

CHAPTER - IV

DEMOGRAPHIC PROFILE, PERCEPTION, PURCHASE PATTERN AND AWARENESS ON ONLINE SHOPPING

This chapter consists of analysis and interpretation of results obtained from the study. The data collected through questionnaire have been analyzed with the help of appropriate statistical tools. The results were drawn according to the objectives and hypothesis of the study. This chapter gives a detailed analysis on perception, purchase pattern and awareness on online shopping.

4.1 PROFILE OF THE RESPONDENTS

This part of the study analyses the demographic profile, Socio economic profile of the respondents who purchase branded and non-branded products through online shopping sites.

Gender

Gender as one of the variables of demographic factor has a significant impact on online purchase of consumers.

Table 4.1
Gender of Respondents

Gender	No.	Percent
Male	156	36.4
Female	272	63.6
Total	428	100.0

Source: Primary Data

It is known from the above table 4.1 that the total women respondents were 63.6 per cent who occupies the majority strength compared to the men respondents (36.4 per cent). The result reveals that women are more impulsive to buy as compared to men and are more attracted towards online purchase.

Age

Age as an important demographic variable not only determines an individual's physical and mental maturity, but also depicts life experience of the individuals.

Table 4.2
Age of Respondents

Age	No.	Percent
Less than 25 Years	232	54.2
26 – 35 Years	95	22.2
36 – 45 Years	57	13.3
46 – 55 Years	44	10.3
Total	428	100.0

Source: Primary Data

It is depicted from the above table 4.2 that the respondents belong to below 25 years of age group are 54.2 per cent, who's age group between 26 – 35 years are 22.2 per cent, who's age group between 36 to 45 years are 13.3 per cent and who's age group between 46-55 years are 10.3 per cent. Thus, the majority of the respondents belong to the age group below 25 years. The result shows that the young aged people prefer more online shopping.

Marital Status

In Indian society, marriage is supposed to be a religious obligation. In the social context, it is the prelude to the family formation, expansion or ever bifurcation. After marriage, there is transition in the status of men and women with attendant rights and obligations.

Table 4.3
Marital Status of Respondents

Marital Status	No.	Percent
Married	203	47.4
Unmarried	225	52.6
Total	428	100.0

Source: Primary Data

It is evidenced from the table 4.3 that the respondents who have been unmarried are 52.6 per cent and 47.4 per cent are married. Thus, most of the respondents are unmarried.

Educational Qualification

Education has a positive impact on social life and on the quality of life and vice versa with illiteracy. Whether literacy is synonymous with education in the developing countries and with reference to weak sections is a question confronting not only widens the knowledge, but also helps a person to make use of rational and scientific approach to solve the problems. This makes the consumer to collect information from various sources.

Table 4.4
Educational Qualification of Respondents

Educational Qualification	No.	Percent
Up to School Level	98	22.9
Graduate	207	48.4
Post Graduate	88	20.6
Diploma	12	2.8
Professional	23	5.4
Total	428	100.0

Source: Primary Data

The table 4.4 exhibits about the educational qualification of the respondents. The respondents who graduated are 48.4 per cent, respondents who have completed school level are 22.9 per cent, post graduated are 20.6 per cent, respondents who have completed professional courses are 5.4 per cent and who have completed diploma are 2.8 per cent. Thus, the majority of the respondents completed their under graduation courses.

Occupation

Occupation determines the social standing of a family. This is due to the different occupations which decide the status as also varying privileges and economic benefits.

Table 4.5
Occupation of Respondents

Occupation	No.	Percent
Student and not working	126	29.4
Student and part-time working	42	9.8
Private Employment	94	22.0
Government Employment	15	3.5
Business	67	15.7
Professional	18	4.2
House Wife	66	15.4
Total	428	100.0

Source: Primary Data

The table 4.5 constitutes about the occupation of the respondents. The respondents belongs to “student and not working” are 29.4 per cent, respondents who engaged with private employment are 22.00 per cent. 15.70 per cent of the respondents are on their own business, 15.40 per cent of the respondents are house wives, “students and part time working” are 9.80 per cent, respondents who are enrolled with professional jobs are 4.20 per cent and respondents who are positioned with Government employment are 3.50 per cent. The result reveals that most of the shoppers fall under the category of students. Thus, the majority of the respondents are students who are not working.

Type of the family

It is more important for the online marketers to know about the type of the family. It impacts on buying pattern directly. This decides the spending capacity of the family. A nuclear family comprises of married couple and their children. A joint family comprises of married couple, their children, their parents and relatives.

Table 4.6
Type of Family of Respondents

Type of the Family	No.	Percent
Nuclear family	326	76.2
Joint family	102	23.8
Total	428	100.0

Source: Primary Data

Table 4.6 depicts about type of the family. The respondents who belongs to nuclear family are 76.2 per cent and the respondents who belong to joint family are 23.8 per cent. Thus, most of the respondents belongs to the nuclear family.

Size of the Family

The size of the family determines the scope of consumption and potentialities of production and there by solvency of their needs.

Table 4.7
Family Size of Respondents

Size of the family	No.	Percent
2members	21	4.9
3members	81	18.9
4 members	231	54.0
Above 5 members	95	22.2
Total	428	100.0

Source: Primary Data

The above table 4.7 informs about the size of the family. The respondent's family with 4 members are 54.00 per cent and who have more than 5 members in their family are 22.2 per cent. The respondents who have 3 members in their family are 18.90 per cent and who have 2 members in their family are 4.90 per cent. Thus, the majority of the respondents belongs to the family with 4 members.

Number of Earning Members in the Family

In general, earning member gets influenced by the family members depending upon the relationship in the family. If the number of earning members increased then their spending capacity will also increase.

Table 4.8
Number of Earning Members in the Family

Number of earning members	No.	Percent
1	135	31.5
2	204	47.7
3	63	14.7
4 and above	26	6.1
Total	428	100.0

Source: Primary Data

The above table 4.8 depicts about number of earning members in the respondent's family. 47.70 per cent of respondents belong to the family having 2 earning members, 31.50 per cent of respondents having one earning member, 14.70 per cent of respondents having 3 earning members and 6.10 per cent of respondents belong to the family having more than 4 earning members. Thus, the majority of the respondents belongs to the family having 2 earning members.

Monthly Income

Income is the main distinguished demographic characteristics which may influence the product preference money spent and their choice of the product. The income level of the consumers play an important role while purchasing the products.

Table 4.9
Monthly Income of Respondents

Monthly Income	No.	Percent
Below Rs.25,000	122	28.5
Rs.25000 - Rs.40,000	140	32.7
Rs.40000 - Rs.55,000	60	14.0
Rs.55000 – Rs.70,000	55	12.9
Above Rs.70,000	51	11.9
Total	428	100.0

Source: Primary Data

The above table 4.9 is detailed about the monthly income of the family. 32.70 per cent respondents ear Rs.25,000 to Rs.40,000, 28.50 per cent earn less than Rs.25,000 as their family income, 14.00 per cent respondents belong to the family having income between Rs.40,000 to Rs.55,000. 12.90 per cent respondents belong to the family having income between Rs.55000 to Rs.70,000 and 11.90 per cent of respondents belong to the family having above Rs.70,000 as their family income. Income is an important variable impact on frequency of online purchase of consumers. Thus, the majority of the respondents belong to the family having less than Rs.25,000 as their monthly family income.

Knowledge about Shopping Websites

All the consumers came to know about the shopping websites from other sources. Sometimes from their own willingness, they search for the details about shopping websites. The following are the some of the sources of the knowledge on shopping websites.

Table 4.10
Knowledge about Shopping Websites

Knowledge about Shopping Websites	No.	Percent
With my own knowledge	66	15.4
By the recommendation of the friends/ relatives/ Colleagues	134	31.3
By the advertisement's in the Newspapers and the Television	107	25.0
By the advertisement's in the Social Media Networking Sites	93	21.7
By the Links in E-Mail & Social Media	28	6.5
Total	428	100.0

Source: Primary Data

The table 4.10 says about the knowledge on shopping websites by the respondents. 31.30 per cent of respondents have knowledge on shopping sites through their friends/ relatives/ colleagues. 25.00 per cent of respondents came to know by the advertisements in newspapers and television, 21.70 per cent came to know by the advertisements in social media and networking sites, 15.40 per cent of respondents knew through shopping websites by their own and 6.50 per cent of the respondents by links in e-mail and social media.

Impact of Advertisement on Purchase of Products through Shopping Websites

In this digital world, to make a product to reach the consumers, advertisement is necessary. In this, online marketing advertisement plays a vital role. Such advertisement influence the consumers to purchase the product.

Table 4.11
Impact of Advertisement on Purchase of Products through Shopping Websites

Impact	No.	Percent
To make Purchase	58	13.6
Discuss with others to purchase	158	36.9
Not considered for the purchase	59	13.8
Search for more Information	153	35.7
Total	428	100.0

Source: Primary Data

The table 4.11 denotes about the impact of advertisement on shopping sites. The advertisement makes 36.90 per cent of respondents to discuss with others to purchase, it makes 35.70 per cent of the respondents to search for more information, it makes 13.80 per cent of respondents not to consider for the purchase and the advertisement makes 13.60 per cent of the respondents to purchase. Thus, the majority of the respondents discuss with others to purchase after seeing advertisement in various media.

Rank Analysis for Attractive Elements of Advertisement on Shopping Websites

The respondents were asked to rank a set of 6 items regarding online shopping. The most important item has given rank 1. The least important item has given a rank of 6. Mean ranks have been found out for each item and were again ordered based on the mean values. The details are given in the following table.

Table 4.12
Rank Analysis for Attractive Elements of Advertisement on Shopping Websites

Elements	Mean Rank
Headlines/Captions	3.56
Pictures	3.04
Message of the products	3.58
Brand Name/ Logos	2.97
Celebrity	4.41
Offers	3.45

Source: Primary Data

It is seen from the above table 4.12 that the lowest mean rank is 2.97 for “Brand Name/Logos”. It has the highest rank order value of 1. The highest mean rank is 4.41 for “Celebrity”. It has the lowest rank of 6.

Kendall's Coefficient of Concordance

Kendall's W	0.076
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Kendall’s co-efficient of concordance (W) was used to find whether there is any similarity among the respondents in their order of assigning the ranks. Kendall’s (W) will vary between 0 and 1. Higher the value of W more will be the similarity of the respondents in their rank order. The Kendall’s W found for the 6 items is 0.076. This shows that there is very low similarity among the respondents in their ranking order,

Frequency of Visiting Shopping Websites

The frequency of visiting various shopping sites were distributed among the respondents from always to never. The distribution is given below in the following Table.

Table 4.13
Frequency of Visiting Shopping Websites

Shopping Sites/ Frequency		Always	Frequently	Occasionally	Rarely	Never	Total
Amazon.in	No.	245	109	54	14	6	428
	%	57.2	25.5	12.6	3.3	1.4	100.0
Flipkart.com	No.	133	181	73	32	9	428
	%	31.1	42.3	17.1	7.5	2.1	100.0
Snapdeal.com	No.	53	69	156	63	87	428
	%	12.4	16.1	36.4	14.7	20.3	100.0
Paytm.com	No.	51	119	88	82	88	428

	%	11.9	27.8	20.6	19.2	20.6	100.0
E-bay.in	No.	23	36	102	109	158	428
	%	5.4	8.4	23.8	25.5	36.9	100.0
Shopclues.com	No.	11	41	83	115	178	428
	%	2.6	9.6	19.4	26.9	41.6	100.0
Homeshop18.com	No.	16	27	68	71	246	428
	%	3.7	6.3	15.9	16.6	57.5	100.0

Source: Primary Data

The table 4.13 depicts that 57.5 per cent of respondents have never visited Homeshop18.com, 57.2 per cent of the respondents always visit amazon.in and Flipcart.com is frequently visited by 42.3 per cent of respondents. 36.9 per cent of respondents never visit e-bay.in, 27.8 per cent of the respondents frequently visit paytm.com, 26.9 per cent of respondents rarely visit shopclues.com and 20.3 per cent of respondents have never visited snapdeal.com. Thus, most of the respondents prefer Amazon.in and Filpkart.com, frequently.

Influence of Advertisement to Purchase of Products through Shopping Sites

Advertising is a mass media content influenced to persuade consumer to take action on products, services and ideas. After watching advertisement, their thought of purchasing product refers to the influence of advertisement on online shopping.

Table 4.14

Influence of Advertisement to Purchase of Products through Shopping Sites

	No.	Percent
Yes	273	63.8
No	155	36.2
Total	428	100.0

Source: Primary Data

The table 4.14 denotes that 63.8 per cent of the respondents were influenced by the advertisements given in various Medias and 36.2 per cent of the respondents were not influenced by the advertisements given through various media. Most of the respondents are influenced by advertisement to purchase through online.

Kinds of Products Purchased through Online Shopping

The individual consumer has a set of values and preference whose determinations are outside the realm of economics. There are various classifications of products available in the online market. All such varieties can be mainly classified into two categories. The following table shows the kinds of products purchased through online shopping sites.

Table 4.15
Kinds of Products Purchased through Online Shopping

Kinds of Products	No.	Percent
Branded	202	47.2
Non Branded Products	141	32.9
Both	85	19.9
Total	428	100.0

Source: Primary Data

It is known from the table 4.15 that 47.2 per cent of the respondents have purchased only branded products through online shopping, 32.9 per cent of respondents have purchased only non – branded products and 19.9 per cent of the respondents purchased both branded and non-branded products through online shopping sites.

Occasion for Purchase of Products through Online Shopping

The consumers may purchase their products through online shopping during various occasions. The following table expresses about such occasions.

Table 4.16
Occasion for Purchase of Products through Online Shopping

Occasion	No.	Percent
Whenever needed	182	42.5
Festival season	88	20.6
Special Offers/ Discounts	133	31.1
Special Occasions	25	5.8
Total	428	100.0

Source: Primary Data

The table 4.16 informs about the occasion of purchase through online shopping. 42.5 per cent of the respondents have purchased through online whenever they are in need. 31.1 per cent of respondents purchase when shopping sites give special offers/ discounts, 20.6 per cent of the respondents purchase during festival season and 5.8 per cent of the respondents purchase only during some special occasions. Thus, most of the respondents purchase through online shopping whenever they are in need.

Purchase Decision Maker in the Family

Even though there are number of members in the family, some specific persons make purchase decision in their family. The following table reveals the dominant position of the members in decision making.

Table 4.17
Purchasing Decision Maker in the Family

Decision Makers	No.	Percent
Earning Male	130	30.4
Earning Female	60	14.0
Both earning Male and Female	81	18.9
Children	13	3.0
Elders	28	6.5
All the members	116	27.1
Total	428	100.0

Source: Primary Data

The table 4.17 represents the deciding authority for online purchase in their family. In 30.4 per cent of the respondent's family, earning male took the final decision for online purchase in their family, 27.1 per cent of the respondents expressed that all the family members make the decision for online purchase in the family, 18.9 per cent of the respondent's family both earning men and women are the deciding authority, 14 per cent of the respondent's family earning women decide, 6.5 per cent of the respondent's family, elders are the decision makers and 3 per cent of the respondents are children decision makers. Thus, majority of the decision makers are the earning men in their family.

Amount Spent on Purchase of Online Products

The income of the consumers influence the purchasing power of the consumers. They are highly price sensitive and certainly not during the special occasions. The following table displays the amount spent on the purchase of online products.

Table 4.18
Amount Spent on Purchase of Online Products

Amount Spent	No.	Percent
Less than Rs.2,000	208	48.6
Rs.2001 to Rs.4,000	127	29.7
Rs.4001 to Rs.6,000	41	9.6
Rs.6001 to Rs.8,000	12	2.8
Rs.8001 to Rs.10,000	31	7.2
Rs.10,001 & Above	10	2.1
Total	428	100.0

Source: Primary Data

The table 4.18 discusses the amount spent on online purchase of products per month. 48.6 per cent of the respondents spends less than Rs.2,000 per month for online purchase, 29.7 per cent of respondents spends between Rs.2,001 to Rs.4,000 per month and 9.6 per cent of respondents spends between Rs.4,001 to Rs.6,000 per

month. 7.2 per cent of respondents spends Rs.8,001 to Rs.10,000 per month, 2.8 per cent of respondents spends between Rs.6,001 to Rs.8,000 per month, and 2.1 per cent of respondents spends more than Rs.10,000 per month for online purchase. Thus, the most of the respondents spend below Rs.2,000 for online purchase per month.

Kind of payment on Purchase of Online Products

There are various types of payment modes available for the purchase of online products. The following are the some of the payment modes existed in online shopping sites.

Table 4.19
Kind of payment on Purchase of Online Products

Payment Mode	No.	Percent
Debit Card	49	11.4
Credit Card	51	11.9
Cash on Delivery	302	70.6
Net Banking	26	6.1
Total	428	100.0

Source: Primary Data

The table 4.19 describes the preference of payment mode for the purchase of goods. 70.6 per cent of respondents prefer cash on delivery, 11.9 per cent of respondents prefer credit cards, 11.4 per cent of respondents prefers debit cards to pay for the purchase of goods through online shopping sites and 6.1 per cent of respondents prefer net banking for purchase of products through online shopping. Accordingly, the result reveals that the majority of the respondents prefer for cash on delivery.

Descriptive Statistics - Perception Regarding Purchase of Online Products

Respondents were asked to express their opinion/perception regarding online purchase on a 5 point rating scale. The scale consisted of 22 statements. The ratings assigned by the respondents for each statement is Strongly Disagree -1, Disagree – 2, Neutral – 3, Agree – 4, Strongly Agree – 5. Higher the rating more will be the level of the agreement of the respondent. Mean rating were found out for each item which are given below.

Table 4.20
Descriptive Statistics - Perception Regarding Purchase of Online Products

Perception regarding online purchase	N	Minimum	Maximum	Mean	S.D
It has very less procedure to place an order	428	1.00	5.00	4.1729	.77309
I purchase products through online according to my Interest	428	1.00	5.00	3.9930	.89099
It is convenient for me to purchase online	428	1.00	5.00	3.7593	.88735
Due to busy schedule I prefer online shopping	428	1.00	5.00	3.6402	.90870
I have shopping privacy in online shopping	428	1.00	5.00	3.6893	.95283
I can shop from my home itself	428	1.00	5.00	3.9463	.93559
Online shopping saves me from market crowd	428	1.00	5.00	3.8621	.89347
I can get detailed product information from the shopping sites itself	428	1.00	5.00	3.5584	.90476
Due to availability of more products broader selection is possible	428	1.00	5.00	3.6495	.85948
I can get user reviews for products available in the shopping sites	428	1.00	5.00	3.8575	.81884
There is no embarrassment for me if do not buy	428	1.00	5.00	3.6262	.91332
There is no time limit for purchase of products through online(24 X 7)	428	1.00	5.00	4.0654	1.01761
I can control my expenses in a better way	428	1.00	5.00	3.6519	.79978
I can purchase from anywhere, at any point, and from any vendor located domestically	428	1.00	5.00	3.7944	.84917
I can customize the products based on requirements	428	1.00	5.00	3.7173	.83370
It is easy to make payment for purchase of products through shopping sites	428	1.00	5.00	3.4229	.97324
I can get more care with individual attention	428	1.00	5.00	3.9299	.87363
I can get easy return/refund/replacement	428	1.00	5.00	3.6449	.96060
I can avail exclusive guarantee given by the online shopping sites	428	1.00	5.00	3.4836	.90650
I can get immediate response to my queries	428	1.00	5.00	3.8294	.87984
It is secured to make payment through online	428	1.00	5.00	3.6402	.89310
I can track my account status and order status of products	428	1.00	5.00	3.5561	.92031

Source: Primary Data

It is seen from the above table 4.20 that the ratings for all the items vary between minimum 1 to maximum 5. The highest mean rating is 4.17 for the statement “It has very less procedure to place an order”, that is the level of agreement for this statement falls above “Agree”. The next highest mean rating is 4.07 for the statement “There is no time limit for purchase of products through online (24X7)” which falls on “Agree”. The lowest mean rating is 3.42 for “It is easy to make payment for purchase of products through shopping sites” that is the agreement level falls between Neutral and Agree. For most of the items, the mean ratings are between 3 and 4 that is the opinion of the respondents for most of the items fall between Neutral and Agree.

Opinion on Price of the Online Products

The opinion of respondents on price of the various products are discussed in the below table. The opinion on price of branded and non-branded products are obtained.

Table 4.21
Opinion on Price of Online Products

Price of Online Products		High	Reasonable	Low	Total
Branded Products	No.	233	185	10	428
	%	54.4	43.2	2.3	100.0
Non Branded Goods	No.	28	280	120	428
	%	6.5	65.4	28.0	100.0

Source: Primary Data

The table 4.21 depicts the respondent’s opinion on the price of various online products. 65.4 per cent of the respondents feel that the price of the non-branded products are reasonable while comparing to branded products, 54.4 per cent of respondents express that the price of the branded products are high, 43.2 per cent of respondents perceives that the price are reasonable, 28.0 per cent of the respondents mentions that the price of the non-branded products are lower than that of the branded products, 6.5 per cent of the respondents opine that the price of the non-branded products are high and 2.3 per cent of the respondents notices that the price of the branded products are low. Thus, most of the respondents observe that the price of the branded products to be high and is reasonable for the non-branded products.

Purchase Pattern of Products Purchased Online

The purchase pattern of products purchased online is given in the following table. The ratings has been assigned from Always to Rarely.

Table 4.22
Purchase Pattern of Products Purchased Online

Purchase Pattern		Always	Frequently	Occasionally	Rarely	Total
Cosmetics	No.	137	86	79	126	428
	%	32.0	20.1	18.5	29.4	100.0
Electronics	No.	54	172	113	89	428
	%	12.6	40.2	26.4	20.8	100.0
Clothing	No.	95	132	143	58	428
	%	22.2	30.8	33.4	13.6	100.0
Accessories	No.	58	183	109	78	428
	%	13.6	42.8	25.5	18.2	100.0
Books	No.	53	95	155	125	428
	%	12.4	22.2	36.2	29.2	100.0
Home Needs	No.	54	136	117	121	428
	%	12.6	31.8	27.3	28.3	100.0
Kids	No.	29	79	132	188	428
	%	6.8	18.5	30.8	43.9	100.0

Source: Primary Data

The table 4.22 exhibits that 43.9 per cent of the respondents purchase kids products rarely, 42.8 per cent of the respondents purchase accessories frequently, 40.2 per cent of the respondents purchase electric products frequently, 36.2 per cent of the respondents purchase books occasionally, 33.4 per cent of the respondents purchase clothing occasionally, 32 per cent of the respondents purchase cosmetics always, 31.8 per cent of the respondents purchase home need products frequently, 29.4 per cent of the respondents purchase cosmetics rarely and 18.5 per cent of the respondents purchase occasionally.

Time Taken for Purchase of Online Products from their Wish List

Wish Lists are the collections of interested products saved by the customers to their user account, signifying interest without immediate intend to purchase. Such products may be purchased in some time gap. The results of time taken on the purchase of online product from their wish list is given below.

Table 4.23
Time Taken for Purchase of Online Products from their Wish List

Time Taken	No.	Percent
Immediately	136	31.8
2 – 3 days	136	31.8
Within a week	116	27.1
Within a month	40	9.3
Total	428	100.0

Source: Primary Data

The Table 4.23 inference about the time taken to purchase online products from their kart/ wish list. 31.8 per cent of the respondents purchase immediately, 31.8 per cent of respondents takes 2-3 days to make purchase from their kart/ wish list, 27.1 per cent of the respondents take a week and 9.3 per cent of the respondents take a month to make purchase from their kart/ wish list. Thus, most of the respondents purchase immediately and some takes 2-3 days for purchase.

Reason for Delayed Purchase from Wish/ Kart List

There must be some reason for the purchase of online products from their Kart/Wish List. The below table shows some of the reasons.

Table 4.24

Reason for Delayed Purchase from Wish/ Kart List

Reason for delayed purchase	No.	Percent
Financial Constraints	43	14.7
Waiting for more innovative products	102	34.9
Waiting for market response	52	17.8
Waiting for more product reviews	95	32.5
Total	292	100.0

Source: Primary Data

The table 4.24 display the reasons for delayed purchase of products through online. Out of 428 respondents, 31.8 per cent of the respondents purchase immediately and the remaining 292 purchase later in different time gap. 34.9 per cent were delayed by waiting for more innovative products, 32.5 per cent of the respondents were delayed by waiting for more product reviews, 17.8 per cent were delayed by waiting for market response and 14.7 per cent of respondents delayed due to financial constraints. Therefore, it is resulted that most of the respondents were delayed by waiting for more product reviews.

Ranking Analysis of Brand attributes attracted to purchase online

The respondents were asked to rank a set of 10 items regarding the attractive attributes to purchase online. The most important item was given a rank 1. The least important item has given a rank of 10. Mean ranks were found out for each item and were again ordered based on the mean values. The details are given in the following table.

Table 4.25

Ranking Analysis of brand attributes attracted to purchase online

Attributes	Mean Rank
Brand Name	3.56
Transparent	6.07
Price	4.10
Easy Availability	4.60
Designs	5.06
High Quality	4.21
Fit in with friends	6.74
Value for money	5.72
Show Off	7.82
Representation of celebrities	7.13

Source: Primary Data

It is noted from the above table 4.25 that the lowest mean rank is 3.56, for “Brand Name” has the highest rank of 1. The highest mean rank is 7.82 for “show off” has the lowest rank of 10.

Kendall’s Coefficient of Concordance

Kendall's W	0.223
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Kendall’s coefficient of concordance (W) was used to find the similarity among the respondents in order of assigning the ranks. Kendall’s Co-efficient of concordance (W) was used to find the similarity among the respondents in their order of assigning the ranks. Kendall’s (W) will vary between 0 and 1. High the value of W more will be the similarity of the respondents in their ranking order. The Kendall’s value found for the 10 items is 0.223. This shows that there is low similarity among the respondents in their ranking order.

Role of Social Media in Online Purchase

Social Media plays a vital role in the promotion of online products. The results of role of social media on online purchase is displayed below.

Table 4.26

Role of Social Media in Online Purchase

	No.	Percent
Yes	305	71.3
No	123	28.7
Total	428	100.0

Source: Primary Data

The table 4.26 shows off about the role of social media in online purchase. 71.3 per cent of the respondents agreed that social media plays important role in their online purchase and 28.7 per cent of the respondents do not depend social media for

their online purchase. Thus, the majority of the respondents depend social media for their online purchase.

Type of Information Expected from Social Media

In order to purchase online products most of the respondents seek the help of social media. They expect some of the information from the social media. The below table shows such information from the social media.

Table 4.27

Type of Information Expected from Social Media

Type of Information	No.	Percent
Getting reviews from friends/relatives	112	36.7
Getting notifications in social media from the shopping sites	94	30.8
Recommendations from friends/relatives	56	18.4
Getting notifications to your mobile	43	14.1
Total	305	100.0

Source: Primary Data

The table 4.27 which displays information revealed from social media helps the respondents to purchase online. Out of 305 of respondents 36.7 per cent respondents get help from social media in the form of getting reviews from friends/relatives, 30.8 per cent of the respondents get notifications in social media from the shopping sites, 18.4 per cent respondents get recommendations from friends/relatives and 14.1 per cent of respondents get notifications to their mobile about the products/ services. Thus, most of the respondents get help from the social media in the form of receiving reviews from friends/ relatives.

Requisition for Return/ Replacement

In case of any defect or change or by individual willingness, the consumers may return the products or they may get replacement with the seller. The below table explains whether they request for return or replacement or not.

Table 4.28

Requisition for Return/ Replacement

	No.	Percent
Yes	272	63.6
No	156	36.4
Total	428	100.0

Source: Primary Data

The table 4.28 describes whether the respondents request for return/replacement of products which are purchased through online shopping sites. 63.6 per cent of the respondents are requested for return/replacement of products

which are purchased through online shopping sites and 36.4 per cent of the respondents didn't make any request for return/replacement. Thus, the majority of the respondents make request for return/replacement of products through online.

Reason of Requisition for Return/ Replacement

Before requesting for return or replacement, there may be some reason. The following are the some of the reasons which were experienced by the respondents who had requested for return or replacement.

Table 4.29

Reason of Requisition for Return/ Replacement

Reasons	No.	Percent
Damaged product	83	30.5
Changes in item specifications	93	34.2
Missing parts or Accessories	19	7.0
Defective Item	54	19.9
Due to particular Site/Sellers Terms and Conditions	23	8.5
Total	272	100.0

Source: Primary Data

The table 4.29 shows the reasons for making request for return/replacement of products purchased through online. Out of 272 respondents 34.2 per cent of respondents request due to changes in item specifications, 30.5 per cent makes request for return or replacement due to delivery of damaged products, 19.9 per cent of respondents make request due to delivery of defective items, 8.5 per cent of respondents make request due to particular site/seller's terms and conditions and 7.0 per cent of respondents make request for return/ replacement due to missing parts / accessories. It is resulted that most of the respondents make request due to the delivery of damaged products.

Cancellation of Purchase Order

Due to some reasons, the consumers may cancel their purchase order. It may be cancelled before making payment or after making payment. The below table depicts whether they have cancelled their purchase order or not.

Table 4.30

Cancellation of Purchase Order

	No.	Percent
Yes	304	71.0
No	124	29.0
Total	428	100.0

Source: Primary Data

The table 4.30 expresses whether the respondents cancel the online purchase order or not. 71.0 per cent of the respondents had cancelled their online purchase order and 29.0 per cent of the respondents didn't cancelled their online purchase order. Hence, the majority of the respondents had cancel their purchase order.

Duration of Cancellation of Purchase Order

Purchase order can be cancelled from the day of order till the day of delivery. The below table explained about the duration of the cancellation of purchase order.

Table 4.31
Duration of Cancellation of Purchase Order

Duration	No.	Percent
On the day of order	105	34.5
One day After	142	46.7
2 days After	34	11.2
On the day of delivery	23	7.6
Total	304	100.0

Source: Primary Data

The table 4.31 inferences about the duration of the cancellation of purchase order. 46.7 per cent of the respondents cancel their online purchase order one day after the day of order, 34.5 per cent of the respondents cancel their online purchase order on the day of order itself, 11.2 per cent of the respondents cancel their order two days after and 7.6 per cent of the respondents cancel their online purchase order on the day of delivery.

Reasons for cancellation of purchase order

Cancellation of purchase order is due to various reasons. The below table highlights the reasons for the cancellation of purchase order.

Table 4.32
Reasons for cancellation of purchase order

Reasons	No.	Percent
Placed the order wrongly	64	21.1
Due to personal reason	144	47.4
Better price with another E-Seller	49	16.1
Negative reviews from friends and relatives	41	13.5
Double placement of order	6	2.0
Total	304	100.0

Source: Primary Data

The table 4.32 informs about the reasons for the cancellation of online purchase order. Out of 304 (100 per cent) respondents, 47.4 per cent of the

respondents cancelled their order due to personal reasons, 21.1 per cent of the respondents cancelled their online purchase order due to placement of wrong order, 16.1 per cent of the respondents cancelled their order due to better price with other e-seller and 13.5 per cent of the respondents cancelled due to negative reviews from friends and relatives. 2.0 per cent of the respondents cancelled due to double placement of order. Thus, most of the respondents cancelled their orders due to personal reasons.

Refund of Money on Cancellation of Purchase Order

If cancellation of order takes place after the payment, the sellers should make refund of money to the consumers account. The below table highlights whether refund is made or not.

Table 4.33
Refund of Money on Cancellation of Purchase Order

	No.	Percent
Yes	156	51.3
No	148	48.7
Total	304	100.0

Source: Primary Data

The table 4.33 reveals the refund of money on the cancellation of online purchase order. Out of 304 (100 per cent) respondents 51.3 per cent of the respondents replied that they got back the amount to their account properly and 48.7 per cent of the respondents replied that they didn't get back their amount properly to their account after cancellation of the order. Thus, most of the respondents got back the amount to their account properly on the cancellation of purchase order on online shopping sites.

Reason for Delay in Refund of Money on Cancellation

Some of the respondents experienced delay in refund of money on cancellation of online purchase order. The following are some of the reasons for delay in refund of money.

Table 4.34
Reason for Delay in Refund of Money on Cancellation

Reason	No.	Percent
Delay in refund	25	16.9
Due to particular site/Sellers Terms & Conditions	53	35.8
Due to delayed product return	35	23.6
Cash on delivery opted	35	23.6
Total	148	100.0

Source: Primary Data

The table 4.34 conveys the reasons for not receiving the refund to their account on the cancellation of online purchase order. Out of 304 (100 per cent) respondents, 51.3 per cent are refunded properly and 48.7 per cent respondents are not refunded after cancelling the purchase order. Out of 148 (100 per cent) respondents, 35.8 per cent of the respondents feels that they are not satisfied due to particular site/seller's terms and conditions. 23.6 per cent of the respondents got the delayed refund due to delay in product return and 23.6 per cent of the respondents had problem in refund due to selection of cash on delivery option and 16.9 per cent of the respondents feel that there is delay in refund. Thus, most of the respondents faced problem in getting refund is due to particular site/seller's terms and conditions.

Personal Factors Vs Knowledge about shopping sites

Chi Square Test

1. Knowledge about shopping sites

The awareness of the respondents regarding the shopping sites have been analyzed with the help of personal variables. The distribution of the respondents regarding source of knowledge of shopping websites among the different groups of selected personal variables are given below.

The relationship between personal variables and source of knowledge on shopping websites have been tested by framing the following hypothesis.

H₀ – Hypothesis: Source of knowledge on shopping websites has no significant relationship with the personal variables, namely, Gender, Age, Marital Status, Educational Qualification, Occupation, Type of the Family and Monthly Income.

Table 4.35
Knowledge about shopping sites

Variable	Groups	A		B		C		D		E		Total		V	TV	Significance
		No	%	No	%	No	%	No	%	No	%	No	%			
Gender	Male	23	14.7	46	29.5	46	29.5	34	21.8	7	4.5	156	100	3.895	9.488	NS
	Female	43	15.8	88	32.4	61	22.4	59	21.7	21	7.7	272	100			
Age	Less than 25 Years	32	13.8	70	30.2	59	25.4	55	23.7	16	6.9	232	100	14.148	12.592	NS
	26 -35 Years	17	17.9	29	30.5	20	21.1	20	21.1	9	9.5	95	100			
	36 – 45 Years	5	8.8	22	38.6	17	29.8	10	17.5	3	5.3	57	100			
	46 – 55 Years	12	27.3	13	29.5	11	25.0	8	18.2			44	100			
Marital Status	Married	31	15.3	70	34.5	50	24.6	39	19.2	13	6.4	203	100	2.407	9.488	NS
	Unmarried	35	15.6	64	28.4	57	25.3	54	24	15	6.7	225	100			
Educational Qualification	Up to School Level	7	7.1	28	28.6	39	39.8	18	18.4	6	6.1	98	100	35.805	32.000	**
	Graduate	37	17.9	69	33.3	40	19.3	45	21.7	16	7.7	207	100			
	Post Graduate	13	14.8	25	28.4	21	23.9	23	26.1	6	6.8	88	100			
	Diploma	1	8.3	7	58.3	4	33.3					12	100			
	Professional	8	34.8	5	21.7	3	13.0	7	30.4			23	100			
Occupation	Student and not working	19	15.1	38	30.2	33	26.2	30	23.8	6	4.8	126	100	38.344	36.415	*
	Student and working	6	14.3	14	33.3	12	28.6	4	9.5	6	14.3	42	100			
	Private Employment	15	16	28	29.8	24	25.5	22	23.4	5	5.3	94	100			
	Government Employment	6	40	5	33.3	3	20			1	6.7	15	100			
	Business	14	20.9	14	20.9	16	23.9	19	28.4	4	6	67	100			
	Professional	1	5.6	7	38.9	2	11.1	8	44.4			18	100			
	House Wife	5	7.6	28	42.4	17	25.8	10	15.2	6	9.1	66	100			
Type of the Family	Nuclear Family	49	15	95	29.1	88	27	74	22.7	20	6.1	326	100	5.302	9.488	NS
	Joint Family	17	16.7	39	38.2	19	18.6	19	18.6	8	7.8	102	100			
Monthly Income	Below Rs.25000	16	13.1	39	32	44	36.1	16	13.1	7	5.7	122	100	31.414	26.296	*
	Rs.25000 – Rs.40000	17	12.1	50	35.7	32	22.9	30	21.4	11	7.9	140	100			
	Rs.40000 – Rs.55000	10	16.7	13	21.7	14	23.3	16	26.7	7	11.7	60	100			
	Rs.55000 – Rs.70000	11	20	18	32.7	11	20	14	25.5	1	1.8	55	100			
	Above Rs.70000	12	23.5	14	27.5	6	11.8	17	33.3	2	3.9	51	100			

Source: Computed Data

A – with my own knowledge; B - By the Recommendation of the friends/Relatives/Colleagues;

C – By the Advertisements in News Papers and the Television; D – By the advertisements in the Social Media Networking Sites; E – By the Links in E-Mail & Social Media

Gender

Gender wise distribution of the respondents about knowledge on shopping websites is given above. Among men 29.5 per cent have knowledge by the recommendation of friends, relatives etc., and 14.7 per cent have knowledge on their own. Among women 32.4 per cent have knowledge by the recommendation of friends, relatives etc., and 15.8 per cent have knowledge on their own.

Age

Age wise distribution of respondents depict that 38.6 per cent of the respondents belong to the age group between 36 – 45 years, who have knowledge by the recommendation of the friends/relatives/colleagues, 30.5 per cent of the respondents belong to the age group between 26 – 35 years, who have knowledge by the recommendation of the friends/relatives/colleagues, 30.2 per cent of the respondents belong to less than 25 years of age, who have knowledge by the recommendation of the friends/relatives/colleagues and 27.3 per cent of the respondents belong to the age group between 46 – 55 years who have knowledge by the recommendation of the friends/relatives/colleagues.

Marital Status

Marital Status wise distribution of respondents expresses that both married (34.5 per cent) and unmarried respondents (28.4 per cent) are aware about shopping websites by the recommendation of the friends/relatives/colleagues.

Educational Qualification

Educational qualification wise distribution of respondents reveals that 58.31 per cent of the respondents who completed diploma have knowledge by the recommendation of the friends/relatives/colleagues, 39.8 per cent of the respondents who completed up to school level have knowledge by viewing advertisements in Newspapers and Television, 34.8 per cent of the respondents are professionals who have knowledge on their own, 33.3 per cent of the respondents who are graduates have knowledge by the recommendation of the friends/relatives/colleagues and 28.4 per cent of the respondents who are post graduates have knowledge by the recommendation of the friends/relatives/colleagues.

Occupation

With respect to occupation wise distribution of respondents, 44.4 per cent of the respondents are professionals who have knowledge by viewing advertisements in social media and networking sites, 42.4 per cent of the respondents are house wives

who have knowledge by the recommendation of the friends/relatives/colleagues, 40 per cent of the Government employees have their own knowledge on shopping sites, 33.3 per cent of the respondents are students who are part - time workers have knowledge by the recommendation of the friends/relatives/colleagues, 30.2 per cent of the respondents are students and who are not working have knowledge by the recommendation of the friends/relatives/colleagues and 29.8 per cent of the respondents are private employees and 20.9 per cent of the respondents are engaged with business who have knowledge on their own and

Type of the Family

Family wise distribution of respondents reveal that 29.1 per cent of the respondents belong to the nuclear family and 38.2 per cent of the respondents belong to the joint family have knowledge by the recommendation of the friends/relatives/colleagues.

Monthly Income

Income wise distribution of respondents about knowledge on shopping websites reveals that 35.7 per cent of the respondents belong to the family earning monthly income between Rs.25,000 to Rs.40,000, 33.3 per cent of the respondents belong to the family having monthly income above Rs.70,000 have knowledge by watching advertisement in the social media and networking sites, 32.7 per cent of the respondents belong to the family having monthly income between Rs.55,000 to Rs.70,000, have knowledge by the recommendation of the friends/ relatives/ colleagues, 32.0 per cent of respondents belong to the family who's monthly income is below Rs.25,000 have knowledge by the recommendation of the friends/ relatives/ colleagues and 26.7 per cent of the respondents belong to the family earning monthly income between Rs.40,000 to Rs.55,000.

Chi-Square test has been applied for each of the personal variable, separately and the results are shown in the table given above. It is seen from the above table (4.35) that educational qualification, occupation and monthly income of the family are found to have significant association with the source of knowledge on shopping websites at 5 per cent or 1 per cent level of significance. The calculated Chi-Square values are found to be greater than the table values at the indicated significance levels. Hence, the hypothesis was rejected with respect to education, occupation and monthly income only. The personal factors such as gender, age, marital status and type of family have no significant influence on knowledge on shopping sites.

2. Personal Factors Vs. Impact of Advertisement on shopping Sites

Impact of advertisement on shopping sites was analyzed with the help of personal variables. The distribution of the respondents regarding impact of advertisement on shopping sites amount the different groups of selected personal variable are given below

The relationship between personal variables and impact of advertisement on shopping websites are tested by framing the following hypothesis.

H₀ – Hypothesis: Impact of advertisement on shopping websites have no significant relationship with the personal variables namely, Gender, Age, Marital Status, Educational Qualification, Occupation, Type of the Family and Monthly Income.

Table 4.36
Impact of Advertisement on Shopping Sites

Variable	Groups	A		B		C		D		Total		V	TV	Significance
		No	%	No	%	No	%	No	%	No	%			
Gender	Male	19	12.2	55	35.3	27	17.3	55	35.3	156	100	2.750	7.815	NS
	Female	39	14.3	103	37.9	32	118	98	36	272	100			
Age	Less than 25 Years	27	11.6	82	35.3	43	18.5	80	34.5	232	100	21.468	16.919	*
	26 -35 Years	10	17.5	30	52.6	3	5.3	14	24.6	95	100			
	36 – 45 Years	3	8.1	11	29.7	4	10.8	19	51.4	57	100			
	46 – 55 Years	4	9.1	14	31.8	4	9.1	22	50.0	44	100			
Marital Status	Married	26	12.8	86	42.4	21	10.3	70	34.5	203	100	6.751	7.815	NS
	Unmarried	32	14.2	72	32	38	16.9	83	36.9	225	100			
Educational Qualification	Up to School Level	17	17.3	36	36.7	13	13.3	32	32.7	98	100	16.330	21.026	NS
	Graduate	25	12.1	83	40.1	24	11.6	75	36.2	207	100			
	Post Graduate	13	13.6	27	30.7	18	20.5	31	35.2	88	100			
	Diploma	2	16.7	3	25	4	33.3	3	25	12	100			
	Professional	2	8.7	9	39.1			12	5.2	23	100			
Occupation	Student and not working	20	15.9	34	27	22	17.5	50	39.7	126	100	30.030	28.869	*
	Student and working	7	16.7	19	45.2	9	21.4	7	16.7	42	100			
	Private Employment	8	8.5	37	39.4	11	11.7	38	40.4	94	100			
	Government Employment	4	26.7	6	40			5	33.3	15	100			
	Business	10	14.9	21	31.3	8	11.9	28	41.8	67	100			
	Professional			9	50	1	5.6	8	44.4	18	100			
	House Wife	9	13.6	32	48.5	8	12.1	17	25.8	66	100			
Type of the Family	Nuclear Family	45	13.8	113	34.7	54	16.6	114	35	326	100	9.843	7.815	*
	Joint Family	13	12.7	45	44.1	5	4.9	39	38.2	102	100			
Monthly Income	Below Rs.25000	17	13.9	41	33.6	35	28.7	29	23.8	122	100	41.946	26.217	**
	Rs.25000 – Rs.40000	17	12.1	52	37.1	17	12.1	54	38.6	140	100			
	Rs.40000 – Rs.55000	7	11.7	22	36.7	3	5	28	46.7	60	100			
	Rs.55000 – Rs.70000	7	12.7	24	43.6	1	1.8	23	41.8	55	100			
	Above Rs.70000	10	19.6	19	37.3	3	5.9	19	37.3	51	100			

Source: Computed Data

A – To Make Purchase; B – Discuss with others to Purchase; C – Not Considered for the Purchase; D – Search for more Information

Gender

Gender wise distribution of respondents about impact of advertisement on shopping sites are given above. Among women 37.9 per cent of the respondents reacted to the advertisement by discussing with others to purchase and 36.0 per cent of the respondents go for more information. Among men 35.3 per cent of the respondents reacted by discussing with others to purchase and 35.3 per cent of the respondents search for more information.

Age

Age wise distribution of the respondents about the impact of advertisement on shopping sites show that 52.6 per cent of the respondents belong to the age group between 36-45 years. They reacted to the advertisement by discussing with others to purchase. 50.0 per cent of the respondents belongs to the age group between 46 – 55 years search for more information, 38.9 per cent of the respondents belong to the age group between 26 – 35 years go for more information and 35.3 per cent of the respondents belongs to the age group less than 25 years discussed with others to purchase.

Marital status

Marital status wise distribution of respondents about the impact of advertisement on shopping sites exhibit that 42.4 per cent of the respondents are married and reacted to advertisement by discussing with others to purchase and 36.9 per cent of respondents are unmarried and reacted by searching for more information.

Educational qualification

Educational qualification wise distribution of the respondents about the impact of advertisement on shopping sites depict that 40.1 per cent of graduated respondents reacted to the advertisement by discussing with others to purchase. 36.7 per cent of respondents who had completed up to school level of education and 35.2 per cent of respondents who are post graduated react towards advertisement by searching for more information. 33.3 per cent of the respondents had completed diploma who never considered the advertisement for purchase through online. 52.2 per cent of the respondents are professionals who search for more information.

Occupation

Occupation wise distribution of respondents about impact of advertisement on shopping sites expresses that, 50.0 per cent of professionals and 48.5 per cent of housewives reacted to the advertisement by discussing with others to purchase. 45.2 per cent of the respondents are students who are part time workers reacted to advertisement by discussing with others to purchase and 41.8 per cent of businessmen

reacted to the advertisement by searching for more information 40.4 per cent of private employees search for more information, 40.0 per cent of Government employees discussed with other to purchase and 39.7 per cent of respondents are students who are not working reacted by searching for more information.

Type of the family

Family wise distribution of respondents about the impact of advertisement on shopping sites display that 44.1 per cent of the respondents belong to the joint family who react to advertisement by discussing with others to purchase and 35 per cent of the respondents belong to nuclear family react to advertisement by searching for more information.

Monthly Income of the family

Income wise distribution of the respondents about the impact of advertisement of on shopping reveals that 46.7 per cent of the respondents belong to the family having their monthly income between Rs. 40,000-55,000 reacts to the advertisement by searching for more information, 44.6 per cent of respondents belong to the family having their monthly income between Rs.55,000 -70,000, 38.6 per cent of respondents belong to the family having monthly income between Rs..25,000 – 40,000 and 37.3 per cent of respondents belong to the family having monthly income above Rs.70,000 reacts to the advertisement by discussing with others to purchase, 33.6 per cent of respondents belong to the family earning below Rs.25,000 as their monthly income. They reacted to the advertisement on shopping sites by discussing with others to purchase.

Chi-Square test was applied for each of the personal variable separately and the results are shown in the table given above. It is known from the above table that age, type of family and monthly income of the family are found to have significant association with the impact of advertisement on shopping sites at 5 per cent or 1 per cent level of significance. The calculated Chi-Square values are found to be greater than the table values at the indicated significance levels. Hence, the hypothesis was rejected with respect to age, occupation, type of family and monthly income of the family only. The personal factors such as gender, size of the family and education qualification have no significant association with the impact of advertisement on shopping sites.

3. Personal Profile Vs. Occasion for Purchase

Occasion for purchasing products through online shopping sites are analysed with the help of personal variables. The distribution of the respondents regarding occasion for the purchase of products through online shopping sites among different groups of selected personal variables are given below.

The relationship between personal variables and occasion for purchase of products on shopping websites are tested by framing the following hypothesis.

H₀ – Hypothesis: Occasion for purchase of products on shopping websites have no significant relationship with the personal variables namely, Gender, Age, Marital Status, Educational Qualification, Occupation, Type of the Family and Monthly Income.

Table 4.37
Occasion for Purchase

Variable	Groups	A		B		C		D		Total		V	TV	Significance
		No	%	No	%	No	%	No	%	No	%			
Gender	Male	60	38.5	38	24.4	49	31.4	9	5.8	156	100	2.686	7.815	NS
	Female	122	44.9	50	18.4	84	30.9	16	5.9	272	100			
Age	Less than 25 Years	97	41.8	53	22.8	69	29.7	13	5.6	232	100	3.291	16.919	NS
	26 -35 Years	41	43.2	16	16.8	32	33.7	6	6.3	95	100			
	36 – 45 Years	23	40.4	13	22.8	18	31.6	3	5.3	57	100			
	46 – 55 Years	21	47.7	6	13.6	14	31.8	3	6.8	44	100			
Marital Status	Married	84	41.4	44	21.7	64	31.5	11	5.4	203	100	0.495	7.815	NS
	Unmarried	98	43.6	44	19.6	69	30.7	14	6.2	225	100			
Educational Qualification	Up to School Level	34	34.7	30	30.6	24	24.5	10	10.2	98	100	30.664	26.217	**
	Graduate	102	49.3	27	13	69	33.3	9	4.3	207	100			
	Post Graduate	27	30.7	26	29.5	30	34.1	5	5.7	88	100			
	Diploma	5	41.7	2	16.7	4	33.3	1	8.3	12	100			
	Professional	14	60.9	3	3	6	26.1			23	100			
Occupation	Student and not working	60	47.6	20	15.9	40	31.7	6	4.8	126	100	16.449	28.869	NS
	Student and working	17	40.5	10	23.8	12	28.6	3	7.1	42	100			
	Private Employment	34	36.2	22	23.4	34	36.2	4	4.3	94	100			
	Government Employment	7	46.7	2	13.3	6	40			15	100			
	Business	34	50.7	13	19.4	14	20.9	6	9	67	100			
	Professional	8	44.4	2	11.1	7	38.9	1	5.6	18	100			
	House Wife	22	33.3	19	28.8	20	30.3	5	7.6	66	100			
Type of the Family	Nuclear Family	145	44.5	71	21.8	92	28.2	18	5.5	326	100	6.042	7.815	NS
	Joint Family	37	36.3	17	16.7	41	40.2	7	6.9	102	100			
Monthly Income	Below Rs.25000	47	38.5	38	31.1	30	24.6	7	5.7	122	100	34.103	26.217	**
	Rs.25000 – Rs.40000	51	36.4	33	23.6	46	32.9	10	7.1	140	100			
	Rs.40000 – Rs.55000	29	48.3	8	13.3	20	33.3	3	5	60	100			
	Rs.55000 – Rs.70000	35	63.6	6	10.9	13	23.6	1	1.8	55	100			
	Above Rs.70000	20	39.2	3	5.9	24	47.1	4	7.8	51	100			

Source: Computed Data

A – Whenever Needed; B – Festival Season; C – Special Offers/ Discounts; D – Special Occasions

Gender

Gender wise distribution of respondents about occasion for purchase of products through online shopping is given above. Among women 44.9 per cent of the respondents purchase products through online shopping sites whenever they are in need, 31.4 per cent of the respondents purchase when special offers/discounts are available, 18.4 per cent of the respondents purchase only during festival season and 5.9 per cent of the respondents purchase during some special occasions. Among men 38.5 per cent of the respondents purchase products through shopping sites whenever they are in need, 31.4 per cent of the respondents purchase when special offers/ discounts are available, 24.4 per cent of the respondents purchase only during festival season, and 5.8 per cent of the respondents purchase during some special occasions.

Age

Age wise distribution of respondents about occasion for purchase of products through online shopping shows that 47.7 per cent of the respondents belong to the age group between 46 – 55 years purchase products through online whenever they are in need, 43.2 per cent of the respondents belong to the age group between 26 – 35 years, 41.8 per cent of the respondents belongs to the age group below 25 years and 40.4 per cent of the respondents who belongs to the age group between 36 – 45 years.

Marital Status

Marital Status wise distribution of respondents about occasion for purchase of products through online shopping sites depict that 41.4 per cent of married respondents and 43.6 per cent of unmarried respondents purchase products through online shopping sites whenever they are in need.

Educational Qualification

Qualification wise distribution of respondents about occasion for purchase of products through online shopping explains that 60.9 per cent of professional respondents, 49.3 per cent of graduated respondents, 41.7 per cent of diploma holders and 34.7 per cent of respondents who had completed the school level of education purchase products through online whenever they are in need. 34.1 per cent of post graduated respondents purchase when special offers/ discounts are available.

Occupation

Occupation wise distribution of respondents about the occasion for purchase of products through online shopping sites narrates that 50.7 per cent of business persons, 47.6 per cent of the students category who are not working, 46.7 per cent of

Government employees, 44.4 per cent of professional respondents 40.5 per cent of the students category who are part time workers, and 33.3 per cent of housewives will purchase when they are in need only. 36.2 per cent are private employees who purchase when special offers/ discounts are available

Type of the Family

Family wise distribution of respondents about occasion for purchase of products through online shopping sites explains that 40.2 per cent of the respondents belong to the nuclear family purchase whenever they need and 40.2 per cent of the respondents belong to the joint family who purchase products through online when special offers/ discounts are available.

Monthly Income

Income wise distribution of respondents about occasion for purchase of products through online is given above. 63.6 per cent of the respondents belong to the family having Rs.55000 – 70000, 48.3 per cent of the respondents belong to the family whose monthly income is between Rs.40000 to 55000, 38.5 per cent of the respondents belong to the family having their monthly income below Rs.25000, 36.4 per cent of the respondents belong to the family having monthly income between Rs.25000 – 40000, will purchase products when they are in need only. 47.1 per cent of the respondents belong to the family having monthly income above Rs.70000 who purchase only when special offers/ discounts are available.

Chi-Square test was applied for each of the personal variable separately and the results are inferred in the table given above. It is seen from the above table that educational qualification, and monthly income of the family are found to have significant association with occasion for purchase of products on shopping websites at 5 per cent or 1 per cent level of significance. The calculated Chi-Square values are found to be greater than the table values at the indicated significance levels. Hence, the hypothesis was rejected with respect to educational qualification and monthly income of the family only. The personal factors such as age, gender, marital status, occupation and type of the family have no significant relationship with occasion for purchase of products through online shopping.

4. Personal Variables Vs. Amount spent for online purchase:

Amount spent for online purchase was analysed with the help of personal variables. The distribution of the respondents regarding amount spent for online purchase among different group of selected personal variables are given below.

The relationship between personal variables and amount spent on purchase of products through shopping websites are tested by framing the following hypothesis.

H₀ – Hypothesis:

Amount spent on purchase of products through shopping websites have no significant relationship with the personal variables namely, Gender, Age, Marital Status, Educational Qualification, Occupation, Type of the Family and Monthly Income.

Table 4.38
Amount spent on Purchase of Products through Online

Variable	Groups	A		B		C		D		E		F		Total		V	TV	Significance
		No	%	No	%	No	%	No	%	No	%	No	%	No	%			
Gender	Male	75	48.1	44	28.2	11	7.1	7	4.5	15	9.6	4	2.6	156	100	6.467	11.070	NS
	Female	133	48.9	83	30.5	30	11	5	1.8	16	5.9	5	1.8	272	100			
Age	Less than 25 Years	120	51.7	68	29.3	15	6.5	7	3.0	19	8.2	3	1.3	232	100	21.079	24.996	NS
	26 -35 Years	37	38.9	33	34.7	13	13.7	1	1.1	6	6.3	5	5.3	95	100			
	36 – 45 Years	31	54.4	15	26.3	7	12.3	1	1.8	2	3.5	1	1.8	57	100			
	46 – 55 Years	20	45.5	11	25.0	6	13.6	3	6.8	4	9.1			44	100			
Marital Status	Married	96	47.3	52	25.6	30	14.8	5	2.5	13	6.4	7	3.4	203	100	17.033	15.086	**
	Unmarried	112	49.8	75	33.3	11	4.9	7	3.1	18	8	2	0.9	225	100			
Educational Qualification	Up to School Level	47	48	37	37.8	7	7.1	1	1	5	5.1	1	1	98	100	45.640	37.556	**
	Graduate	107	51.7	54	26.1	19	9.2	9	9.2	16	7.7	2	1.0	207	100			
	Post Graduate	42	47.7	27	30.7	5	5.7	2	2.3	7	8	5	5.7	88	100			
	Diploma	7	58.3			2	16.7			2	16.7	1	8.3	12	100			
	Professional	5	21.7	9	39.1	8	34.8			1	4.3			23	100			
Occupation	Student and not working	65	51.6	46	36.5	6	4.8	2	1.6	5	4	2	1.6	126	100	60.749	50.892	**
	Student and working	17	40.5	13	31	2	4.8	1	2.4	9	21.4			42	100			
	Private Employment	49	52.1	18	19.1	10	1.6	6	6.4	7	7.4		4.3	94	100			
	Government Employment	4	26.7	4	26.7	5	33.3			2	13.3			15	100			
	Business	32	47.8	19	28.4	7	10.4	2	3	7	10.4			67	100			
	Professional	6	33.3	6	33.3	5	27.8					1	5.6	18	100			
	House Wife	35	53	21	31.8	6	9.1	1	1.5	1	1.5	2	3	66	100			
Type of the Family	Nuclear Family	164	50.3	105	32.2	24	7.4	9	2.8	22	6.7	2	0.6	326	100	25.707	15.086	**
	Joint Family	44	43.1	22	21.6	17	16.7	3	2.9	9	8.8	7	6.9	102	100			
Monthly Income	Below Rs.25000	78	63.9	28	23	4	3.3	2	1.6	5	4.1	5	4.1	122	100	46.984	37.566	**
	Rs.25000 – Rs.40000	73	52.1	40	28.6	14	10	3	2.1	8	5.7	2	1.4	140	100			
	Rs.40000 – Rs.55000	26	43.3	23	38.3	7	11.7	2	3.3	2	3.3			60	100			
	Rs.55000 – Rs.70000	17	30.9	18	32.7	9	16.4	2	3.6	8	14.5	1	1.8	55	100			
	Above Rs.70000	14	27.5	18	35.3	7	13.7	3	5.9	8	15.7	1	2	51	100			

Source: Computed Data

A – Less than Rs.2000; B – Rs.2001 to Rs.4000; C – Rs.4001 to Rs.6000; D – Rs.6001 to Rs.8000; E – Rs.8001 to Rs.10000; F – Rs.10001 & Above

Gender

Gender wise distribution of respondents about amount spent for online purchase is given above. Among women 48.9 per cent of the respondents spend less than Rs.2000 per month for online shopping, 30.5 per cent of the respondents spend from Rs.2001-4000 per month, 11.1 per cent of the respondents spend from Rs.4001 – 6000 per month, 5.9 per cent of the respondents spend more than Rs.10000 per month for online shopping and 1.8 per cent of the respondents spend Rs.6001 – 8000 per month for online shopping. Among men 48.1 per cent of the respondents spend less than Rs.2000 per month for online shopping, 28.2 per cent of the respondents spend from Rs.2001 – 4000 per month, 9.6 per cent of the respondents spend from Rs.8001 – 10000 per month, 7.1 per cent of the respondents spend Rs.4001 – 6000 per month, 4.5 per cent of the respondents spend Rs.6001 – 8000 per month and 2.6 per cent of the respondents spend more than Rs.10000 per month.

Age

Age wise distribution of respondents about the amount spent on online shopping exhibits that 51.7 per cent of the respondents belong to age group less than 25 years, 54.4 per cent of the respondents belong to the age group between 36-45 years, 45.5 per cent of the respondents belong to the age group between 46 – 55 years have spent less than Rs.2000 per month for purchase of products through online shopping sites and 38.9 per cent of the respondents belong to the age group between 26 -35 years.

Marital Status

Marital status wise distribution of respondents about amount spent for purchase of online products displays that 49.8 per cent of unmarried respondents also spent less than Rs.2000 per month for their online purchase and 47.3 per cent of married respondents spent less than Rs.2000 per month for their online purchase.

Educational Qualification

Qualification wise distribution of respondents about amount spent for purchase of online products. 48 per cent of respondents had completed their school level of education, 51.7 per cent of the graduate respondents, 47.7 per cent of post graduate respondents, 58.3 per cent of diploma holders have spent less than Rs.2000 per month for their online purchase. 39.1 per cent of respondents are professionals who spends amount between Rs.2001 – 4000 per month for their online purchase.

Occupation

Occupation wise distribution of respondents about amount spent for online purchase depicts that 53.00 per cent of house wives, 52.1 per cent of private employees, 47.8 per cent of business persons, 40.5 per cent of the student category who are part time workers, 5.6 per cent of the student category who are not working have spent less than Rs.2000 per month for their online purchase. 33.33 per cent of respondents are professionals who spends Rs.2001 – 4000 per month for their online purchase. 33.3 per cent of respondents are Government employees who spend amount between Rs.4001 – 6000 per month for online purchase.

Type of the Family

Family wise distribution of the respondents about amount spent for online shopping discusses that 50.3 per cent of the respondents belong to the nuclear family who spends less than Rs.2000 per month and 43.1 per cent of the respondents belong to the joint family who also spends less than Rs.2000 per month for their online purchase.

Monthly Income

Income wise distribution of respondents about amount spent on online purchase narrates that 63.9 per cent of the respondents belong to the family having monthly income below Rs.25000, 52.1 per cent of the respondents belong to the family having their monthly income between Rs.25000 – 40000, 43.3 per cent of the respondents belong to the family having their monthly income between Rs.40000 – 55000 have spent less than Rs.2000 per month for their online purchase. 35.3 per cent of the respondents belong to the family having monthly income above Rs.70000 and 32.7 per cent of the respondents belong to the family having their monthly income between Rs.55000 – 70000 have spent between Rs.2001 – Rs.4000 per month for their online purchase.

Chi-Square test was applied for each of the personal variable separately and the results are shown in the table given above. It is seen from the above table that marital status, educational qualification, occupation, type of the family and monthly income of the family are found to have significant association with amount spent on purchase of products on shopping websites at 5 per cent or 1 per cent level of significance. The calculated Chi-Square values are found to be greater than the table values at the indicated significance levels. Hence, the hypothesis was rejected with respect to marital status, educational qualification, occupation, type of the family and

monthly income of the family only. The personal factors such as age and gender have no significant relationship with amount spent on purchase of products through online shopping.

5. Personal variables Vs. Time taken to make purchase of online products from Kart/Wish list

Time taken for purchasing products from kart/ wish list of online shopping sites was analyzed with the help of personal variables. The distribution of the respondents regarding time taken for purchase from wish list or kart different group of selected personal variables are given below.

H₀ – Hypothesis

Time taken to purchase the online products from kart/ wish list has no significant relationship with the personal variables namely, Gender, Age, Marital Status, Educational Qualification, Occupation, Type of the Family and Monthly Income.

Table 4.39
Time taken to make purchase the online products from kart/ wish list

Variable	Groups	A		B		C		D		Total		V	TV	Significance
		No	%	No	%	No	%	No	%	No	%			
Gender	Male	49	31.4	49	31.4	42	26.9	16	10.3	156	100	0.241	7.815	NS
	Female	87	32	87	32	74	27.2	24	8.8	272	100			
Age	Less than 25 Years	74	31.9	72	31	66	28.4	20	8.6	232	100	8.720	16.919	NS
	26 -35 Years	36	37.9	33	34.7	18	18.9	8	8.4	95	100			
	36 – 45 Years	16	28.1	19	33.3	15	26.3	7	12.3	57	100			
	46 – 55 Years	10	22.7	12	27.3	17	38.6	5	11.4	44	100			
Marital Status	Married	69	34	64	31.5	50	24.6	20	9.9	203	100	1.580	7.815	NS
	Unmarried	67	29.8	72	32	66	29.3	20	8.9	225	100			
Educational Qualification	Up to School Level	47	48	26	26.5	18	18.4	7	7.1	98	100	27.436	26.217	**
	Graduate	54	26.1	66	31.9	64	30.9	23	11.1	207	100			
	Post Graduate	31	35.2	30	34.1	22	25	5	5.7	88	100			
	Diploma	1	8.3	4	33.3	4	33.3	3	25	12	100			
	Professional	3	13	10	43.5	8	34.8	2	8.7	23	100			
Occupation	Student and not working	36	28.6	44	34.9	36	28.6	10	7.9	126	100	32.194	28.869	*
	Student and working	15	35.7	12	28.6	11	26.2	4	9.5	42	100			
	Private Employment	30	31.9	36	38.3	24	25.5	4	4.3	94	100			
	Government Employment	7	46.7	3	20	5	33.3			15	100			
	Business	14	20.9	20	29.9	22	32.8	11	16.4	67	100			
	Professional	3	16.7	7	38.9	3	16.7	5	27.8	18	100			
	House Wife	31	47	14	21.2	15	22.7	6	9.1	66	100			
Type of the Family	Nuclear Family	98	30.1	108	33.1	94	28.8	26	8	326	100	6.315	7.815	NS
	Joint Family	38	37.3	28	27.5	22	21.6	14	13.7	102	100			
Monthly Income	Below Rs.25000	46	37.7	41	3.6	25	20.5	10	8.2	122	100	14.303	21.026	NS
	Rs.25000 – Rs.40000	44	31.4	48	34.3	37	26.4	11	7.9	140	100			
	Rs.40000 – Rs.55000	21	35	18	30	16	26.7	5	8.3	60	100			
	Rs.55000 – Rs.70000	16	29.1	15	27.3	18	32.7	6	10.9	55	100			
	Above Rs.70000	9	17.6	14	27.5	2	39.2	8	15.7	51	100			

Source: Computed Data

A- Immediately; B – 2-3 Days; C- Within in a Week; D-Within a Month

Gender

Gender wise distribution of respondents about time taken to make purchase of online products from kart/ wish list is given above. Among women 32 per cent of respondents accept that they purchase immediately, 32 per cent purchase within 2-3 days, 27.2 per cent purchase within a week and 8.8 per cent purchase within a month from the kart/ wish list. Among males 31.4 per cent of respondents accepts that they will purchase immediately, 31.4 per cent purchase within 2-3 days and 26.9 per cent purchase within a week and 10.3 per cent purchase within a month.

Age

Age wise distribution of respondents about time taken to make purchase of online products from kart/ wish list displays that 97.33 per cent belongs to the age group between 36-45 years accepts that they purchase with 2-3 days, 38.6 per cent belongs to the age group between 46-55 years who accept that they purchase within a week, 37.9 per cent belongs to the age group between 26-35 years accepts that they purchase immediately, 31.9 per cent of respondents belong to the age group below 25 years accepted that they purchase products immediately from the online shopping sites.

Marital Status

Marital Status wise distribution of respondents about time taken to make purchase of online products from kart/ wish list expresses that 34.00 per cent of married respondents accept that they purchase immediately from the shopping sites, 32.00 per cent accepts that they purchase within 2-3 days, 29.8 per cent of unmarried respondents accepts that they purchase immediately from the online shopping sites, 29.3 per cent accepts that they purchase within a week, 24.65 per cent responds that they purchase within a week, 9.9 per cent accepts that they will purchase within a month, 8.9 per cent of respondents accepts that they purchase within a month from online shopping sites and 3.5 per cent accepts that they purchase within 2-3 days.

Educational Qualification

Qualification wise distribution of respondents about time taken to make purchase of online products from kart/ wish list is given below. 48.00 per cent of respondents who had completed their school level of education had accepted that they purchase immediately, 43.5 per cent of respondents are professionals who also accepts that they will purchase within a week, 35.2 per cent of respondents are post graduates who accepts that they purchase immediately, 33.3 per cent of respondents

had completed their diploma who accepts that they purchase within a week, 31.9 per cent of respondents are graduates who accepts that they purchase with 2-3 days from kart/ wish list of online shopping sites.

Occupation

Occupation wise distribution of respondents about time taken to make purchase of online products from kart/ wish list expresses that 47 per cent of the respondents are house wives who also accepts that they purchase immediately, 46.7 per cent of the respondents are Government employees who purchase within a week, 38.9 per cent of the respondents are professionals who accepts that they purchase within 2-3 days, 38.3 per cent of the respondents are private employees who responds that they will purchase within 2-3 days, 35.7 per cent of the respondents are students and part time workers accepts that they will purchase immediately, 34.9 per cent of the respondents are students and not working responds that they purchase within 2-3 days from the online shopping sites and 32.8 per cent of the respondents are business persons who also accepts that will purchase within a week from kart/ wish list of online shopping sites.

Type of the Family

Family distribution of respondents about time taken to make purchase of online products from kart/ wish list depicts that 37.3 per cent of respondents belongs to the joint family who purchase immediately from the shopping sites, 33.1 per cent accepts that they purchase within 2-3 days, 30.1 per cent of the respondents belongs to the nuclear family purchase immediately from the shopping sites, 28.8 per cent accepts that they purchase within a week, 27.5 per cent accepts that they will purchase within 2-3 days, 21.6 per cent accepts that they purchase within a week 13.7 per cent accepts that they purchase within a month and 8.00 per cent responds that they purchase within a month from the kart/ wish list of online shopping sites.

Monthly Income

Income wise distribution of respondents about time taken to make purchase of online products from kart/ wish list reveals that 37.7 per cent of the respondents belong to the family having monthly income below Rs.25000 had responded that they purchase immediately, 36.2 per cent of the respondents belong to the family having monthly income above Rs.70000 had responded that they purchase within a week, 35.00 per cent of the respondents belong to the family having monthly income between Rs.40000 – 55000 had responded that they purchase immediately, 34.3 per

cent of the respondents belong the family having monthly income between Rs.25000-40000 had responded that they purchase within 2-3 days, 32.7 per cent of the respondents belong to the family having monthly income between Rs.55000 – 70000.

Chi-Square Test was applied for each of the personal variable separately and the results are shown in the table given above. It is seen from the above table that, educational qualification and occupation are found to have significant association with time taken to purchase online from kart/ wish list at 5 per cent or 1 per cent level of significance. The calculated Chi-Square values are found to be greater than the table values at the indicated significance levels. Hence, the hypothesis was rejected with respect to educational qualification and occupation of the respondents. The personal factors such as age, gender, type of the family and monthly income of the family have no significant influence with time taken to purchase online from kart/ wish list.

FACTOR ANALYSIS

Factor Analysis of perception regarding online purchase

The purpose of factor analysis in general is to find a method of reducing the number of original variables in to a smaller set of factors (dimensions) with minimum loss of information. That is, the factor analysis tries to identify and define the latent dimensions in the original variables. The factor analysis method is applied in this study to find out the latent factors in the set of statements relating to the perception of respondents regarding online purchase.

Factor analysis is usually arrived at in the following stages

1. In the first step, the correlation matrix is computed for all variables (statements). The variables which do not have correlations with other variables can be identified from the correlation matrix. The factor model to be derived is appropriate for the data as well the variables will also be checked.
2. Next step is the method of factor extraction. That is, the number of factors required to represent the data without loss of much information and the method of calculation are also decided. At this step, how well the chosen model fits the data is also ascertained.
3. In the third step, rotation of factor matrix done to make the factors derived are more meaningful.
4. Finally, scores for each factor can be computed for each case. These scores are then used for further analysis.

The scale containing perception regarding online purchase consisted of 22 items which measure the level of agreement/disagreement of the respondents on the number of statements relating to the scale.

Step 1

Correlation matrix for the variables, statement 1 to statement 22, was created to analyze initially for possible inclusion of variables (statements) in factor analysis. Each statement is considered as one variable with values ranging from 1 to 5.

Since the aim of the factor analysis is to obtain 'factors' that explain these correlations, the variables must be related to each other in order to have an appropriate factor model. By examining the correlation matrix, the extent of correlations between the variables can be identified. Normally, a correlation value of + 0.30 is taken as enough to explain the correlation among variables. For this study, all the variables from 1 to 22 have been retained for further analysis. Further, two tests applied to the correlation matrix obtained to find whether the relationship between the variables is significant or not.

Table 4.40

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.837
Bartlett's Test of Sphericity	Approx. Chi-Square	1689.610
	Df	231
	Sig.	**

** - Significant at 1per cent level (P<0.01)

Among the two test values given above, Bartlett's test of sphericity is used to test whether the correlation matrix is an identity matrix. That is, to test whether all the diagonal terms in the matrix are 1 and the off-diagonal terms in the matrix are 0. it is used to test whether the correlations between all the variables is 0. The table shows the test value as 1689.610 and the significance level is less than 0.01 (P<0.01) It is seen that, the significance level associated with the test statistic is less than 0.01, and it appears that the correlation matrix is not an identity matrix. That is the variables have correlations among themselves.

Another test is called KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy. This test value is found out using the correlations and partial correlations of the variables. If the test value, or KMO measure is closer to 1, then it is good to use factor analysis. If KMO is closer to 0, then the factor analysis is not a good idea for the variables and data. The value of test statistic is given above as 0.837 which means

the factor analysis for the selected variables is found to be more appropriate to the data.

Step 2

In this stage, the method of factor extraction is determined. Principal Components Analysis (PCA) is a method used to extract factors. PCA involves in transforming a set of correlated variables into a set of uncorrelated dimensions (here factors) so that the factors are unrelated and the variables selected for each factor are related. PCA is used in this study to extract the number of factors required to represent the data.

To extract consecutive factors, they account for less and less variability. The decision of when to stop extracting factors basically depends on when there is only very little "random" variability left. The results obtained from principal components analysis are given below.

To start with, in the correlation matrix, the diagonal elements are the variances of all variables which are equal to 1.0. Therefore, the total variance in that matrix is equal to the number of variables. For this study, there are 22 variables (items) each with a variance of 1 and the total variability that can potentially be extracted is equal to 22 times 1. The variance accounted by successive factors are summarized as follows:

From the table given below, in the second column (*Initial Eigen values*), from the column titled '*Variance*', to find the variance on the new factors that were successively extracted. In the third column, these values are expressed as a percent of the total variance. It is seen that factor 1 accounts for about 22 percent of the total variance, factor 2 about 8 percent, and so on. As expected, the sum of the eigen values is equal to the number of variables. The third column contains the cumulative variance extracted. The variances extracted by the factors are called the *eigen values*.

It can be seen from the below table that how much variance each successive factor extracted and we can decide about the number of factors to be retained. The factors with Eigen values greater than 1 can only retained. This is because, any factor which extracts at least one equivalent to one original variable is retained and others are dropped. This criterion is normally being used and is used in this study also. In table shown above, using this criterion, it has retained 6 factors (principal components).

Table 4.41
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings (Rotated)		
	Total	per cent of Variance	Cumulative per cent	Total	per cent of Variance	Cumulative per cent
1	4.759	21.633	21.633	2.601	11.823	11.823
2	1.729	7.859	29.491	2.085	9.479	21.302
3	1.276	5.799	35.290	1.804	8.201	29.503
4	1.199	5.449	40.739	1.658	7.537	37.040
5	1.121	5.096	45.835	1.581	7.184	44.224
6	1.043	4.742	50.577	1.398	6.353	50.577
7	.984	4.474	55.052			
8	.919	4.179	59.230			
9	.901	4.097	63.327			
10	.836	3.801	67.128			
11	.807	3.668	70.796			
12	.772	3.511	74.307			
13	.740	3.362	77.669			
14	.683	3.103	80.772			
15	.669	3.041	83.813			
16	.617	2.802	86.615			
17	.545	2.477	89.092			
18	.538	2.444	91.535			
19	.526	2.390	93.925			
20	.467	2.124	96.050			
21	.443	2.013	98.062			
22	.426	1.938	100.000			

Source: Computed Data

Table 4.42
Component Matrix

	Component					
	1	2	3	4	5	6
There is no embarrassment for me if do not buy	.584	-.162	-.277	-.107	.191	-.026
There is no time limit for purchase of products through online(24 X 7)	.564	-.337	-.153	-.109	-.111	.204
I can get immediate response to my queries	.539	.045	-.309	.174	-.035	.374
I can get user reviews for products available in the shopping sites	.536	-.071	.189	-.285	.118	.089
I can get detailed product information from the shopping sites itself	.528	.041	.003	-.221	.278	-.279
It is secured to make payment through Online	.527	.318	-.097	-.045	-.423	-.302
I can get more care with individual attention	.527	-.093	-.064	.221	.378	-.256
I can purchase from anywhere, at any point, and from any vendor located domestically	.513	-.010	-.344	.333	-.113	.072
It is convenient for me to purchase online	.510	-.210	.253	-.061	-.205	.011
I can shop from my home itself	.493	-.374	-.349	-.030	-.087	-.069
I can customize the products based on requirements	.485	.005	.039	.372	.209	-.118
I can track my account status and order status of products	.472	.310	.265	-.281	.111	-.242
Online Shopping saves me from Market crowd	.453	-.384	.401	.048	-.058	-.132
It is easy to make payment for purchase of products through Shopping sites	.441	.413	-.081	.048	-.217	-.137
I can avail exclusive guarantee given by the online shopping sites	.395	.480	.012	.171	-.201	.253
I Purchase products through Online according to my Interest	.417	-.476	-.131	-.176	.047	.039
I can get Easy return/refund/replacement	.433	.444	-.175	-.271	-.141	-.115
I have Shopping Privacy in online shopping	.392	-.173	.480	.250	-.284	-.108
Due to Busy Schedule I prefer online Shopping	.275	-.124	.346	.200	-.231	.200
I can control my expenses in a better way	.335	.205	.195	-.440	.205	.321
It has very Less Procedure to Place an order	.164	.268	.096	.435	.421	-.138
Due to availability of more products Broader selection is possible	.424	.244	.205	.091	.272	.497

Source: Computed Data

Extraction Method: Principal Component Analysis.

6 components extracted.

The table shown above gives the Component Matrix or Factor Matrix where PCA extracted six factors. These are all coefficients used to express a standardized variable in terms of the factors. These coefficients are called factor loadings, since they indicate how much weight is assigned to each factor. Factors with large coefficients (in absolute value) for a variable are closely related to that variable. For example, Factor 1 is the factor with largest loading (0.584) for the item, namely **“There is no embarrassment for me if do not buy”**. These are all the correlations between the factors and the variables, Hence, the correlation between this Statement and Factor 1 is 0.584. Thus, the factor matrix is obtained. These are the initially obtained estimates of factors.

Step 3

Normally, the factor matrix (Component Matrix) obtained using the PCA extraction will show the relationship between the factors and the variables. But it will be difficult to obtain any meaningful factors out of this matrix. Seldom variables and factors appear to be correlated in any interpretable pattern. Most of the factors are correlated with many variables. Since the idea of factor analysis is to identify the factors that meaningfully summarize the sets of closely related variables, the Rotation phase of the factor analysis is attempted to transfer initial matrix into one that is easier to interpret. It is called the rotation phase of the factor matrix. There are several methods available for rotating factor matrix. The one used in this analysis is Varimax Rotation, the most commonly used method, which attempts to minimize the number of variables that have high loadings on a factor. This should enhance the interpretability of the factors. The Rotated Factor Matrix (Table titled Rotated Component Matrix) using Varimax rotation is given in Table 4 where each factor identifies itself with a few set of variables. The variables which identify with each of the factors are sorted in the decreasing order and are highlighted against each column and row.

Table 4.43
Rotated Component Matrix

	Component					
	1	2	3	4	5	6
I can shop from my home itself	.694	.132	.096	-.070	.059	-.004
There is no time limit for purchase of products through online(24 X 7)	.633	.064	.234	.139	-.062	.194
I Purchase products through Online according to my Interest	.625	-.094	.166	.146	-.004	-.060
There is no embarrassment for me if do not buy	.600	.150	-.023	.215	.243	.066
I can purchase from anywhere, at any point, and from any vendor located domestically	.432	.277	.076	-.210	.245	.370
It is secured to make payment through Online	.160	.773	.190	-.005	.033	.012
I can get Easy return/refund/replacement	.119	.643	-.119	.271	.000	.085
It is easy to make payment for purchase of products through Shopping sites	.037	.617	.071	.053	.139	.175
I have Shopping Privacy in online shopping	.027	.128	.731	-.024	.130	.014
Online Shopping saves me from Market crowd	.264	-.032	.630	.152	.163	-.136
Due to Busy Schedule I prefer online Shopping	.021	-.009	.532	.015	-.018	.244
It is convenient for me to purchase online	.294	.154	.516	.190	-.010	.035
I can control my expenses in a better way	.055	.070	.000	.689	-.079	.209
I can track my account status and order status of products	-.013	.426	.157	.518	.221	-.124
I can get user reviews for products available in the shopping sites	.303	.106	.245	.509	.070	.052
I can get detailed product information from the shopping sites itself	.309	.265	.030	.406	.348	-.177
It has very Less Procedure to Place an order	-.189	.023	-.023	.014	.660	.145
I can get more care with individual attention	.352	.088	.093	.106	.628	-.027
I can customize the products based on requirements	.193	.118	.219	.006	.555	.159
Due to availability of more products Broader selection is possible	-.003	-.030	.124	.444	.229	.587
I can get immediate response to my queries	.434	.180	.016	.029	.114	.570
I can avail exclusive guarantee given by the online shopping sites	-.085	.446	.110	.095	.070	.537

Source: Computed Data

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 15 iterations.

Step 4

The factor score coefficients can be calculated for all the variables from the factor results arrived above, (since each factor is a linear combination of all variables) which are then used to calculate the factor scores for each individual. Since PCA was used in extraction of initial factors, all methods result in estimating same factor score coefficients. However, for the present study, original values of the variables are kept for further analysis and factor scores are obtained by adding the actual values (ratings given by the respondents) of the respective variables for that particular factor, for each respondent.

Conclusion

Thus, the 22 variables in the factor analysis study data are converted to 6 factor model and each factor may be identified with the corresponding variables as follows:

Table 4.44
Factors identified

Statements	Factors	Factor Names
I can shop from my home itself	Factor 1	Shopping convenience
There is no time limit for purchase of products through online(24 X 7)		
I Purchase products through Online according to my Interest		
There is no embarrassment for me if do not buy		
I can purchase from anywhere, at any point, and from any vendor located domestically		
It is secured to make payment through Online	Factor 2	Secured and easy transaction
I can get Easy return/refund/replacement		
It is easy to make payment for purchase of products through Shopping sites		
I have Shopping Privacy in online shopping	Factor 3	Time saving
Online Shopping saves me from Market crowd		
Due to Busy Schedule I prefer online Shopping		
It is convenient for me to purchase online		
I can control my expenses in a better way	Factor 4	Selective purchase
I can track my account status and order status of products		
I can get user reviews for products available in the shopping sites		
I can get detailed product information from the shopping sites itself		
It has very Less Procedure to Place an order	Factor 5	Hassle free purchase
I can get more care with individual attention		
I can customize the products based on requirements		
Due to availability of more products Broader selection is possible	Factor 6	Product detailing
I can get immediate response to my queries		
I can avail exclusive guarantee given by the online shopping sites		

Source: Computed Data

**Analysis of factors relating to perception towards online purchase
Multivariate Analysis of Variance (MANOVA)**

Multivariate Analysis of Variance (MANOVA) is another type of ANOVA Procedure. In the normal One – Way ANOVA, the dependent variable is compared among the groups of Independent Variable. However, in MANOVA the number of dependent variables will be more than one. In the usual ANOVA, a single F-Test value is found out, but, in MANOVA several test statistics namely Pillai’s Trace, Wilk’s Lambda, Hotelling’s Trace and Roy’s Largest roots are available when testing for the significant differences among the columns of group means for the independent variables, the approximations of F-Tests for these test statistics are follows. Since several alternative statistical tests are available (as described above), the selection of the particular test to be used is generally depending on the number of hypothesis degrees of freedom.

When the hypothesis degrees of freedom is 1, all the four tests mentioned above will give identical results. When the hypothesis degrees of freedom is more than 1, the four statistics will also usually give the same result. In the perfect study also the various MANOVA tests gave similar results. MANOVA technique is used in this study for the analysis of factors relating to perception towards online purchase.

The six factors arrived at using the factor analysis are shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing. The factor scores were found out by adding the ratings given by the respondents for the items coming under each factor. Before conducting MANOVA, the correlations between all the six factors are found out to understand the interrelationships between the factors.

**Table 4.45
Correlations between Factors Relating to Purchase towards Online Purchase**

	Shopping convenience	Secured and easy transaction	Time saving	Selective purchase	Hassle free purchase	Product detailing
Shopping convenience	1	.319**	.407**	.338**	.337**	.446**
Secured and easy transaction		1	.258**	.375**	.304**	.488**
Time saving			1	.316**	.279**	.288**
Selective purchase				1	.264**	.437**
Hassle free purchase					1	.371**
Product detailing						1

** . Correlation is significant at the 0.01 level.

The correlations between the factors have moderate degree of correlation which are found to be significant at 1 per cent level. Since the factors are moderately correlated, MANOVA can be proceeded further. MANOVA has been applied by taking the 6 factors as dependent variables and selected personal and purchase related variables as independent variables.

Perception towards Online Purchase Vs. Gender

The 6 perception factors are simultaneously compared between gender groups. The mean scores comparing between men and women respondents are given in the following table.

Table 4.46
Perception towards Online Purchase by Gender

Actors	Gender								
	Male			Female					
	Mean	S.D	No.	Mean	S.D	No.	V	F- Ratio	Significance
Shopping convenience	18.97	2.87	156	19.69	3.12	272	0.967	2.373	*
Secured and easy transaction	14.17	2.69	156	14.32	2.52	272			
Time saving	14.74	2.26	156	15.07	2.44	272			
Selective purchase	11.00	1.60	156	11.25	1.77	272			
Hassle free purchase	11.58	1.61	156	11.96	1.77	272			
Product detailing	10.93	1.72	156	10.84	1.86	272			

Source: Computed Data

The table 4.44 shows that the mean scores of shopping convenience for women respondents is 19.69 which is higher than the mean score of men respondents (18.97). Similarly, it is seen that for other factors namely secured and easy transaction, time saving, selective purchase and hassle free purchase, product detailing, the mean scores of women are higher than men.

The differences between the gender groups on these six factors are tested by framing the following hypothesis:

H₀ Hypothesis – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among men and respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilks Lambda and the corresponding approximate F value are shown above. The F value (2.373) is found to be significant at 5per cent level. (Table Value: 2.120)

In the MANOVA table, since the F value for gender is significant and the null hypothesis stated above is rejected.

The follow up of MANOVA table is given below, since MANOVA gave significant result. In the following table, each factor is tested for significance difference among gender groups using ordinary One – Way ANOVA. This test is conducted only if MANOVA gives significant result.

Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Between Gender	Shopping convenience	51.330	1	51.330	5.596	*
	Secured and easy transaction	2.030	1	2.030	.304	Ns
	Time saving	11.216	1	11.216	1.984	Ns
	Selective purchase	6.196	1	6.196	2.127	Ns
	Hassle free purchase	13.760	1	13.760	4.707	*
	Product detailing	.826	1	.826	.251	Ns
Error	Shopping convenience	3907.277	426	9.172		
	Secured and easy transaction	2843.136	426	6.674		
	Time saving	2408.754	426	5.654		
	Selective purchase	1241.000	426	2.913		
	Hassle free purchase	1245.387	426	2.923		
	Product detailing	1401.107	426	3.289		
Total	Shopping convenience	3958.607	427			
	Secured and easy transaction	2845.166	427			
	Time saving	2419.970	427			
	Selective purchase	1247.196	427			
	Hassle free purchase	1259.147	427			
	Product detailing	1401.932	427			

It is seen from the above table that the factors shopping convenience and selective purchase are significantly different between gender groups. The other four factors do not differ significantly between men and women respondents.

Perception towards Online Purchase Vs. Age

The 6 perception factors are simultaneously compared between Age groups. The mean scores comparing between different age groups of respondents are given in the following table.

Table 4.47
Perception towards Online Purchase by Age

Factors	Age												V	F	Signi		
	Less than 25 Yrs			26 – 35 Yrs			36 – 45 Yrs			46 – 55 Yrs						Ratio	fiance
	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.					
Shopping convenience	19.44	2.98	232	19.05	3.28	95	19.30	2.81	57	20.30	3.05	44	0.930	1.709	*		
Secured and easy transaction	14.31	2.47	232	13.96	2.74	95	14.07	2.58	57	14.93	2.75	44					
Time saving	14.81	2.31	232	15.45	2.46	95	14.70	2.34	57	14.93	2.56	44					
Selective purchase	11.13	1.80	232	11.22	1.64	95	10.95	1.34	57	11.43	1.81	44					
Hassle free purchase	11.82	1.78	232	11.69	1.89	95	11.95	1.33	57	11.93	1.48	44					
Product detailing	10.71	1.68	232	11.01	1.98	95	11.09	1.90	57	11.16	1.95	44					

Source: Computed Data

The table 4.47 exhibits that the mean scores of shopping convenience for the respondents who come under the age group between 46 – 55 years is 20.30 which is higher than the mean scores of all other age groups such as Less than 25 years, 26-35 Years and 36-45 Years. Similarly, it is seen that for other factors such as secured and easy transaction, time saving, selective purchase and hassle free purchase, product detailing the mean scores of the age group 46-55 years is higher than the mean scores of all other age groups.

The differences between the age groups on these six factors are tested by framing the following hypothesis.

H₀ Hypothesis – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among different age groups of respondents.

The above hypothesis have been tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (2.373) is found to be significant at 5per cent or 1per cent level. (Table Value: 1.613)

In the MANOVA table, since the F value for age is significant and hence, the null hypothesis stated above is rejected.

The follow up of MANOVA table is given below, since MANOVA gave significant result. In the following table, each factor is tested for significance difference among age groups using ordinary One- Way ANOVA. This test is conducted only if MANOVA gives significant result.

Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	Table Value
Between Age	Shopping convenience	47.510	3	15.837	1.717	Ns	2.626
	Secured and easy transaction	31.164	3	10.388	1.565	Ns	2.626
	Time saving	32.052	3	10.684	1.897	Ns	2.626
	Selective purchase	6.343	3	2.114	.722	Ns	2.626
	Hassle free purchase	2.966	3	.989	.334	Ns	2.626
	Product detailing	14.426	3	4.809	1.469	Ns	2.626
Error	Shopping convenience	3911.097	424	9.224			
	Secured and easy transaction	2814.002	424	6.637			
	Time saving	2387.917	424	5.632			
	Selective purchase	1240.853	424	2.927			
	Hassle free purchase	1256.181	424	2.963			
	Product detailing	1387.506	424	3.272			
Corrected Total	Shopping convenience	3958.607	427				
	Secured and easy transaction	2845.166	427				
	Time saving	2419.970	427				
	Selective purchase	1247.196	427				
	Hassle free purchase	1259.147	427				
	Product detailing	1401.932	427				

It is noted from the above table that the factors shopping convenience and selective purchase are significantly different between age groups. The other four factors do not differ significantly between the different age groups of the respondents

Perception towards Online Purchase Vs. Marital Status

The 6 perception factors are simultaneously compared between the variables in Marital Status. The mean scores comparing between different variables in Marital Status of respondents are given in the following table.

Table 4.48
Perception towards Online Purchase by Marital Status

	Marital Status								
	Married			Unmarried			V	F Ratio	Significance
	Mean	S.D	No.	Mean	S.D	No.	0.975	1.785	Ns
Shopping convenience	19.37	3.00	203	19.48	3.09	225			
Secured and easy transaction	14.27	2.70	203	14.26	2.48	225			
Time saving	14.97	2.41	203	14.94	2.36	225			
Selective purchase	11.11	1.62	203	11.20	1.79	225			
Hassle free purchase	11.94	1.53	203	11.72	1.87	225			
Product detailing	11.07	1.90	203	10.69	1.71	225			

Source: Computed Data

The table 4.48 depicts that the mean scores of shopping convenience for the respondents who are unmarried is 19.48 which is higher than the mean scores of married respondents (19.37). The mean scores of Secured and Easy transaction for respondents who are married is 14.27 which slightly higher than the mean scores of unmarried respondents (14.26). Similarly, it is seen that for other factors such as secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing, the mean scores of the unmarried group is higher than the mean scores of married group.

The differences between the marital statuses of the respondents on these six factors are tested by framing the following hypothesis:

H₀ Hypothesis – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among married and unmarried respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (1.785) is found to be significant at 5per cent level. (Table Value: 0.975)

In the MANOVA table, since the F value for marital status is not significant and hence, the null hypothesis stated above is accepted.

Perception towards Online Purchase Vs. Educational Qualification

The 6 perception factors are simultaneously compared between the variables in Educational Qualification. The mean scores comparing between different variables in Educational Qualification of respondents are given in the following table.

Table 4.49
Perception towards Online Purchase by Educational Qualification

	Educational Qualification																	
	Up to School Level			Graduate			Post Graduate			Diploma			Professional			V	F Ratio	Significance
	Mean	S.D	No	Mean	S.D	No.	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	0.958	0.760	Ns
Shopping convenience	19.17	2.84	98	19.67	3.06	207	18.99	3.00	88	19.58	2.97	12	19.91	3.86	23			
Secured and easy transaction	14.63	2.37	98	14.22	2.57	207	14.11	2.77	88	14.00	2.41	12	13.83	2.93	23			
Time saving	14.81	2.29	98	15.00	2.45	207	15.13	2.37	88	14.42	2.19	12	14.74	2.43	23			
Selective purchase	11.16	1.65	98	11.21	1.79	207	10.99	1.66	88	11.25	1.76	12	11.26	1.45	23			
Hassle free purchase	11.92	1.45	98	11.90	1.85	207	11.51	1.76	88	12.08	1.31	12	11.70	1.58	23			
Product detailing	10.86	1.55	98	10.90	1.86	207	10.82	1.97	88	11.00	1.91	12	10.78	1.86	23			

Source: Computed Data

The table 4.49 depicts that the mean scores of shopping convenience for the respondents who are professionally qualified is 19.91 which is higher than the mean scores of other educational qualifications, such as school level educated, graduated, post graduated, diploma holder. The mean scores of secured and easy transaction for respondents who had completed their school level of education is 14.63 which is higher than the mean scores of other qualified respondents. The mean scores of time saving for respondents who graduated is 15.13 is higher than the mean scores of other qualified respondents. The mean scores of selective purchase for the respondents who are professionally qualified is 11.26, which is higher than the mean scores of other educational qualifications. The mean scores of hassle free purchase for the respondents who are post graduated is 12.08, which is higher than the mean scores of other educational qualifications. The mean scores of product detailing for the respondents who are post graduated is 11.00, which is higher than the mean scores of other educational qualifications.

The differences between the educational qualifications of the respondents on these six factors are tested by framing the following hypothesis:

H₀ Hypothesis – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among various educational qualifications of the respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (0.760) is found to be significant at 5per cent level. (Table Value: 0.958)

In the MANOVA table, since the F value for educational qualification is not significant and hence, the null hypothesis stated above is accepted.

Perception towards online purchase by Occupation

The 6 perception factors are simultaneously compared between the variables in Occupation. The mean scores comparing between different variables in Occupations of respondents are given in the following table.

Table 4.50

Perception towards Online Purchase by Occupation

	Occupation																							
	Student and not working			Student and part-time working			Private Employment			Government Employment			Business			Professional			House Wife					
	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	V	F Ratio	Significance
Shopping convenience	19.37	3.33	126	19.50	2.73	42	19.16	2.83	94	19.53	3.87	15	19.97	3.03	67	20.28	2.11	18	19.06	2.98	66	0.905	1.172	Ns
Secured and easy transaction	14.24	2.53	126	13.86	2.69	42	14.63	2.54	94	14.47	2.83	15	13.99	2.63	67	13.72	3.18	18	14.44	2.40	66			
Time saving	15.09	2.30	126	15.05	2.41	42	14.78	2.29	94	15.93	2.37	15	14.70	2.56	67	15.33	2.47	18	14.80	2.44	66			
Selective purchase	11.21	1.89	126	11.19	1.86	42	10.89	1.52	94	11.27	1.75	15	11.07	1.75	67	11.33	1.28	18	11.42	1.55	66			
Hassle free purchase	11.73	1.89	126	11.45	2.15	42	11.86	1.60	94	11.73	1.71	15	11.87	1.40	67	11.78	1.48	18	12.15	1.59	66			
Product detailing	10.59	1.80	126	10.69	1.77	42	11.03	1.67	94	11.33	2.41	15	10.94	1.93	67	11.33	1.28	18	11.00	1.89	66			

Source: Computed Data

The table 4.50 depicts that the mean scores of shopping convenience for the respondents who are professionally occupied is 20.28, which is higher than the mean scores of other occupations, such as student and not working, student and part time working, private employment, Government employment, business, professional and home makers . The mean scores of secured and easy transaction for respondents who are private employee is 14.63, which is higher than the mean scores of other occupations. The mean scores of time saving for respondents who are Government employee is 15.93, which is higher than the mean scores of other occupations. The mean scores of selective purchase for the respondents who are home makers is 11.42, which is higher than the mean scores of other occupations. Similarly, the mean scores of Hassle free purchase for the respondents who are home makers is 12.15, which is higher than the mean scores of other occupations. The mean scores of product detailing for the respondents who are professionals is 11.33, which is higher than the mean scores of other occupations.

The differences between the occupations of the respondents on these six factors were tested by framing the following hypothesis:

H₀ – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, Hassle free purchase and product detailing have no significant difference among various occupations of the respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (1.172) is found to be significant at 5per cent level. (Table Value: 0.905)

In the MANOVA table, since the F value for educational qualification is not significant and hence, the null hypothesis stated above is accepted.

Perception towards online purchase by Type of the Family

The 6 perception factors are simultaneously compared between the variables in type of the family. The mean scores comparing different variables in type of the family of respondents are given in the following table.

Table 4.51**Perception towards Online Purchase by Type of the Family**

	Type of the Family								
	Nuclear family			Joint family			V	F Ratio	Significance
	Mean	S.D	No.	Mean	S.D	No.			
Shopping convenience	19.64	2.88	326	18.73	3.44	102	0.961	2.869	**
Secured and easy transaction	14.40	2.47	326	13.84	2.87	102			
Time saving	15.00	2.29	326	14.78	2.66	102			
Selective purchase	11.27	1.61	326	10.80	1.96	102			
Hassle free purchase	11.78	1.70	326	11.65	1.77	102			
Product detailing	10.91	1.77	326	10.75	1.95	102			

Source: Computed Data

The table 4.51 depicts that the mean scores of shopping convenience for the respondents who belong to Nuclear Family is 19.64, which is higher than the mean scores of the respondents who belongs to Joint Family (18.73). Similarly, it is seen that for other factors such as secured and easy transaction, time saving, selective purchase and hassle free purchase, product detailing the mean scores of the nuclear family group is higher than the mean scores of joint family group.

The differences between the marital statuses of the respondents on these six factors were tested by framing the following hypothesis:

H₀ – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among nuclear family and joint family respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (2.869) is found to be significant at 5per cent or 1per cent level. (Table Value: 0.961)

In the MANOVA table, since the F value for type of the family is significant and hence, the null hypothesis stated above is rejected.

The follow up of MANOVA table is given below, since MANOVA gave significant result. In the following table, each factor is tested for significance difference among type of the family using ordinary One- Way ANOVA. This test is conducted only if MANOVA gives significant result.

Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Between Type of the Family	Shopping convenience	65.570	1	65.570	7.175	**
	Secured and easy transaction	23.722	1	23.722	3.582	Ns
	Time saving	3.718	1	3.718	.655	Ns
	Selective purchase	16.872	1	16.872	5.842	*
	Hassle free purchase	2.294	1	2.294	.778	Ns
	Product detailing	1.820	1	1.820	.554	Ns
Error	Shopping convenience	3893.038	426	9.139		
	Secured and easy transaction	2821.444	426	6.623		
	Time saving	2416.252	426	5.672		
	Selective purchase	1230.324	426	2.888		
	Hassle free purchase	1256.853	426	2.950		
	Product detailing	1400.112	426	3.287		
Total	Shopping convenience	3958.607	427			
	Secured and easy transaction	2845.166	427			
	Time saving	2419.970	427			
	Selective purchase	1247.196	427			
	Hassle free purchase	1259.147	427			
	Product detailing	1401.932	427			

It is noted from the above table, the factors shopping convenience and selective purchase are significantly different between types of the family. The other four factors do not differ significantly between the different types of the family of the respondents

Perception towards online purchase by Monthly Income of the Family:

The 6 perception factors are simultaneously compared between Age groups. The mean scores comparing between different age groups of respondents are given in the following table.

Table 4.52

Perception towards online purchase by Monthly Income of the Family

	Monthly Income of the family																	
	Below Rs.25000			Rs.25000 - Rs.40000			Rs.40000 - Rs.55000			Rs.55000 – Rs.70000			Above Rs.70000					
	Mean	S.D	No	Mean	S.D	No.	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	V	F-Ratio	Significance
Shopping convenience	19.09	2.88	122	18.98	3.11	140	20.18	2.71	60	19.73	2.97	55	20.24	3.41	51	0.901	1.846	**
Secured and easy transaction	14.20	2.62	122	14.35	2.34	140	14.38	2.56	60	14.04	3.02	55	14.27	2.72	51			
Time saving	14.99	2.29	122	14.46	2.37	140	15.32	2.42	60	15.35	2.26	55	15.35	2.54	51			
Selective purchase	10.86	1.64	122	10.96	1.62	140	11.35	1.86	60	11.71	1.81	55	11.59	1.61	51			
Hassle free purchase	11.70	1.92	122	11.77	1.54	140	12.35	1.62	60	11.62	1.60	55	11.82	1.83	51			
Product detailing	10.66	1.74	122	10.73	1.78	140	11.35	1.72	60	11.11	2.19	55	10.94	1.64	51			

Source: Computed Data

The table 4.52 exhibits that the mean scores of shopping convenience for the respondents whose monthly income above Rs.70000 is 20.24, which is higher than the mean scores of all other income groups such as Below Rs.25000, Rs.25000-40000, Rs.40000-55000, Rs.55000-70000. Similarly, the mean scores of other factors such as time saving, hassle free purchase remain higher than the other income groups. The mean scores of secured and easy transaction for respondents whose monthly income between Rs.40000- 55000 is 14.38, which is higher than the mean scores of all other income groups. The mean scores of selective purchase for the respondents whose monthly income is between Rs.55000-70000 is 11.71, which is higher than the all other income groups. The mean scores of product detailing for the respondents whose monthly income is between Rs.40000-55000 is 11.35, which is higher than the all other income groups.

The differences between the age groups on these six factors have been tested by framing the following hypothesis:

H₀ – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among different income groups of respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (1.846) is found to be significant at 5per cent level. (Table Value: 0.906)

In the MANOVA table since the F value for age is significant and the null hypothesis stated above is rejected.

The follow up of MANOVA table is given below, since MANOVA gave significant result. In the following table each factor is tested for significance difference among income groups using ordinary One- Way ANOVA. This test is conducted only if MANOVA gives significant result.

Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Between Monthly Income of the family	Shopping convenience	114.595	4	28.649	3.153	*
	Secured and easy transaction	5.171	4	1.293	.193	Ns
	Time saving	59.168	4	14.792	2.650	*
	Selective purchase	44.395	4	11.099	3.903	**
	Hassle free purchase	21.041	4	5.260	1.797	Ns
	Product detailing	25.206	4	6.302	1.936	Ns
Error	Shopping convenience	3844.013	423	9.088		
	Secured and easy transaction	2839.995	423	6.714		
	Time saving	2360.801	423	5.581		
	Selective purchase	1202.801	423	2.844		
	Hassle free purchase	1238.106	423	2.927		
	Product detailing	1376.726	423	3.255		
Total	Shopping convenience	3958.607	427			
	Secured and easy transaction	2845.166	427			
	Time saving	2419.970	427			
	Selective purchase	1247.196	427			
	Hassle free purchase	1259.147	427			
	Product detailing	1401.932	427			

It is noted from the above table that the factors shopping convenience, time saving and selective purchase were significantly different among various income groups. The other three factors do not differ significantly between the different income groups of the respondents.

Perception towards online purchase by kind of products purchased

The 6 perception factors are simultaneously compared between the variables in kinds of products purchased. The mean scores comparing between different variables in kind of products of respondents are given in the following table.

Table 4.53

Perception towards Online Purchase by Kind of Products Purchased

	Kind of products purchased online											
	Branded Products			Non Branded Products			Both			V	F Ratio	Significance
	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No			
Shopping convenience	19.60	3.11	202	19.17	2.72	141	19.42	3.39	85	0.980	0.698	Ns
Secured and easy transaction	14.37	2.70	202	13.99	2.15	141	14.47	2.92	85			
Time saving	15.13	2.36	202	14.69	2.24	141	14.96	2.63	85			

Selective purchase	11.23	1.80	202	11.00	1.48	141	11.26	1.84	85			
Hassle free purchase	11.89	1.77	202	11.74	1.67	141	11.80	1.67	85			
Product detailing	11.05	1.81	202	10.72	1.59	141	10.71	2.11	85			

Source: Computed Data

The table 4.53 displays the mean scores of shopping convenience for the respondents who purchase branded products is 19.60 which is higher than the mean scores of non-branded products and both branded and non-branded products. Similarly, the mean scores of time saving, hassle free purchase and product detailing for respondents who purchase branded products stands high when comparing to non-branded products and both branded and non-branded products. The mean scores of secured and easy transaction for respondents who purchase both branded and non-branded is 14.47, which is slightly higher than the mean scores of branded and non-branded products. Similarly, it is seen that for selective purchase the mean scores of both branded and non-branded products is higher than the mean scores of branded and non-branded products.

The differences between the kinds of products purchased by the respondents on these six factors are tested by framing the following hypothesis:

H₀ – The perception factors namely shopping convenience, secured and easy transaction, Time saving, selective purchase, Hassle free purchase and product detailing have no significant difference among the kinds of products purchased through online.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (0.698) is found to be significant at 5per cent or 1per cent level. (Table Value: 0.980)

In the MANOVA table, since the F value for kind of products purchased is not significant and hence, the null hypothesis stated above is accepted.

Perception towards online purchase by Occasion

The 6 perception factors are simultaneously compared between occasions of purchase of products through online. The mean scores comparing between different occasions of online purchase by respondents are given in the following table.

Table 4.54

Perception towards Online Purchase by Occasion

	Occasion in which products purchased through online?														
	Whenever needed			Festival season			Special Offers/ Discounts			Special Occasions			V	F ratio	Significance
	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	0.915	2.105	**
Shopping convenience	19.80	3.06	182	18.59	2.63	88	19.73	2.99	133	18.00	3.71	25			
Secured and easy transaction	14.20	2.55	182	14.40	2.22	88	14.32	2.74	133	14.00	3.16	25			
Time saving	14.99	2.42	182	14.51	2.04	88	15.41	2.31	133	13.72	2.97	25			
Selective purchase	11.14	1.65	182	11.00	1.60	88	11.26	1.80	133	11.28	2.05	25			
Hassle free purchase	11.86	1.70	182	11.92	1.53	88	11.68	1.86	133	11.88	1.72	25			
Product detailing	10.92	1.83	182	10.84	1.64	88	10.85	1.82	133	10.72	2.25	25			

Source: Computed Data

The table 4.54 displays the mean scores of shopping convenience for the respondents who purchase online products whenever they need is 19.80, which is higher than the mean scores of all other occasions such as festival season, special offers/ discounts and special occasions. Similarly, the mean scores of product detailing remains high than the other occasions. The mean scores of secured and easy transaction for respondents who purchase products through online only during festive season is 14.40, which is higher than the mean scores of all other occasions. The mean scores of time saving for the respondents who purchase products through online is 15.41, which is higher than the all other occasions. The mean scores of selective purchase for the respondents who purchase product through online during some special occasion is 11.28, which is higher than the all other occasions. The mean scores of hassle free purchase for the respondents who purchase product through online during festival season is 11.92, which is higher than the all other occasions.

The differences between the various occasions for purchase of online products on these six factors are tested by framing the following hypothesis:

H₀ – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among occasions on the purchase of online product.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (2.105) is found to be significant at 5per cent level. (Table Value: 0.915)

In the MANOVA table since the F value for occasion for purchase of online products is significant and the null hypothesis stated above is rejected.

The follow up of MANOVA table is given below, since MANOVA gave significant result. In the following table, each factor is tested for significance difference among various occasions using ordinary One- Way ANOVA. This test is conducted only if MANOVA gives significant result.

Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Occasion in which purchased through online?	Shopping convenience	150.200	3	50.067	5.574	**
	Secured and easy transaction	4.470	3	1.490	.222	Ns
	Time saving	83.691	3	27.897	5.063	**
	Selective purchase	4.081	3	1.360	.464	Ns
	Hassle free purchase	3.761	3	1.254	.423	Ns
	Product detailing	1.204	3	.401	.121	Ns
Error	Shopping convenience	3808.407	424	8.982		
	Secured and easy transaction	2840.696	424	6.700		
	Time saving	2336.279	424	5.510		
	Selective purchase	1243.115	424	2.932		
	Hassle free purchase	1255.386	424	2.961		
	Product detailing	1400.728	424	3.304		
Total	Shopping convenience	3958.607	427			
	Secured and easy transaction	2845.166	427			
	Time saving	2419.970	427			
	Selective purchase	1247.196	427			
	Hassle free purchase	1259.147	427			
	Product detailing	1401.932	427			

It is noted from the above table that the factors shopping convenience and time saving are significantly different between various occasions. The other four factors do not differ significantly between the different occasions on the purchase of online products of the respondents.

Perception towards Online Purchase by Decision Making on Online Purchase

The 6 perception factors are simultaneously compared between the variables in decision makers on online purchase. The mean scores comparing between different variables in decision makers on online purchase are given in the following table.

Table 4.55

Perception towards Online Purchase by Decision Making on Online Purchase

Final decision for online purchase in family																					
	Earning Male			Earning Female			Both earning male and female			Children			Elders			All the members			V	F Ratio	Significance
	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No			
Shopping convenience	19.32	2.76	130	19.05	3.39	60	19.54	2.59	81	18.23	3.47	13	19.71	2.99	28	19.72	3.40	116	0.932	0.996	Ns
Secured and easy transaction	14.32	2.71	130	14.52	2.34	60	14.06	2.55	81	14.38	1.98	13	14.18	2.23	28	14.22	2.74	116			
Time saving	14.90	2.10	130	14.57	2.34	60	14.81	2.46	81	14.15	1.77	13	15.07	2.81	28	15.36	2.56	116			
Selective purchase	11.14	1.75	130	11.13	1.49	60	11.17	1.73	81	10.31	2.10	13	11.39	1.50	28	11.22	1.76	116			
Hassle free purchase	11.81	1.68	130	12.03	1.51	60	11.60	1.63	81	11.23	2.01	13	11.96	1.55	28	11.91	1.92	116			
Product detailing	10.78	1.67	130	11.15	1.57	60	10.96	1.79	81	9.54	2.11	13	10.61	2.02	28	10.97	1.96	116			

Source: Computed Data

The table 4.55 depicts that the mean scores of shopping convenience for the respondents who makes decision on purchase of online products is, all the members in the family (19.72) which is higher than the mean scores of all other decision makers in the family. Similarly, the mean scores of time saving for respondents who makes decision on purchase of online products stands high when comparing to other decision makers in the family. The mean scores of secured and easy transaction for respondents who makes decision on purchase of online products is earning women whose mean score is 14.52, which slightly higher than the mean scores of other decision makers in the family. Similarly, it is seen that for hassle free purchase and product detailing the mean scores of earning women is higher than the mean scores of all other decision makers. The mean scores of selective purchase for respondents who makes decision on purchase of online products is elders whose mean score is 11.39 which slightly higher than the mean scores of other decision makers in the family.

The differences between the decision makers on purchase of online products of the respondents on these six factors are tested by framing the following hypothesis: H_0 – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among the decision makers on purchase of online products.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (0.996) is found to be significant at 5per cent level. (Table Value: 0.932)

In the MANOVA table since the F value for decision makers on purchase of online products is not significant and hence the null hypothesis stated above is accepted.

Perception towards Online Purchase by Amount Spent on Purchase of Online Products

The 6 perception factors are simultaneously compared between amounts spent on purchase of online products. The mean scores comparing between different amounts spent on purchase of online products by respondents are given in the following table.

Table 4.56
Perception towards Online Purchase by Amount Spent on Online Purchase

	Amount spent for purchasing online per month																				
	Less than Rs.2000			Rs.2000 to Rs.4000			Rs.4001 to Rs.6000			Rs.6001 to Rs.8000			Rs.8001 to Rs.10000			Rs.10001 & Above					
	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	Mean	S.D	No.	V	F Ratio	Significance
Shopping convenience	19.62	2.85	208	19.49	3.01	127	19.39	3.38	41	19.09	4.23	11	18.94	3.11	31	16.70	3.65	10	0.892	1.619	*
Secured and easy transaction	14.09	2.41	208	14.34	2.48	127	14.54	2.85	41	15.55	3.11	11	14.39	2.94	31	14.10	4.18	10			
Time saving	14.72	2.32	208	15.17	2.34	127	15.24	2.51	41	14.82	2.32	11	15.26	2.72	31	15.00	2.71	10			
Selective purchase	10.98	1.63	208	11.43	1.68	127	11.29	1.87	41	11.64	1.63	11	11.32	1.66	31	9.80	2.39	10			
Hassle free purchase	11.98	1.76	208	11.64	1.67	127	11.66	1.70	41	11.82	1.99	11	12.13	1.50	31	10.60	1.26	10			
Product detailing	10.81	1.72	208	10.83	1.92	127	11.10	1.69	41	11.36	1.36	11	11.13	1.91	31	10.30	2.91	10			

Source: Computed Data

The table 4.56 shows the mean scores of shopping convenience for the respondents who spent amount less than Rs.2000 for purchase of online products is 19.62, which is higher than the mean scores of all other amounts such as Rs.2000-4000, Rs.4001-6000, Rs.6001-8000, Rs.8001-10000 and above Rs.10000. Similarly, the mean scores of selective purchase, product detailing remains same for the respondents who spent between Rs.6001-8000 for online purchase. The mean scores of time spent for respondents who spent between Rs.6001 to Rs.8000 for online purchase is 15.55, which is higher than the mean scores of all other amounts. The mean scores of time saving for the respondents who spent between Rs.8001 – 10000 for purchase of products through online is 15.26, which is higher than the all other amounts. Similarly the mean scores of Hassle free purchase for the respondents who spent between Rs.8001-10000 for purchase of products through online is 12.13, which is higher than the all other amounts.

The differences between the various amounts spent on purchase of online products on these six factors are tested by framing the following hypothesis:

H₀ – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference among different amounts spent on purchase of online products by the respondents.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (1.619) is found to be significant at 5per cent level. (Table Value: 0.892)

In the MANOVA table since the F value for amount spent on purchase of online products is significant and the null hypothesis stated above is rejected.

The follow up of MANOVA table is given below, since MANOVA gave significant result. In the following table, each factor is tested for significance difference among various amounts spent on purchase of online products using ordinary One- Way ANOVA. This test is conducted only if MANOVA gives significant result.

Tests of Between-Subjects Effects

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Amount spent for purchasing online per month	Shopping convenience	91.008	5	18.202	1.986	Ns
	Secured and easy transaction	29.105	5	5.821	.872	Ns
	Time saving	23.482	5	4.696	.827	Ns
	Selective purchase	38.685	5	7.737	2.702	*
	Hassle free purchase	28.189	5	5.638	1.933	Ns
	Product detailing	10.978	5	2.196	.666	Ns
Error	Shopping convenience	3867.599	422	9.165		
	Secured and easy transaction	2816.060	422	6.673		
	Time saving	2396.487	422	5.679		
	Selective purchase	1208.512	422	2.864		
	Hassle free purchase	1230.958	422	2.917		
	Product detailing	1390.954	422	3.296		
Total	Shopping convenience	3958.607	427			
	Secured and easy transaction	2845.166	427			
	Time saving	2419.970	427			
	Selective purchase	1247.196	427			
	Hassle free purchase	1259.147	427			
	Product detailing	1401.932	427			

It is noted from the above table that the factor selective purchase significantly differ between various amounts spent on purchase of online products. The other five factors do not differ significantly between the different amounts spent on the purchase of online products of the respondents.

Perception towards Online Purchase by Kind of Payment Mode

The 6 perception factors are simultaneously compared between the variables in kind of payment mode on online purchase. The mean scores comparing between different variables in kind of payment mode on online purchase are given in the following table.

Table 4.57

Perception towards Online Purchase by Kind of Payment Mode on Online Purchase

	Kind of payment mode preferred														
	Debit Card			Credit Card			Cash on Delivery			Net Banking					
	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	Mean	S.D	No	V	F Ratio	Significance
Shopping convenience	18.88	3.67	49	18.86	2.70	51	19.60	2.98	302	19.58	3.11	26	0.937	1.522	Ns
Secured and easy transaction	14.53	2.59	49	14.45	2.99	51	14.25	2.53	302	13.62	2.37	26			
Time saving	14.71	2.78	49	14.55	2.52	51	15.04	2.30	302	15.19	2.30	26			
Selective purchase	11.29	1.68	49	11.24	1.81	51	11.15	1.70	302	10.88	1.68	26			
Hassle free purchase	12.22	1.39	49	11.61	1.77	51	11.86	1.75	302	11.04	1.54	26			
Product detailing	10.80	1.86	49	11.22	2.14	51	10.86	1.75	302	10.50	1.75	26			

Source: Computed Data

The table 4.57 expresses the mean scores of shopping convenience for the respondents who makes payment by cash on delivery for purchase of online products is 19.60, which is higher than the mean scores of all other mode of payment such as debit card payment, credit card payment and net banking. The mean scores of secured and easy transaction for respondents who makes payment through debit card on purchase of online products is 14.53, which slightly higher than the mean scores of other mode of payments. Similarly, it is seen that for selective purchase and hassle free purchase mean scores of debit card is higher than the mean scores of all other mode of payments. The mean scores of time saving for respondents who makes payment through net bank for purchase of online products is 15.19, which slightly higher than the mean scores of other payment modes. The mean scores of product detailing for respondents who makes payment through credit card for purchase of online products is 11.22, which slightly higher than the mean scores of other Payment modes.

The differences between the kinds of payment mode on purchase of online products of the respondents on these six factors are tested by framing the following hypothesis

H₀ – The perception factors namely shopping convenience, secured and easy transaction, time saving, selective purchase, hassle free purchase and product detailing have no significant difference between the kinds of payment used by the respondents on purchase of online products.

The above hypothesis was tested with the help of MANOVA. The test statistics Wilk's Lambda and the corresponding approximate F value is shown in the table. The F value (1.522) is found to be significant at 5per cent level. (Table Value: 0.937)

In the MANOVA table since the F value for kind of payment mode preferred on purchase of online products is not significant and hence the null hypothesis stated above is accepted.