26510), it was still not statistically meaningful.

Women with 1–3 years of internet experience also did not show any significant perception differences compared to other groups. Their comparisons with <1 year (p = 0.748), 3–6 years (p = 0.980), and >6 years (p = 0.510) all exceeded the 0.05 significance level, indicating consistency in their responses.

Similarly, women with 3–6 years and those with over 6 years of internet use did not exhibit any significant differences in their views compared to the other groups. Overall, the data indicates that duration of internet use does not significantly influence women's perceptions of security and privacy when engaging in online shopping.

Duration of women's internet usage and User-friendly

Ho: There is no notable difference between the mean scores of Durations of women's internet usage wise women's perception towards e-commerce for factor namely 'User-friendly'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
User-friendly	BetweenGroups	7.602	3	2.534	3.867	.009
	WithinGroups	828.030	1266	0.655		
	Total	835.632	1269			

Table 4.35: ANOVA for User friendly and Duration of Online Shopping Experience

Interpretation

The Table 4.35 presents a significance value of 0.009 (p = 0.009), which is below the standard 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "User-friendly" aspect of e-commerce across different age groups. The F-value of 3.867 confirms that the variation between the group means is meaningful.

The Between Groups Sum of Squares is 7.602 with 3 degrees of freedom, while the Within Groups Sum of Squares is 828.030 with 1266 degrees of freedom. The Mean Square for Between Groups is 2.534, and for Within Groups it is 0.655. These results show that differences in user-friendliness perception vary significantly by age group, suggesting that age influences how women interact with or experience the ease of using e-commerce platforms.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) I'm Operating Internet Since	(J) I'm Operating Internet Since	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	< 1 Year	1-3 Year	.44354*	.13878	.008	.0861	.8010

User-friendly		3-6 Year	.39861*	.13717	.020	.0453	.7519
		> 6 Year	.30508	.13146	.094	-.0336	.6437
	1-3 Year	< 1 Year	-.44354*	.13878	.008	-.8010	-.0861
		3-6 Year	-.04492	.09106	.961	-.2795	.1896
		> 6 Year	-.13846	.08222	.333	-.3502	.0733
	3-6 Year	< 1 Year	-.39861*	.13717	.020	-.7519	-.0453
		1-3 Year	.04492	.09106	.961	-.1896	.2795
		> 6 Year	-.09354	.07947	.642	-.2982	.1112
	> 6 Year	< 1 Year	-.30508	.13146	.094	-.6437	.0336
		1-3 Year	.13846	.08222	.333	-.0733	.3502
		3-6 Year	.09354	.07947	.642	-.1112	.2982
The mean difference is notable at the 0.05 level.							

Table 4.36: Post Hoc Tests for User friendly and Duration of Online Shopping Experience

Interpretation

Table 4.36 shows how women with different durations of internet use perceive the user-friendliness of online shopping platforms. Significant differences were found, especially between women with less than one year of experience and those with longer durations. Specifically, the differences between women with less than one year and those with 1–3 years ($p = 0.008$) and 3–6 years ($p = 0.020$) were statistically significant at the 0.05 level.

Women with less than one year of internet use had higher mean scores for user-friendliness compared to those with 1–3 and 3–6 years of experience. However, the difference with those having more than six years of experience ($p = 0.094$) was not significant, though it was approaching the threshold. This suggests that newer users may perceive online platforms as more user-friendly than intermediate users.

Women who have been using the internet for 1–3 years did not show any significant differences when compared with the 3–6 years ($p = 0.961$) and >6 years ($p = 0.333$) groups. Similarly, the 3–6 years group showed no notable differences with either the 1–3 years or >6 years group. This consistency suggests similar perceptions among users with intermediate to advanced internet experience.

Overall, the only notable differences in user-friendliness perceptions appeared between women with less than one year of experience and those with 1–3 or 3–6 years. These findings may reflect how newer users tend to view platforms as more intuitive or may be less critical

compared to those with more experience, who might have higher expectations or more exposure to different platforms.

H8: Profession wise Women's perception and 6 Factors (Convenience, Post Sales Services, Online Assistance, Reliability & Communication, Security &Privacy and User-friendly)

Ho: There is statistically no notable difference between the mean scores of profession wise women's perception towards e-commerce for factor namely 'Convenience'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Convenience	Between Groups	8.540	5	1.708	4.416	.001
	Within Groups	487.623	1264	.387		
	Total	496.163	1269			

Table 4.37: ANOVA for Convenience and Profession wise women's perception

Interpretation

The ANOVA table (Table 4.37) reveals a significance value of 0.001 (p = 0.001), which is well below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Convenience" factor in e-commerce across different occupational groups. The F-value of 4.416 suggests that the differences among group means are meaningful and unlikely due to chance.

The Between Groups Sum of Squares is 8.540 with 5 degrees of freedom, while the Within Groups Sum of Squares is 487.623 with 1264 degrees of freedom. The Mean Square Between Groups is 1.708, compared to 0.387 for Within Groups. These values highlight that the variation between occupations is significant enough to impact perceptions. Therefore, occupational status appears to influence how women perceive the convenience of using e-commerce platforms.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Occupation	(J) Occupation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Convenience	Business	Employed	.30872*	.08433	.004	.0677	.5498
		Home-Maker	.07044	.11590	.990	-.2609	.4017
		Professional	.11946	.09930	.835	-.1644	.4033
		Retired	-.06607	.11590	.993	-.3974	.2652
		Others	.14363	.08131	.488	-.0888	.3760
	Employed	Business	-.30872*	.08433	.004	-.5498	-.0677
		Home-Maker	-.23828	.10427	.202	-.5364	.0598
		Professional	-.18926	.08544	.232	-.4335	.0550
		Retired	-.37479*	.10427	.005	-.6729	-.0767
		Others	-.16509	.06364	.100	-.3470	.0168
	Home-Maker	Business	-.07044	.11590	.990	-.4017	.2609
		Employed	.23828	.10427	.202	-.0598	.5364
		Professional	.04902	.11671	.998	-.2846	.3826
		Retired	-.13651	.13113	.904	-.5113	.2383
		Others	.07319	.10184	.980	-.2179	.3643
	Professional	Business	-.11946	.09930	.835	-.4033	.1644
		Employed	.18926	.08544	.232	-.0550	.4335
		Home-Maker	-.04902	.11671	.998	-.3826	.2846
		Retired	-.18553	.11671	.606	-.5192	.1481
		Others	.02417	.08246	1.000	-.2115	.2599
	Retired	Business	.06607	.11590	.993	-.2652	.3974
		Employed	.37479*	.10427	.005	.0767	.6729
		Home-Maker	.13651	.13113	.904	-.2383	.5113
		Professional	.18553	.11671	.606	-.1481	.5192
		Others	.20970	.10184	.310	-.0814	.5008
		Business	-.14363	.08131	.488	-.3760	.0888

	Others	Employed	.16509	.06364	.100	-.0168	.3470
		Home-Maker	-.07319	.10184	.980	-.3643	.2179
		Professional	-.02417	.08246	1.000	-.2599	.2115
		Retired	-.20970	.10184	.310	-.5008	.0814
The mean difference* is notable at the 0.05 level.							

Table 4.38: Post Hoc Tests for Convenience and Profession wise women's perception

Interpretation

Table 4.38 shows how women from different occupations perceive the convenience of online shopping. Significant differences were observed mainly between the "Business" and "Employed" groups. Women in business reported significantly higher convenience scores than employed women, with a mean difference of 0.30872 and a p-value of 0.004, which is below the 0.05 threshold. This means businesswomen find online shopping more convenient than those who are employed.

Employed women, on the other hand, rated convenience significantly lower compared to both businesswomen and retired women. The difference between employed and retired women was also statistically significant ($p = 0.005$), suggesting that retired women perceive online shopping as more convenient than those currently employed. This might reflect time availability or lifestyle differences between these groups.

For the other occupational groups—such as home-makers, professionals, and others—no statistically significant differences were found when compared with each other or with business, employed, or retired women. This means their perceptions of convenience are relatively similar and do not vary notably across these categories.

In summary, the results indicate that occupation plays a role in shaping perceptions of convenience in online shopping, particularly for employed and retired women, as well as those in business. Women in business and those who are retired tend to find online shopping more convenient than employed women, possibly due to greater flexibility or different lifestyle demands.

Profession wise Women's perception and Post Sales Services

Ho: There is statistically no notable difference between the mean scores of professions wise women's perception towards e-commerce for factor namely 'Post Sales Services'.

ANOVA Table

Factor		Sum of Squares	df	MeanSquare	F	Sig.
Post Sales Services	Between Groups	11.265	5	2.253	4.878	<0.001
	Within Groups	583.858	1264	.462		
	Total	595.123	1269			

Table 4.39: ANOVA for Post sales services and Profession wise women's perception

Interpretation

The ANOVA table (Table 4.39) reports a significance value of less than 0.001 ($p < 0.001$), which is highly significant and well below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of post-sales services in e-commerce across different occupational groups. The F-value of 4.878 confirms that the variation among the group means is substantial and not due to random chance.

The Between Groups Sum of Squares is 11.265 with 5 degrees of freedom, while the Within Groups Sum of Squares is 583.858 with 1264 degrees of freedom. The Mean Square for Between Groups is 2.253, and for Within Groups, it is 0.462. These results show that occupational status significantly influences how women perceive post-sales services. This suggests that tailored post-sales strategies may be needed to address the expectations of women in different occupational categories.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Occupation	(J) Occupation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	Business	Employed	.15118	.09217	.572	-.1123	.4146
		Home-Maker	-.17000	.12667	.761	-.5321	.1921
		Professional	.03883	.10853	.999	-.2714	.3491
		Retired	-.05889	.12667	.997	-.4210	.3032

Post Sales Services		Others	.12596	.08886	.716	-.1280	.3800
	Employed	Business	-.15118	.09217	.572	-.4146	.1123
		Home-Maker	-.32118	.11396	.056	-.6469	.0046
		Professional	-.11235	.09338	.835	-.3793	.1546
		Retired	-.21007	.11396	.439	-.5358	.1157
		Others	-.02521	.06956	.999	-.2240	.1736
	Home-Maker	Business	.17000	.12667	.761	-.1921	.5321
		Employed	.32118	.11396	.056	-.0046	.6469
		Professional	.20883	.12756	.574	-.1558	.5735
		Retired	.11111	.14331	.972	-.2986	.5208
		Others	.29596	.11131	.085	-.0222	.6141
	Professional	Business	-.03883	.10853	.999	-.3491	.2714
		Employed	.11235	.09338	.835	-.1546	.3793
		Home-Maker	-.20883	.12756	.574	-.5735	.1558
		Retired	-.09772	.12756	.973	-.4623	.2669
		Others	.08713	.09012	.928	-.1705	.3447
	Retired	Business	.05889	.12667	.997	-.3032	.4210
		Employed	.21007	.11396	.439	-.1157	.5358
		Home-Maker	-.11111	.14331	.972	-.5208	.2986
		Professional	.09772	.12756	.973	-.2669	.4623
		Others	.18485	.11131	.558	-.1333	.5030
	Others	Business	-.12596	.08886	.716	-.3800	.1280
		Employed	.02521	.06956	.999	-.1736	.2240
		Home-Maker	-.29596	.11131	.085	-.6141	.0222
		Professional	-.08713	.09012	.928	-.3447	.1705
		Retired	-.18485	.11131	.558	-.5030	.1333
The Mean Difference * Is Notable at The 0.05 Level.							

Table 4.40: Post Hoc Test for Post sales services and Profession wise women's perception

Interpretation

Table 4.40 illustrates how perceptions of post-sales services differ among women from various occupational backgrounds. However, the data shows that there are no statistically significant differences between most groups, as all the p-values are above 0.05,

except for one comparison which comes very close to significance.

The only near-significant result was found between employed women and home-makers, with a mean difference of -0.32118 and a p-value of 0.056, just slightly above the 0.05 threshold. This suggests that employed women might perceive post-sales services as less satisfactory than home-makers, but the result isn't strong enough to be considered statistically significant.

All other pairwise comparisons—including businesswomen, professionals, retired women, and others—did not reveal any significant differences in how they perceive post-sales services. This implies that overall, perceptions of post-sales services are relatively consistent across different occupational categories.

In summary, occupation does not appear to be a strong factor influencing women's views on post-sales services in online shopping. Although employed women may view these services slightly less favorably than homemakers, this trend is not statistically confirmed. Therefore, it can be concluded that post-sales service satisfaction is generally stable regardless of a woman's occupation.

Profession wise Women's perception and Online Assistance

Ho: There is statistically no notable difference between the mean scores of professions wise women's perception towards e-commerce for factor namely 'Online Assistance'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Online Assistance	Between Groups	8.216	5	1.643	2.928	0.013
	Within Groups	709.792	1264	0.561		
	Total	718.008	1269			

Table 4.41: ANOVA for Online Assistance and Profession wise women's perception

Interpretation

The ANOVA table (Table 4.41) shows a significant value of 0.013 (p = 0.013), which is below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Online Assistance" factor in e-commerce across different occupational

groups. The F-value of 2.928 confirms that the variation among group means is meaningful and not due to chance.

The Between Groups Sum of Squares is 8.216 with 5 degrees of freedom, and the Within Groups Sum of Squares is 709.792 with 1264 degrees of freedom. The Mean Square for Between Groups is 1.643, while the Within Groups Mean Square is 0.561. These values reflect that occupational status has a significant influence on how women evaluate the quality or usefulness of online assistance in e-commerce. This insight may help platforms tailor support services to better meet the needs of users from different professional backgrounds.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Occupation	(J) Occupation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Online Assistance	Business	Employed	.19975	.10161	.363	-.0907	.4902
		Home-Maker	.02176	.13965	1.000	-.3774	.4210
		Professional	.04995	.11965	.998	-.2921	.3920
		Retired	-.05972	.13965	.998	-.4589	.3395
		Others	.10593	.09797	.889	-.1741	.3860
	Employed	Business	-.19975	.10161	.363	-.4902	.0907
		Home-Maker	-.17800	.12564	.717	-.5372	.1812
		Professional	-.14981	.10295	.693	-.4441	.1445
		Retired	-.25948	.12564	.307	-.6186	.0997
		Others	-.09383	.07669	.825	-.3130	.1254
	Home-Maker	Business	-.02176	.13965	1.000	-.4210	.3774
		Employed	.17800	.12564	.717	-.1812	.5372
		Professional	.02819	.14063	1.000	-.3738	.4302
		Retired	-.08148	.15800	.996	-.5331	.3702
		Others	.08417	.12271	.983	-.2666	.4349
	Professional	Business	-.04995	.11965	.998	-.3920	.2921
		Employed	.14981	.10295	.693	-.1445	.4441
		Home-Maker	-.02819	.14063	1.000	-.4302	.3738

		Retired	-.10967	.14063	.971	-.5117	.2923
		Others	.05598	.09935	.993	-.2280	.3400
	Retired	Business	.05972	.13965	.998	-.3395	.4589
		Employed	.25948	.12564	.307	-.0997	.6186
		Home-Maker	.08148	.15800	.996	-.3702	.5331
		Professional	.10967	.14063	.971	-.2923	.5117
		Others	.16565	.12271	.757	-.1851	.5164
	Others	Business	-.10593	.09797	.889	-.3860	.1741
		Employed	.09383	.07669	.825	-.1254	.3130
		Home-Maker	-.08417	.12271	.983	-.4349	.2666
		Professional	-.05598	.09935	.993	-.3400	.2280
		Retired	-.16565	.12271	.757	-.5164	.1851
The mean difference * is notable at the 0.05 level.							

Table 4.42: Post Hoc Tests for Online Assistance and Profession wise women's perception

Interpretation

Table 4.42 examines how women from different occupational backgrounds perceive online assistance services. However, none of the pairwise comparisons show statistically significant differences, as all p-values are well above the 0.05 level, indicating no strong evidence of variation based on occupation.

The highest observed mean difference was between retired women and employed women (Mean Difference = 0.25948, $p = 0.307$), suggesting that retired women may perceive online assistance slightly more favorably. However, this result is not statistically significant, so no firm conclusions can be drawn from it.

Other comparisons—such as between businesswomen, professionals, homemakers, and others—also failed to reach significance. Most of the confidence intervals include zero, and the p-values are consistently above the threshold, further reinforcing that the perceived quality of online assistance does not significantly vary by occupational group.

In conclusion, occupation does not have a notable influence on how women evaluate online assistance services. The similarity in perceptions across all groups suggests that online customer support experiences are relatively consistent regardless of a woman's professional or domestic status.

Profession wise Women's perception and Reliability & Communication

Ho: There is statistically no notable difference between the mean scores ofprofessions wise women's perception towards e-commerce for factor namely 'Reliability and Communication'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Reliability and Communication	Between Groups	22.780	5	4.556	6.79	.005
	WithinGroups	847.928	1264	0.671		
	Total	870.708	1269			

Table 4.43: ANOVA for Reliability and Communication and Profession wise women's perception

Interpretation

The ANOVA table (Table 4.43) presents a significant value of 0.005 (p = 0.005), which is below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Reliability and Communication" factor in e-commerce across different occupational groups. The F-value of 6.79 supports that the observed variation among the group means is meaningful and unlikely due to chance.

The Between Groups Sum of Squares is 22.780 with 5 degrees of freedom, and the Within Groups Sum of Squares is 847.928 with 1264 degrees of freedom. The Mean Square for Between Groups is 4.556, compared to 0.671 for Within Groups. These results suggest that occupation influences how women perceive the reliability of services and the clarity or effectiveness of communication in e-commerce platforms. Businesses can use this insight to improve engagement and trust with women across various occupational backgrounds.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Occupation	(J) Occupation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound

Reliability and Communication	Business	Employed	.32794*	.11131	.039	.0098	.6461
		Home-Maker	.01204	.15298	1.000	-.4253	.4493
		Professional	.26331	.13107	.338	-.1114	.6380
		Retired	-.07685	.15298	.996	-.5142	.3605
		Others	.12852	.10732	.838	-.1783	.4353
	Employed	Business	-.32794*	.11131	.039	-.6461	-.0098
		Home-Maker	-.31590	.13763	.197	-.7093	.0775
		Professional	-.06463	.11278	.993	-.3870	.2577
		Retired	-.40479*	.13763	.040	-.7982	-.0114
		Others	-.19942	.08400	.167	-.4396	.0407
	Home-Maker	Business	-.01204	.15298	1.000	-.4493	.4253
		Employed	.31590	.13763	.197	-.0775	.7093
		Professional	.25127	.15405	.578	-.1891	.6916
		Retired	-.08889	.17308	.996	-.5836	.4059
		Others	.11648	.13443	.954	-.2678	.5007
	Professional	Business	-.26331	.13107	.338	-.6380	.1114
		Employed	.06463	.11278	.993	-.2577	.3870
		Home-Maker	-.25127	.15405	.578	-.6916	.1891
		Retired	-.34016	.15405	.235	-.7805	.1002
		Others	-.13479	.10884	.818	-.4459	.1763
	Retired	Business	.07685	.15298	.996	-.3605	.5142
		Employed	.40479*	.13763	.040	.0114	.7982
		Home-Maker	.08889	.17308	.996	-.4059	.5836
		Professional	.34016	.15405	.235	-.1002	.7805
		Others	.20537	.13443	.646	-.1789	.5896
	Others	Business	-.12852	.10732	.838	-.4353	.1783
		Employed	.19942	.08400	.167	-.0407	.4396
		Home-Maker	-.11648	.13443	.954	-.5007	.2678
		Professional	.13479	.10884	.818	-.1763	.4459
		Retired	-.20537	.13443	.646	-.5896	.1789
The mean difference is notable at the 0.05 level.							

Table 4.44: Post Hoc Tests for Reliability and Communication and Profession wise women's perception

Interpretation

Table 4.44 explores how women from different occupational categories perceive reliability and communication in digital services. A few statistically significant differences emerged, indicating that occupational background may influence perceptions in this area.

Women employed in the workforce reported significantly lower satisfaction with reliability and communication compared to those in business (*Mean Difference = -0.32794, p = 0.039*) and retired women (*Mean Difference = -0.40479, p = 0.040*). These findings suggest that employed women may have higher expectations or more critical evaluations due to their active engagement with digital services in professional settings.

No other comparisons reached statistical significance. Differences between homemakers, professionals, and others were not substantial, with p-values well above the 0.05 threshold and confidence intervals encompassing zero, indicating no meaningful variation in their perceptions.

In summary, occupation appears to have a modest but notable impact on women's views of service reliability and communication, particularly highlighting that employed women view these aspects less favorably than their business or retired counterparts. This insight may help service providers tailor communication strategies and reliability improvements to meet the expectations of employed users.

Profession wise Women's perception and Security & Privacy

Ho: There is statistically no notable difference between the mean scores ofprofession wise women's perception towards e-commerce for factor namely 'Security and Privacy'.

ANOVA Table

Factor		Sum of Squares	df	Mean Square	F	Sig.
Security and Privacy	BetweenGroups	13.901	5	2.780	3.878	0.002
	Within Groups	905.981	1264	0.717		
	Total	919.882	1269			

Table 4.45: ANOVA for Security and Privacy and Profession wise women's perception

Interpretation

The ANOVA table (Table 4.45) shows a significance value of 0.002 (p = 0.002), which

is well below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Security and Privacy" factor in e-commerce across different occupational groups. The F-value of 3.878 reinforces that the variation between group means is meaningful and unlikely to have occurred by chance.

The Between Groups Sum of Squares is 13.901 with 5 degrees of freedom, while the Within Groups Sum of Squares is 905.981 with 1264 degrees of freedom. The Mean Square for Between Groups is 2.780, and the Mean Square Within Groups is 0.717. These results suggest that women in different occupations view the security and privacy aspects of e-commerce differently. E-commerce platforms can use this insight to tailor their communication and security assurance strategies to specific professional segments for improved trust and engagement.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Occupation	(J) Occupation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Security and Privacy	Business	Employed	.00539	.11476	1.000	-.3227	.3334
		Home-Maker	-.26019	.15772	.566	-.7110	.1907
		Professional	-.19621	.13513	.695	-.5825	.1901
		Retired	-.30463	.15772	.384	-.7555	.1462
		Others	-.03677	.11064	.999	-.3531	.2795
	Employed	Business	-.00539	.11476	1.000	-.3334	.3227
		Home-Maker	-.26558	.14190	.421	-.6712	.1400
		Professional	-.20160	.11627	.510	-.5340	.1308
		Retired	-.31002	.14190	.246	-.7156	.0956
		Others	-.04217	.08661	.997	-.2897	.2054
	Home-Maker	Business	.26019	.15772	.566	-.1907	.7110
		Employed	.26558	.14190	.421	-.1400	.6712
		Professional	.06397	.15882	.999	-.3900	.5180
		Retired	-.04444	.17844	1.000	-.5545	.4656

		Others	.22341	.13859	.591	-.1728	.6196
	Professional	Business	.19621	.13513	.695	-.1901	.5825
		Employed	.20160	.11627	.510	-.1308	.5340
		Home-Maker	-.06397	.15882	.999	-.5180	.3900
		Retired	-.10842	.15882	.984	-.5624	.3456
		Others	.15944	.11221	.714	-.1613	.4802
	Retired	Business	.30463	.15772	.384	-.1462	.7555
		Employed	.31002	.14190	.246	-.0956	.7156
		Home-Maker	.04444	.17844	1.000	-.4656	.5545
		Professional	.10842	.15882	.984	-.3456	.5624
		Others	.26786	.13859	.383	-.1283	.6640
	Others	Business	.03677	.11064	.999	-.2795	.3531
		Employed	.04217	.08661	.997	-.2054	.2897
		Home-Maker	-.22341	.13859	.591	-.6196	.1728
		Professional	-.15944	.11221	.714	-.4802	.1613
		Retired	-.26786	.13859	.383	-.6640	.1283
The mean difference is notable at the 0.05 level.							

Table 4.46: Post Hoc Tests for Security and Privacy and Profession wise women's perception

Interpretation

Table 4.46 reveals the differences in women's perceptions of security and privacy in digital services across various occupational categories. However, in this case, the analysis found no statistically significant differences between any occupational group comparisons at the 0.05 level.

Although some comparisons showed relatively large mean differences — for instance, retired women vs. employed women (Mean Difference = 0.31002) and business vs. retired (Mean Difference = -0.30463) — their p-values (.246 and .384, respectively) and wide confidence intervals indicate that these differences are not statistically reliable.

All confidence intervals for the pairwise comparisons include zero, suggesting that the variations in perceived security and privacy are likely due to random chance rather than true differences between occupational groups.

In conclusion, women's perceptions of security and privacy in digital services appear broadly consistent regardless of their occupation, with no group reporting significantly different views

from others. This uniformity may reflect a general consensus or shared concern among all women regarding privacy and data security in digital environments.

Profession wise Women's perception and User-friendly

Ho: There is statistically no notable difference between the mean scores ofprofessions wise women's perception towards e-commerce for factor namely 'User-friendly'.

ANOVA Table

		Sum of Squares	df	Mean Square	F	Sig.
User-friendly	Between Groups	5.169	5	1.034	1.550	0.175
	Within Groups	839.642	1264	0.664		
	Total	844.811	1269			

Table 4.47: ANOVA for User friendly and Profession wise women's perception

Interpretation

The ANOVA table (Table 4.47) reports a significant value of 0.175 (p = 0.175), which is above the 0.05 threshold. This indicates that there is no statistically significant difference in women's perceptions of the "User-friendly" aspect of e-commerce across different occupational groups. The F-value of 1.550 supports that the differences in group means are not large enough to be considered meaningful.

The Between Groups Sum of Squares is 5.169 with 5 degrees of freedom, and the Within Groups Sum of Squares is 839.642 with 1264 degrees of freedom. The Mean Square for Between Groups is 1.034, while the Within Groups Mean Square is 0.664. These results suggest that occupational status does not significantly influence how women evaluate the ease of use or interface friendliness of e-commerce platforms.

Post Hoc Tests

Multiple Comparisons						
Tukey HSD						
	(I) Occupation	(J)	Mean			95% Confidence

Dependent Variable		Occupation	Difference (I-J)	Std. Error	Sig.	Interval	
						Lower Bound	Upper Bound
User-friendly	Business	Employed	.16446	.11059	.673	-.1517	.4806
		Home-Maker	.24398	.15199	.595	-.1905	.6784
		Professional	.09670	.13022	.976	-.2755	.4689
		Retired	.16991	.15199	.874	-.2646	.6044
		Others	.17351	.10662	.581	-.1313	.4783
	Employed	Business	-.16446	.11059	.673	-.4806	.1517
		Home-Maker	.07952	.13674	.992	-.3114	.4704
		Professional	-.06776	.11204	.991	-.3880	.2525
		Retired	.00545	.13674	1.000	-.3854	.3963
		Others	.00905	.08346	1.000	-.2295	.2476
	Home-Maker	Business	-.24398	.15199	.595	-.6784	.1905
		Employed	-.07952	.13674	.992	-.4704	.3114
		Professional	-.14728	.15305	.930	-.5848	.2902
		Retired	-.07407	.17196	.998	-.5656	.4175
		Others	-.07047	.13355	.995	-.4522	.3113
	Professional	Business	-.09670	.13022	.976	-.4689	.2755
		Employed	.06776	.11204	.991	-.2525	.3880
		Home-Maker	.14728	.15305	.930	-.2902	.5848
		Retired	.07321	.15305	.997	-.3643	.5107
		Others	.07681	.10813	.981	-.2323	.3859
	Retired	Business	-.16991	.15199	.874	-.6044	.2646
		Employed	-.00545	.13674	1.000	-.3963	.3854
		Home-Maker	.07407	.17196	.998	-.4175	.5656
		Professional	-.07321	.15305	.997	-.5107	.3643
		Others	.00360	.13355	1.000	-.3782	.3854
	Others	Business	-.17351	.10662	.581	-.4783	.1313
		Employed	-.00905	.08346	1.000	-.2476	.2295
		Home-Maker	.07047	.13355	.995	-.3113	.4522
		Professional	-.07681	.10813	.981	-.3859	.2323
		Retired	-.00360	.13355	1.000	-.3854	.3782

The mean difference is notable at the 0.05 level.

Table 4.48: Post Hoc Tests for User friendly and Profession wise women's perception

Interpretation

Table 4.48 shows the pairwise comparisons of user-friendliness perceptions across occupational categories. The analysis reveals that none of the comparisons reach statistical significance at the 0.05 level, suggesting that women, regardless of their occupation, report relatively similar experiences when it comes to the user-friendliness of digital services.

Although some mean differences exist — such as home-makers vs. businesswomen (Mean Difference = -0.24398) and retired vs. businesswomen (Mean Difference = -0.16991) — all corresponding p-values are well above 0.05, and the confidence intervals include zero, indicating these results are not statistically meaningful.

Overall, there is no strong evidence of occupational differences in how user-friendly digital platforms are perceived to be by women. This suggests that user interface design and ease of navigation are being experienced in a generally consistent way across all occupational groups.

H9: Qualification wise Women's perception and 6 Factors (Convenience, Post Sales Services, Online Assistance, Reliability & Communication, Security & Privacy and User-friendly)

Qualification wise Women's perception and Convenience

Ho: There is statistically no notable difference between the mean scores of qualifications wise women's perception towards e-commerce for factornamely 'Convenience'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Convenience	Between Groups	8.856	4	2.214	5.635	0.000
	Within Groups	497.084	1265	0.393		
	Total	505.940	1269			

Table 4.49: ANOVA for Convenience and Qualification wise Women's perception

Interpretation

The ANOVA table (Table 4.49) shows a significance value of 0.000 ($p < 0.001$), which is well below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Convenience" factor in e-commerce across different income groups. The F-value of 5.635 further supports that the variation among group means is substantial and not due to random chance.

The Between Groups Sum of Squares is 8.856 with 4 degrees of freedom, while the Within Groups Sum of Squares is 497.084 with 1265 degrees of freedom. The Mean Square for Between Groups is 2.214, compared to 0.393 for Within Groups. These results suggest that income level plays a notable role in shaping women's views on how convenient they find e-commerce platforms. This insight can guide companies to design features and services that cater to varying levels of convenience expectations across income brackets.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	Higher Secondary	Under-Graduate	.23557	.08815	.059	-.0056	.4767
		Post-Graduate	.19141	.08579	.170	-.0433	.4261
		Doctorate	.05425	.11819	.991	-.2691	.3776
		Others	.35827	.14719	.108	-.0444	.7609
	Under-Graduate	Higher Secondary	-.23557	.08815	.059	-.4767	.0056
		post-graduate	-.04416	.05680	.937	-.1996	.1112
		doctorate	-.18132	.09917	.358	-.4526	.0900

Convenience		others	.12270	.13241	.887	-.2395	.4849
	Post-Graduate	Higher Secondary	-.19141	.08579	.170	-.4261	.0433
		Under-Graduate	.04416	.05680	.937	-.1112	.1996
		Doctorate	-.13716	.09708	.620	-.4027	.1284
		Others	.16686	.13085	.707	-.1911	.5248
	Doctorate	Higher Secondary	-.05425	.11819	.991	-.3776	.2691
		Under-Graduate	.18132	.09917	.358	-.0900	.4526
		Post-Graduate	.13716	.09708	.620	-.1284	.4027
		Others	.30402	.15405	.280	-.1174	.7254
	Others	Higher Secondary	-.35827	.14719	.108	-.7609	.0444
		Under-Graduate	-.12270	.13241	.887	-.4849	.2395
		Post-Graduate	-.16686	.13085	.707	-.5248	.1911
		Doctorate	-.30402	.15405	.280	-.7254	.1174
The mean difference is notable at the 0.05 level.							

Table 4.50: Post Hoc Tests for Convenience and Qualification wise Women's perception

Interpretation

Table 4.50 presents the post hoc analysis using the Tukey HSD test to compare perceptions of user-friendliness among women from various occupational backgrounds. The findings indicate that there are no statistically significant differences across any of the occupational groups, as all the p-values are greater than 0.05. This means that women's views on the user-friendliness of digital platforms do not differ meaningfully based on whether they are employed, running a business, retired, homemakers, professionals, or in other categories. In comparisons between businesswomen and other occupational groups, none of the mean differences reach statistical significance. For example, the difference between business and

employed women (Mean Difference = 0.16446, p = 0.673), and business vs. homemakers (Mean Difference = 0.24398, p = 0.595) both indicate no notable variation. Additionally, the confidence intervals for these comparisons include zero, further confirming that the differences are not meaningful in a statistical sense.

Similarly, employed women's perceptions of user-friendliness do not differ significantly from those in other occupational categories. Whether compared with homemakers (p = 0.992), professionals (p = 0.991), retired women (p = 1.000), or others (p = 1.000), there are no statistically significant differences. The same trend continues with homemakers, professionals, and retired women, where all comparisons with other groups show p-values well above 0.05, confirming a consistent perception of user-friendliness.

Overall, these results suggest that occupation does not play a significant role in shaping how women perceive the user-friendliness of digital platforms. The interface design, usability, and accessibility features appear to be experienced similarly by women across all occupational groups. This consistency is a positive indicator that digital platforms may be succeeding in creating inclusive and user-friendly experiences for a diverse range of users.

Qualification wise Women's perception and Post Sales Services

Ho: There is statistically no notable difference between the mean scores ofqualifications wise women's perception towards e-commerce for factornamely 'Post Sales Services'.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
Post Sales Services	Between Groups	4.396	4	1.099	2.337	0.053
	WithinGroups	590.726	1265	0.467		
	Total	595.122	1269			

Table 4.51: ANOVA for Post sales services and Qualification wise Women's perception

Interpretation

The ANOVA table (Table 4.51) presents a significance value of 0.053 (p = 0.053), which is slightly above the 0.05 threshold. This suggests that there is no statistically significant difference in women's perceptions of the "Post Sales Services" factor in e-commerce across

different income groups. Although the F-value of 2.337 indicates some level of variation between group means, it is not strong enough to be considered meaningful at the 5% significance level.

The Between Groups Sum of Squares is 4.396 with 4 degrees of freedom, and the Within Groups Sum of Squares is 590.726 with 1265 degrees of freedom. The Mean Square for Between Groups is 1.099, while the Within Groups Mean Square is 0.467. These findings imply that women from different income groups perceive post-sales services in a relatively similar manner, and income level does not play a significant role in shaping their opinions on this particular factor.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Post Sales Services	Higher Secondary	Under- Graduate	.03502	.09609	.996	-.2279	.2979
		Post-Graduate	.09404	.09352	.853	-.1618	.3499
		Doctorate	-.02696	.12884	1.000	-.3794	.3255
		Others	-.16558	.16045	.841	-.6045	.2734
	Under- Graduate	Higher Secondary	-.03502	.09609	.996	-.2979	.2279
		Post-Graduate	.05902	.06192	.876	-.1104	.2284
		Doctorate	-.06198	.10811	.979	-.3577	.2338
		Others	-.20059	.14434	.635	-.5955	.1943
	Post-Graduate	Higher Secondary	-.09404	.09352	.853	-.3499	.1618
		Under- Graduate	-.05902	.06192	.876	-.2284	.1104
		Doctorate	-.12100	.10583	.783	-.4105	.1685
		Others	-.25961	.14264	.363	-.6498	.1306

	Doctorate	Higher Secondary	.02696	.12884	1.000	-.3255	.3794
		Under- Graduate	.06198	.10811	.979	-.2338	.3577
		Post-Graduate	.12100	.10583	.783	-.1685	.4105
		Others	-.13861	.16793	.923	-.5980	.3208
	Others	Higher Secondary	.16558	.16045	.841	-.2734	.6045
		Under- Graduate	.20059	.14434	.635	-.1943	.5955
		Post-Graduate	.25961	.14264	.363	-.1306	.6498
		Doctorate	.13861	.16793	.923	-.3208	.5980
The mean difference is notable at the 0.05 level.							

Table 4.52: Post Hoc Test for Post sales services and Qualification wise Women's perception

Interpretation

Table 4.52 shows the comparative analysis of post-sales service perceptions among women with different educational qualifications. In the first set of comparisons, women with a higher secondary qualification were compared to other groups. The results reveal no statistically significant differences in perception of post-sales services with undergraduates ($p = 0.996$), postgraduates ($p = 0.853$), doctorates ($p = 1.000$), or others ($p = 0.841$), as all p-values exceed 0.05. The confidence intervals for these comparisons include zero, further confirming that these differences are not meaningful.

In the second section, focusing on the undergraduate qualification group, the findings remain consistent. Comparisons between undergraduates and higher secondary ($p = 0.996$), postgraduates ($p = 0.876$), doctorates ($p = 0.979$), and others ($p = 0.635$) show no notable differences. Even though some mean differences exist — such as a slightly lower perception in post-sales services by undergraduates compared to others (Mean Difference = -0.20059) — the lack of statistical significance indicates these are not meaningful.

The third part of the analysis examines the postgraduate group. Once again, there are no significant differences in how postgraduates perceive post-sales services compared to those with higher secondary ($p = 0.853$), undergraduate ($p = 0.876$), doctorate ($p = 0.783$), or other qualifications ($p = 0.363$). All p-values are well above the 0.05 threshold, and the confidence

intervals continue to include zero, reinforcing the consistency across groups.

Finally, when analyzing the doctorate and other qualification groups, the results remain the same. Doctorates do not show any statistically significant difference in perception compared to higher secondary (p = 1.000), undergraduate (p = 0.979), postgraduate (p = 0.783), or other groups (p = 0.923). Similarly, the "other" qualification group does not differ significantly from any of the others. These findings collectively suggest that educational qualification does not significantly impact women's perceptions of post-sales services in e-commerce, and experiences appear to be consistent across educational backgrounds.

Qualification wise Women's perception and Online Assistance

Ho: There is statistically no notable difference between the mean scores ofqualifications wise women's perception towards e-commerce for factornamely 'Online Assistance'.

ANOVA Table

		Sum of Squares	df	Mean Square	F	Sig.
Online Assistance	Between Groups	5.207	4	1.302	2.309	0.056
	Within Groups	712.801	1265	0.563		
	Total	718.008	1269			

Table 4.53: ANOVA for Online Assistance and Qualification wise Women's perception

Interpretation

The ANOVA table (Table 4.53) reveals a significant value of 0.056 (p = 0.056), which is slightly above the 0.05 threshold. This indicates that there is no statistically significant difference in women's perceptions of the "Online Assistance" factor in e-commerce across different income groups. The F-value of 2.309 suggests minor variation between group means, but it is not substantial enough to confirm a meaningful difference.

The Between Groups Sum of Squares is 5.207 with 4 degrees of freedom, while the Within Groups Sum of Squares is 712.801 with 1265 degrees of freedom. The Mean Square for Between Groups is 1.302, compared to 0.563 for Within Groups. These results imply that women across different income levels generally share similar perceptions about the availability and quality of online assistance provided by e-commerce platforms.

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Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Online Assistance	Higher Secondary	Under-Graduate	.19529	.10555	.346	-.0935	.4840
		Post-Graduate	.19409	.10272	.324	-.0869	.4751
		Doctorate	.10987	.14152	.937	-.2773	.4970
		Others	.07232	.17624	.994	-.4098	.5545
	Under-Graduate	Higher Secondary	-.19529	.10555	.346	-.4840	.0935
		Post-Graduate	-.00119	.06801	1.000	-.1873	.1849
		Doctorate	-.08541	.11875	.952	-.4103	.2394
		Others	-.12296	.15854	.938	-.5567	.3108
	Post-Graduate	Higher Secondary	-.19409	.10272	.324	-.4751	.0869
		Under-Graduate	.00119	.06801	1.000	-.1849	.1873
		Doctorate	-.08422	.11624	.951	-.4022	.2338
		Others	-.12177	.15667	.937	-.5504	.3068
	Doctorate	Higher Secondary	-.10987	.14152	.937	-.4970	.2773
		Under-Graduate	.08541	.11875	.952	-.2394	.4103
		Post-	.08422	.11624	.951	-.2338	.4022

		Graduate					
		Others	-.03755	.18445	1.000	-.5421	.4670
	Others	Higher Secondary	-.07232	.17624	.994	-.5545	.4098
		Under-Graduate	.12296	.15854	.938	-.3108	.5567
		Post-Graduate	.12177	.15667	.937	-.3068	.5504
		Doctorate	.03755	.18445	1.000	-.4670	.5421
The mean difference is notable at the 0.05 level.							

Table 4.54: Post Hoc Tests for Online Assistance and Qualification wise Women's perception

Interpretation

Table 4.54 presents a detailed comparison of women's perceptions of online assistance across various educational qualification levels. Starting with the higher secondary group, comparisons with undergraduates (p = 0.346), postgraduates (p = 0.324), doctorates (p = 0.937), and those with other qualifications (p = 0.994) show no statistically significant differences. Although there are slight mean differences, such as with undergraduates (Mean Difference = 0.19529), the high p-values and confidence intervals crossing zero indicate that these differences are not meaningful.

In the second section, for women with undergraduate qualifications, the comparison with higher secondary respondents confirms no significant difference (p = 0.346). Additionally, comparisons with postgraduates (p = 1.000), doctorates (p = 0.952), and others (p = 0.938) also show no statistically notable differences in their perceptions of online assistance. This suggests a fairly uniform experience among women from these groups.

The third section focuses on the postgraduate group. Here, the analysis reveals no significant differences in perception of online assistance compared to higher secondary (p = 0.324), undergraduate (p = 1.000), doctorate (p = 0.951), and other educational groups (p = 0.937). Despite small variations in mean differences, the p-values remain above the 0.05 threshold and the confidence intervals encompass zero, confirming no meaningful statistical variation.

In the final section, comparisons within the doctorate and other qualification groups further support the overall consistency in perception. Doctorates show no notable differences in perception when compared to higher secondary (p = 0.937), undergraduate (p = 0.952),

postgraduate (p = 0.951), or other qualification groups (p = 1.000). Likewise, those with other qualifications also do not differ significantly from any group. In summary, educational qualification does not appear to significantly influence women's perceptions of online assistance, suggesting that digital support services are perceived similarly across all educational backgrounds.

Qualification wise Women's perception and Reliability and Communication

Ho: There is statistically no notable difference between the mean scores ofqualifications wise women's perception towards e-commerce for factor namely 'Reliability and Communication'.

ANOVA Table

		Sum ofSquares	df	MeanSquare	F	Sig.
Reliability and Communication	Between Groups	13.329	4	3.332	4.922	0.001
	Within Groups	861.912	1265	0.681		
	Total	875.241	1269			

Table 4.55: ANOVA for Reliability and Communication and Qualification wise Women's perception

Interpretation

The ANOVA table (Table 4.55) shows a significance value of 0.001 (p = 0.001), which is well below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "Reliability and Communication" factor in e-commerce across different income groups. The F-value of 4.922 suggests that the variation between group means is meaningful and unlikely due to chance.

The Between Groups Sum of Squares is 13.329 with 4 degrees of freedom, while the Within Groups Sum of Squares is 861.912 with 1265 degrees of freedom. The Mean Square for Between Groups is 3.332, compared to 0.681 for Within Groups. These findings suggest that income plays a role in shaping how women perceive the reliability of services and the effectiveness of communication provided by e-commerce platforms.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Reliability And Communication	Higher Secondary	Under-Graduate	.17803	.11602	.540	-.1394	.4954
		Post-Graduate	.24509	.11292	.192	-.0638	.5540
		Doctorate	.01618	.15556	1.000	-.4094	.4417
		Others	-.11253	.19373	.978	-.6425	.4175
	Under-Graduate	Higher Secondary	-.17803	.11602	.540	-.4954	.1394
		Post-Graduate	.06705	.07476	.898	-.1375	.2716
		Doctorate	-.16185	.13053	.728	-.5189	.1952
		Others	-.29056	.17427	.455	-.7673	.1862
	Post-Graduate	Higher Secondary	-.24509	.11292	.192	-.5540	.0638
		Under-Graduate	-.06705	.07476	.898	-.2716	.1375
		Doctorate	-.22890	.12778	.379	-.5785	.1207
		Others	-.35761	.17222	.232	-.8287	.1135
	Doctorate	Higher Secondary	-.01618	.15556	1.000	-.4417	.4094
		Under-Graduate	.16185	.13053	.728	-.1952	.5189
		Post-Graduate	.22890	.12778	.379	-.1207	.5785
		Others	-.12871	.20275	.969	-.6834	.4260
	Others	Higher Secondary	.11253	.19373	.978	-.4175	.6425
		Under-Graduate	.29056	.17427	.455	-.1862	.7673

		Post-Graduate	.35761	.17222	.232	-.1135	.8287
		Doctorate	.12871	.20275	.969	-.4260	.6834
The mean difference is notable at the 0.05 level.							

Table 4.56: Post Hoc Tests for Reliability and Communication and Qualification wise Women's perception

Interpretation

Table 4.56 presents a comparative analysis of women's perceptions regarding *reliability and communication* in e-commerce services across different educational qualification levels. In the first section, comparisons between women with higher secondary education and other groups—undergraduates (p = 0.540), postgraduates (p = 0.192), doctorates (p = 1.000), and others (p = 0.978)—reveal no statistically significant differences. Although the highest mean difference (0.24509) is observed between higher secondary and postgraduate groups, the p-value remains above 0.05, and the confidence interval includes zero, indicating the result is not significant.

In the second section, focused on the undergraduate group, comparisons with higher secondary (p = 0.540), postgraduate (p = 0.898), doctorate (p = 0.728), and other qualification groups (p = 0.455) also show no significant differences. While the mean differences slightly vary, all p-values exceed the 0.05 threshold, and confidence intervals span both negative and positive values, confirming the lack of statistical significance.

The third section explores the postgraduate qualification group. Results again show no notable differences in perception when compared with higher secondary (p = 0.192), undergraduate (p = 0.898), doctorate (p = 0.379), and other qualification groups (p = 0.232). Even though some comparisons, like postgraduate vs. others, display a larger mean difference (0.35761), the wide confidence intervals and non-significant p-values highlight that these differences are not meaningful statistically.

Finally, in the fourth section covering doctorate and other qualification groups, no significant differences are observed in any of the pairwise comparisons. Doctorates showed no notable difference compared to higher secondary (p = 1.000), undergraduate (p = 0.728), postgraduate (p = 0.379), or other qualification holders (p = 0.969). Likewise, the "others" group showed similar results with all p-values well above 0.05. Overall, these findings suggest that educational qualification does not have a significant effect on women's perception of reliability and communication in e-commerce.

Qualification wise Women's perception and Security and Privacy

Ho: There is statistically no notable difference between the mean scores ofqualifications wise women's perception towards e-commerce for factornamely 'Security and Privacy'.

ANOVA Table

		Sum ofSquares	df	MeanSquare	F	Sig.
Security & Privacy	Between Groups	2.557	4	0.639	0.883	0.472
	WithinGroups	918.453	1265	0.726		
	Total	921.010	1269			

Table 4.57: ANOVA for Security and Privacy and Qualification wise Women's perception

Interpretation

The ANOVA table (Table 4.57) presents a significant value of 0.472 (p = 0.472), which is well above the 0.05 threshold. This indicates that there is no statistically significant difference in women's perceptions of the "Security and Privacy" factor in e-commerce across different income groups. The F-value of 0.883 further supports the conclusion that the observed differences between group means are not meaningful.

The Between Groups Sum of Squares is 2.557 with 4 degrees of freedom, while the Within Groups Sum of Squares is 918.453 with 1265 degrees of freedom. The Mean Square for Between Groups is 0.639, compared to 0.726 for Within Groups. These findings suggest that women, regardless of income level, tend to have similar perceptions regarding the safety and privacy measures provided by e-commerce platforms.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound

Securityand Privacy	Higher Secondary	Under-Graduate	.03325	.11969	.999	-.2942	.3607
		Post-Graduate	.11464	.11649	.862	-.2040	.4333
		Doctorate	.04525	.16048	.999	-.3938	.4843
		Others	.01232	.19986	1.000	-.5344	.5591
	Under-Graduate	Higher Secondary	-.03325	.11969	.999	-.3607	.2942
		Post-Graduate	.08139	.07713	.829	-.1296	.2924
		Doctorate	.01200	.13466	1.000	-.3564	.3804
		Others	-.02093	.17979	1.000	-.5128	.4709
	Post-Graduate	Higher Secondary	-.11464	.11649	.862	-.4333	.2040
		Under-Graduate	-.08139	.07713	.829	-.2924	.1296
		Doctorate	-.06939	.13182	.985	-.4300	.2912
		Others	-.10232	.17767	.979	-.5884	.3837
	Doctorate	Higher Secondary	-.04525	.16048	.999	-.4843	.3938
		Under-Graduate	-.01200	.13466	1.000	-.3804	.3564
		Post-Graduate	.06939	.13182	.985	-.2912	.4300
		Others	-.03293	.20917	1.000	-.6051	.5393
	Others	Higher Secondary	-.01232	.19986	1.000	-.5591	.5344
		Under-Graduate	.02093	.17979	1.000	-.4709	.5128
		Post-Graduate	.10232	.17767	.979	-.3837	.5884
		Doctorate	.03293	.20917	1.000	-.5393	.6051
The mean difference is notable at the 0.05 level.							

Table 4.58: Post Hoc Tests for Security and Privacy and Profession wise women's perception

Interpretation

Table 4.58 presents a comparison of women's perceptions of *security and privacy* in e-commerce across various educational qualifications. In the first section, the comparisons involving women with a higher secondary qualification show no statistically significant differences when compared to undergraduates (p = 0.999), postgraduates (p = 0.862), doctorate holders (p = 0.999), and those in the “others” category (p = 1.000). All p-values are greater than 0.05, and the confidence intervals include zero, which confirms that the observed mean differences are not meaningful.

The second section focuses on women with undergraduate qualifications. Again, no significant differences are observed in their perceptions when compared with higher secondary (p = 0.999), postgraduate (p = 0.829), doctorate (p = 1.000), or other qualification groups (p = 1.000). Although the mean difference between undergraduates and postgraduates is slightly higher (0.08139), the result is still not statistically significant.

In the third section, examining the postgraduate group, the analysis reveals that their perception of security and privacy does not differ significantly from any other group: higher secondary (p = 0.862), undergraduate (p = 0.829), doctorate (p = 0.985), or others (p = 0.979). All confidence intervals include zero, suggesting that educational background does not strongly influence how women view the safety and privacy of online services.

Finally, for the doctorate and "others" groups, the findings remain consistent. Doctorate holders do not show statistically significant differences in perception when compared with higher secondary (p = 0.999), undergraduate (p = 1.000), postgraduate (p = 0.985), or others (p = 1.000). Similarly, women categorized under "others" show no significant variation when compared with any of the other educational groups. In summary, educational qualification does not appear to affect women’s perceptions of security and privacy in e-commerce platforms.

Qualification wise Women’s perception and User-friendly

Ho: There is statistically no notable difference between the mean scores ofqualifications wise women’s perception towards e-commerce for factornamely ‘User-friendly’.

ANOVA Table

Factor		Sum ofSquares	df	Mean Square	F	Sig.
User-friendly	Between	9.229	4	2.307	3.479	0.008

	Groups					
	WithinGroups	836.143	1265	0.661		
	Total	845.372	1269			

Table 4.59: ANOVA for User friendly and Qualification wise Women's perception

Interpretation

The ANOVA table (Table 4.59) shows a significant value of 0.008 (p = 0.008), which is below the 0.05 threshold. This indicates a statistically notable difference in women's perceptions of the "User-friendly" nature of e-commerce platforms across different income groups. The F-value of 3.479 suggests that the differences between group means are meaningful and unlikely to be due to chance.

The Between Groups Sum of Squares is 9.229 with 4 degrees of freedom, while the Within Groups Sum of Squares is 836.143 with 1265 degrees of freedom. The Mean Square for Between Groups is 2.307, and for Within Groups, it is 0.661. These results imply that women's evaluation of how user-friendly e-commerce platforms are does vary across income levels, providing insights for platforms to tailor their design and usability features accordingly.

Post Hoc Tests

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
User-friendly	Higher Secondary	Under-Graduate	.11490	.11435	.853	-.1979	.4277
		Post-Graduate	.06636	.11129	.976	-.2381	.3708
		Doctorate	-.19604	.15332	.704	-.6155	.2234
		Others	.19879	.19094	.836	-.3236	.7211

	Under-Graduate	Higher Secondary	-.11490	.11435	.853	-.4277	.1979
		Post-Graduate	-.04854	.07369	.965	-.2501	.1530
		Doctorate	-.31094	.12865	.112	-.6629	.0410
		Others	.08389	.17176	.988	-.3860	.5538
	Post-Graduate	Higher Secondary	-.06636	.11129	.976	-.3708	.2381
		Under-Graduate	.04854	.07369	.965	-.1530	.2501
		Doctorate	-.26240	.12594	.228	-.6069	.0821
		Others	.13243	.16974	.936	-.3319	.5968
	Doctorate	Higher Secondary	.19604	.15332	.704	-.2234	.6155
		Under-Graduate	.31094	.12865	.112	-.0410	.6629
		Post-Graduate	.26240	.12594	.228	-.0821	.6069
		Others	.39483	.19983	.279	-.1518	.9415
	Others	Higher Secondary	-.19879	.19094	.836	-.7211	.3236
		Under-Graduate	-.08389	.17176	.988	-.5538	.3860
		Post-Graduate	-.13243	.16974	.936	-.5968	.3319
		Doctorate	-.39483	.19983	.279	-.9415	.1518
The mean difference is notable at the 0.05 level.							

Table 4.60: Post Hoc Tests for User friendly and Qualification wise Women's Perception

Interpretation

Table 4.60 presents the comparative analysis of women's perceptions of user-friendliness in digital platforms across various educational qualifications. Starting with the higher secondary qualification group, comparisons with undergraduate (p = 0.853), postgraduate (p = 0.976), doctorate (p = 0.704), and others (p = 0.836) show no statistically significant differences. All

p-values are well above 0.05, and the confidence intervals for all pairs include zero, indicating that perceived user-friendliness is consistently rated across these educational categories.

The second section evaluates the perceptions of undergraduate women. Comparisons with higher secondary (p = 0.853), postgraduate (p = 0.965), and other qualifications (p = 0.988) again show no significant differences. The only comparison approaching significance is between undergraduates and doctorate holders, where the mean difference is -0.31094 and the p-value is 0.112—though this is still above the threshold for significance, suggesting only a weak trend, not a confirmed difference.

In the third section, the postgraduate group is compared with others. There are no statistically significant differences in perceived user-friendliness when compared to higher secondary (p = 0.976), undergraduate (p = 0.965), doctorate (p = 0.228), or other qualifications (p = 0.936). Despite small variations in the mean differences, none of the results meet the criteria for statistical significance, and confidence intervals again include zero.

The final section addresses the doctorate and “others” qualification groups. Doctorate holders showed no significant difference in perception compared to any other group—whether higher secondary (p = 0.704), undergraduate (p = 0.112), postgraduate (p = 0.228), or others (p = 0.279). Similarly, the "others" group also demonstrated no statistically significant variations in user-friendliness perceptions with any other group. In conclusion, educational qualification does not significantly influence women’s perceptions of user-friendliness in digital platforms.

4.4.3.1 Summary of ANOVA TABLE AND Hypothesis

H_0: Hypotheses	Test	‘α ‘level of significance	Results
Factor One: Convenience as a Factor and Its Relationship with Various Demographic Variables			
There is no notable variation in the average scores of different age groups regarding women's perception of e-commerce in terms of ‘Convenience.’	ANOVA	0.006	Not Accepted

There is no notable substantial variation in the average scores of women's perception of e-commerce across different professions for the factor of 'Convenience.'	ANOVA	0.001	Not Accepted
There is no notable difference in the mean scores of women's perceptions of e-commerce, based on their duration of online shopping experience, specifically for the factor of 'Convenience.'	ANOVA	0.009	Not Accepted
There is no major difference in the mean scores of women's perceptions of e-commerce, based on their qualifications, specifically for the factor of 'Convenience.'	ANOVA	0.0003	Not Accepted
Factor Two: Post-Sales Services and Their Relationship with Various Demographic Variables			
No significant difference was found in the mean scores of women's perceptions of e-commerce, based on age groups, specifically for the factor of 'Post Sales Services.'	ANOVA	0.008	Not Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on professions wise, specifically for the factor of 'Post Sales Services.'	ANOVA	0.0001	Not Accepted
No major difference was observed in the mean scores of women's perceptions of E-commerce, based on their duration of online shopping experience, particularly regarding 'Post Sales Services.'	ANOVA	0.019	Not Accepted

No noticeable difference was found in the mean scores of women's perceptions of E-commerce, based on their qualifications, with respect to 'Post Sales Services.'	ANOVA	0.053	Accepted
Factor Three: Online Assistance and Its Relationship with Various Demographic Variables			
No noticeable difference was observed in the mean scores of women's perceptions of e-commerce, based on age groups, specifically for the factor of 'Online Assistance.'	ANOVA	0.051	Accepted
No noticeable difference was observed in the mean scores of women's perceptions of e-commerce, based on professions wise, specifically for the factor of 'Online Assistance.'	ANOVA	0.013	Not Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their duration of online shopping experience, specifically for the factor of 'Online Assistance.'	ANOVA	0.014	Not Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their qualifications, with respect to the factor of 'Online Assistance.'	ANOVA	0.056	Accepted
Factor Four: Reliability and Communication in Relation to Various Demographic Variables			

No significant difference was found in the mean scores of women's perceptions of e-commerce, based on age groups, specifically for the factors of Reliability and Communication.	ANOVA	0.034	Not Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their professions, with respect to the factors of 'Reliability and Communication.'	ANOVA	0.005	Not Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their duration of online shopping experience, specifically for the factors of 'Reliability and Communication.'	ANOVA	0.007	Not Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their qualifications, with respect to the factors of 'Reliability and Communication.'	ANOVA	0.001	Not Accepted
Factor Five: Security and Privacy in Relation to Various Demographic Variables			
No noticeable difference was observed in the average scores of women's perceptions of e-commerce, based on age groups, specifically for the factors of 'Security and Privacy.'	ANOVA	0.150	Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their professions, with respect to the factors of 'Security and Privacy.'	ANOVA	0.002	Not Accepted

No major difference was observed in the mean scores of women's perceptions of e-commerce, based on their duration of online shopping experience, specifically for the factors of 'Security and Privacy.'	ANOVA	0.194	Accepted
No major difference was found in the mean scores of women's perceptions of e-commerce, based on their qualifications, with respect to the factors of 'Security and Privacy.'	ANOVA	0.472	Accepted
Factor Six: User-Friendliness and Its Relationship with Various Demographic Variables			
No significant difference was found in the mean scores of women's perceptions of e-commerce, based on age groups, specifically for the factor of User-Friendliness.	ANOVA	0.214	Accepted
No significant difference was found in the mean scores of women's perceptions of e-commerce, based on their professions, with respect to the factor of User-Friendliness.	ANOVA	0.175	Accepted
No significant difference was observed in the mean scores of women's perceptions of e-commerce, based on their duration of online shopping experience, specifically for the factor of User-Friendliness.	ANOVA	0.009	Not Accepted

No significant difference was found in the mean scores of women's perceptions of e-commerce, based on their qualifications, with respect to the factor of User-Friendliness.	ANOVA	0.008	Not Accepted

Table 4.61 Summary table for ANOVA test

Based on the ANOVA analysis, the following conclusions can be drawn:

- For the factor "Convenience," three hypotheses were rejected, and one was accepted. This indicates that there is a significant difference in perceptions of e-commerce among women when compared by profession, duration of online shopping experience, and qualification. However, there is no significant difference based on age groups.
- For the factor "post-sales Services," three hypotheses were rejected, and one was accepted. This shows a significant difference in perceptions based on age group, profession, and duration of online shopping, while no significant difference exists with respect to qualification.
- For the factor "Online Assistance," two hypotheses were rejected and two were accepted. This suggests that perceptions of e-commerce differ significantly based on duration of online shopping and profession, but not by age group or qualification.
- For the factor "Reliability and Communication," all four hypotheses were rejected, indicating significant differences in women's perceptions across all demographic variables—age, profession, duration of online shopping, and qualification.
- For the factor "Security and Privacy," three hypotheses were accepted, and one was rejected. This means there is no significant difference in perception based on age group, duration of online shopping, or qualification, but there is a significant difference based on profession.
- For the factor "User-Friendliness," two hypotheses were rejected and two were accepted. This implies that women's perceptions differ significantly according to duration of online shopping and qualification but not based on age group or profession.

Finally, when analyzing overall perceptions of women toward e-commerce—considering all six factors (Convenience, Post-Sales Services, Online Assistance, Reliability &

Communication, Security & Privacy, and User-Friendliness)—the results show that all four hypotheses related to demographic groups were rejected. Therefore, it can be concluded that there are significant differences in overall e-commerce perception among women based on age group, profession, duration of online shopping, and qualification.