

CHAPTER III

ANALYSIS AND INTERPRETATION

This chapter titled as analysis and interpretation, presents the data collected through questionnaire. The data collected for the study has been analysed using appropriate statistical tools, with reference to the objectives of the study. The results of the analysis are presented in this chapter for drawing specific inferences related to the objectives of the study.

Respondents profile:

Demographic factors play a vital role in determining the way respondents think, act, and behave. The following Table (no: 8) describes the respondents profile, such as: gender, age in years, marital status, educational qualification, type of family, occupation, area of residence, and family income.

Table No.8: Respondents profile of Coimbatore city in the selected branded retail outlets

Demographic factor	Particulars	Respondents	
		Number	Percentage
Gender	Male	580	68.2
	Female	270	31.8
	Total	850	100.0
Age in years	15 – 20	102	12.0
	21 – 30	335	39.4
	31 – 40	263	30.9
	41 years and above	150	17.6
	Total	850	100.00
Marital status	Married	588	69.2
	Unmarried	233	27.4
	Others	29	3.4
	Total	850	100.0

Demographic factor	Particulars	Respondents	
		Number	Percentage
Educational qualification	Illiterate	26	3.1
	School	37	4.4
	Hr. Sec.	78	9.2
	UG	280	32.9
	PG	192	22.6
	Professional	237	27.9
	Total	850	100.0
Type of family	Nuclear	495	58.2
	Joint	355	41.8
	Total	850	100.0
Occupation	Agriculture	226	26.6
	Business	204	24.0
	Professional	234	27.5
	Service	123	14.5
	Others	63	7.4
	Total	850	100.0
Area of residence	Rural	428	50.4
	Semi-urban	217	25.5
	Urban	205	24.1
	Total	850	100.0
Family monthly income (Rs)	Below 10,000	190	22.4
	10,001 – 15,000	159	18.7
	15,001- 20,000	145	17.1
	20,001 -25,000	135	15.9
	25,001- 30,000	81	9.5
	Above 30,000	140	16.5
	Total	850	100.0

Source: Primary data

It is inferred that the above table (no.8) 68.2 percent are male respondents, 39.4 percent belongs to the age group between 21 to 30 years, 69.2 percent are married among 850 respondents, 32.9 percent have completed UG, 58.2 percent are from nuclear family, 27.5 percent are professional, 50.4 are from rural area of residence and 22.4 percent of the respondents family income is below Rs. 10,000.

Objectives 1: To study the socio-economic factors in the selected branded retail outlets of the respondents in Coimbatore city.

The socio-economic factors of the respondents could be ascertained with the frequency of customers' walk-in. The following Table (no: 9) classifies the frequency of purchase preferred into four types: weekly, fortnightly, monthly, and occasionally, while shopping at selected branded retail outlets.

Table No. 9: Frequency of purchase

Frequency	Respondents	Percent
Weekly	218	25.6
Fortnightly	183	21.5
Monthly	373	43.9
Occasionally	76	8.9
Total	850	100.0

Source: Primary Data

The above table reveals that among 850 respondents, 43.9 percent made monthly purchase in branded retail outlet (BRO), 25.6 percent made weekly purchase, 21.5 percent made fortnightly purchase and the rest of 8.9 percent of the respondents made occasional purchase. It could be found that most of the BRO customers are salaried employees. Hence, most of the customers prefer to shop once in a month in the selected BRO. The retailers can provide offers / coupons during first week of every month which could increase their market share. Eventually customer foot fall to the BRO will be enhanced drastically.

The purchase convenience at the selected branded outlets is one of the major reasons for preferring same outlet. The convenience turns the customers more loyal towards the outlet. The below Table (no: 10) depicts the purchase plan opted by the respondents, like: door delivery, cash in hand, offer purchase, credit/debit card purchase, Sodexo, and None.

Table No. 10: Purchase Plans

Purchase plan for	Respondents	Percent
Door delivery	197	23.2
Cash in hand	365	42.9
Offer purchase	87	10.2
Credit / debit card purchase	44	5.2
Sodexo	31	3.6
None	126	14.8
Total	850	100.0

Source: Primary Data.

From the above table it can be found that 42.9 percent of the respondents plan their purchase for cash in hand, 23.2 percent plan for door delivery purchase, 14.8 percent do not plan purchase, followed by 10.2 percent who plan for offer purchase, 5.2 percent plan for credit / debit card purchase and the rest 3.6 percent use the Sodexo for purchase. The conventional format, cash in hand purchase plan is still dominating shopping at BRO, but when it comes to delivery option customers prefer door delivery options which attract the customers to do the shopping at BRO.

In spite of the purchase plan decisions, there exist various other reasons for choosing the particular branded outlets. The underneath Table (no: 11) states the factors influencing the purchase in a particular branded retail outlet, like: parking facility, correct weighing machine, no adulteration, reasonable price, offers, and card purchase.

Table No.11: Reasons for purchasing in particular branded retail outlets

Reasons	Respondents	Percent
Parking facility	253	29.8
Correct weighing machine	148	17.4
No adulteration	83	9.8
Reasonable price	201	23.6
Offers	136	16.0
Card purchase	29	3.4
Total	850	100.0

Source: Primary Data.

The above table depicts that, among the total respondents, 29.8 percent of the respondents have purchased in a particular retail outlet due to parking facility, 23.6 percent due to reasonable price, followed by 17.4 percent due to correct weighing machine, 16 percent due to offers, 9.8 percent due to no adulteration and the rest 3.4 percent due to credit purchase. Parking is the major criteria for the customer to shop in the retail outlet, because parking consumes more time than shopping. Thus, the study showed that most of the respondents purchased in a particular retail outlet due to good parking facility.

In the era of globalisation, customers are very much oriented towards the type of products consumed. The following Table (no: 12) elucidates the type of products purchased i.e. branded products and non-branded products.

Table No. 12: Type of product purchase

Type of product	Respondents	Percent
Branded products	646	76.0
Non-branded products	204	24.0
Total	850	100.0

Source: Primary Data.

As seen in the above table that, among the respondents, 76 percent of the respondents have purchased branded products whereas the rest 24 percent have purchased non-branded products from the branded retail outlet. The respondents of this study clearly focused on branded products that they shop rather than non-branded products because respondents are crystal clear while shopping at branded retail outlet. Thus, the studies showed that majority of the respondents have purchased branded products from the branded retail outlet.

Budget for purchase indicates the financial status of the respondents which influences the life style to a greater extent by creating a radical change in the thinking, behavior, and action. Hence, monthly budget for purchase was studied in Table (no: 13) in five groups: Rs.2, 500-4,500; Rs.4, 501-6,500; Rs.6, 501-8,500; Rs.8, 501-10,000; and above Rs.10, 001.

Table No. 13: Budget for retail outlet purchase

Monthly Budget	Respondents	Percent
Rs.2,500-4,500	334	39.3
Rs.4,501-6,500	269	31.6
Rs.6,501-8,500	120	14.1
Rs.8,501-10,000	90	10.6
Above Rs.10,001	37	4.4
Total	850	100.0

Source: Primary Data.

It is renowned from the above table, among the respondents 39.3 percent have monthly budget between Rs. 2,500-4,500 for their branded retail outlet purchase, followed by 31.6 percent who have between Rs.4,501-6,500, 14.1 percent have between Rs.6,501-8,500, 10.6 percent have between Rs.8,501-10,000 and the rest 4.4 percent have monthly budget above Rs.10,001 for the branded retail outlet purchase. Majority of the customers allocate maximum of Rs. 2, 500 to Rs. 4, 500 as budget for their BRO monthly purchase.

Any branded outlet can reach the market position only when there is an effective loyalty program. The below Table (no: 14) explicates that loyalty program practiced in the selected outlets, like: discount sale, point system, credit base system and privilege card.

Table No. 14: Loyalty programme purchase

Programme	Respondents	Percent
Discount sale	401	47.1
Point system	309	36.3
Credit base system	68	8.0
Privilege card	72	8.5
Total	850	100.0

Source: Primary Data.

It is found from the above table that among the 850 respondents, 47.1 percent have liked the loyalty programme due to discount sale, 36.3 percent have liked the loyalty programme due to point system, followed by 8.5 percent due to privilege card and the rest eight percent due to credit base system. It's no longer enough to offer great products at fair prices. Shopping is one of the most popular activities, branded retail outlet today must know their customer, and give them exactly what they want and when they want it. Thus, the study showed that most of the respondents liked the loyalty programme due to discount sale in the branded retail outlet.

In this hypothetical business scenario, there exists a heavy head-to-head competition. The beneath table (no: 15) formulates the classification of branded retail outlet used by the respondents during the period of study. Some of the Branded retail outlets are Big Bassar, More, Nilgiris, Reliance, and Spencer's.

Table No.15: Branded retail outlet use

Branded retail outlet use	Respondents	Percent
Big Basaar	294	34.6
More	211	24.8
Nilgiris	202	23.8
Reliance	86	10.1
Spencer's	57	6.7
Total	850	100.0

Source: Primary Data.

The above table shows that, among the total respondents, 34.6 percent use the branded retail outlet „Big Basaar’, followed by 24.8 percent who use „More’, 23.8 percent prefer „Nilgiris’ , 10.1 percent who use „Reliance’ and the rest 6.7 percent who use „Spencer’s for their monthly retail purchase. A branded retail outlet in Coimbatore is carefully designed to provide not only the basic necessities of food, but also to provide related products that reflects the one stop shopping experience. The simple percentage analysis clearly put forth the point that 34.6 percent of the customer use „Big Bassar’ for their purchase and only 6.7 percent of them prefer Spencer’s retail outlet.

Monthly budget for retail purchase

The inter-correlation matrix of explanatory variables, namely, X1-Age, X2-Occupation, X3-Family Income, X4-Frequency of Purchase and X5-Awareness with dependent variable Y-Monthly budget for retail outlet purchase is furnished in the table given below:-

Table No. 16: Inter-correlation matrix for monthly budget of retail purchase

	X1	X2	X3	X4	X5	Y
X1	1.000					
X2	0.152	1.000				
X3	0.312	0.242	1.000			
X4	-0.100	0.051	-0.053	1.000		
X5	0.026	0.104	0.041	0.000	1.000	
Y	0.242**	-0.130**	0.372**	-0.225**	0.087 ns	1.000

Source: Primary Data NS- Non significant at 5 % level **Significant at 1 % level

It is found from the above table the correlation between all the explanatory variables, except X4 with X2 and X3, X5 with X1, X3 and X4, are highly significant and positive. Further it is also seen that all these explanatory variables are highly, significantly correlated with the dependent variable budget for branded retail outlet purchase. Consumers are keen while purchasing in a retail outlet, they allocate the budget before shopping.

Path coefficient analysis

In the Path coefficient analysis the direct (response) effect of each of the explanatory variables on the dependent variable and the indirect (response) effect of each explanatory variable on the dependent variable through other explanatory variables are obtained and furnished in the table given below.

Table No.17: Direct and indirect effect of explanatory variables on selected branded retail outlets

Explanatory Variables	X1	X2	X3	X4	X5	Cor(XY)
X1	0.142	-0.037	0.116	0.018	0.002	0.242**
X2	0.022	-0.242	0.090	-0.009	0.010	-0.130**
X3	0.044	-0.059	0.373	0.009	0.004	0.372**
X4	-0.014	-0.012	-0.020	-0.179	0.000	-0.225**
X5	0.004	-0.025	0.015	0.000	0.093	0.087 ns

NS- Non Significant at 5 % level **Significant at 1 % level

It is renowned from the above table, among the five explanatory variables, two explanatory variables, namely, X1-Age and X3-Family income had higher positive direct effect on the dependent variable Y. The variable X1-Age also had higher positive indirect effect on Y through X3-Family income. Similarly, the variable X3 also had positive indirect effect on the dependent variable Y through X1. Hence the two explanatory variables X1-Age and X3-Family income are substantially important contributing variable to Y-Budget for branded retail outlet purchase. The current generation has gone through a drastic cultural change due to the increase in the purchasing power. This leads to more disposable income and freedom to purchase in their life style.

The following table depicts the personal factors and frequency of purchase of 850 respondents. Factors like sex, age, marital status, education, type of family, area of residence, occupation and family income is furnished below.

Table No. 18: Association between personal characters and frequency of purchase

Personal factors	Calculated χ^2	Table Value of χ^2	DF	Significance
Sex	4.063	7.82	3	NS
Age	51.840	16.92	9	S
Marital status	21.929	12.59	6	S
Education	98.935	25.00	15	S
Type of family	15.056	12.59	6	S
Area of residence	11.030	12.59	6	NS
Occupation	24.310	21.03	12	S
Family income	66.826	25.00	15	S

S-Significant at 1 % level NS-Non Significant at 5 % level

Chi-Square test is used to find out the relationship between the personal characters and frequency of purchase. Significant Chi-Square indicates that there is association between all the personal characters except sex and area of residence of the respondents and frequency of purchase in branded retail outlet. The double income household has changed the thinking process of the individuals. More over this has increased the purchasing power of an individual which has got a great influence on the lifestyle of the society.

The following table explains the comparison of personal characters and reasons to purchase in particular branded retail outlet using Chi-Square test with degrees of freedom.

Table No.19: Association between personal characters and reasons to purchase in particular branded retail outlets

Personal characters	Calculated χ^2	Table Value of χ^2	DF	Significance
Sex	.926	11.07	5	NS
Age	73.680	25.0	15	S
Marital status	25.844	18.31	10	S
Education	100.548	37.65	25	S
Type of family	30.229	18.31	10	S
Area of residence	92.684	18.31	10	S
Occupation	119.712	31.41	20	S
Family income	88.270	37.65	25	S

S-Significant at 5 % level NS-Non-Significant at 5 % level

Chi-Square test is used to find out the relationship between the personal characters and reasons to purchase in particular branded retail outlet by the respondents. The first step of understanding the branded retail outlet customers is to identifying the potential customer for the product and the service. Customers are now showing preferences for branded retail outlet which enable them to shop a variety of products under one roof and feel the shopping experience in terms of ambience and entertainment. Significant Chi-Square indicates that there is association between all the personal characters of the respondents, except sex, the respondents prefer to buy in particular branded retail outlet.

Null Hypothesis: There is no significant difference in the mean score among different occupational group of respondents on the monthly budget for retail outlet purchase.

The following table shows calculated ANOVA for the monthly budget of 850 respondents who are using the selected branded retail outlets.

Table No. 20: ANOVA - Monthly Budget for retail outlet purchase

Source	SS	DF	MS	F
Between groups	11.79094	4	2.947735	2.21 ns
Within groups	1126.584	845	1.33323	

NS - Non significant at 5 % level

As the F is non significant the null hypothesis of no difference in the mean purchase score among occupational groups of respondents is accepted. The mean score among different groups of respondents is furnished below:

The table describes classification based on the occupation and monthly budget for retail outlet purchase with mean purchase score of respondents selected for the study. The occupational group of monthly budget is classified as agriculture, business, professional, service and others.

Table No. 21: Monthly budget for retail outlet purchase

Occupational group	Respondents	Mean purchase score
Agriculture	226	2.26
Business	204	2.07
Professional	234	1.99
Service	123	2.11
Others	63	1.87

Source: Primary Data

Table 21 indicates that the mean monthly budget of branded retail outlet score ranges from 1.87 in others group to 2.26 in agriculturist group and since the F-value is not significant, the monthly purchase among the occupational groups of respondents is on par. Thus, the study revealed that there are no significant variations in the monthly purchase from BRO among the occupational groups of respondent.

Null Hypothesis: There is no significant difference in the mean monthly expenditure score among different occupational groups of respondent.

The following table shows calculated ANOVA for the monthly expenditure of 850 respondents who are using the selected branded retail outlets.

Table No. 22: ANOVA - Monthly expenditure of a branded retail outlet users

Source	S S	D F	M S	F
Between groups	2365.22	4	591.305	11.82**
Within groups	42260.12	845	50.01198	

**Significant at 1 % level

As the F is significant, the null hypothesis of no difference in the mean score among different groups of respondents is rejected. The mean score among different respondent is furnished below:-

The table describes classification based on the occupational group of monthly expenditure for retail outlet users with mean expenditure score of respondents selected for the study. The occupational group of monthly expenditure is classified as agriculture, business, professional, service and others.

Table No. 23: Monthly expenditure of a branded retail outlet users

Occupation	Respondents	Mean expenditure
Agriculture	226	8.66
Business	204	11.94
Professional	234	12.36
Service	123	13.11
Others	63	12.09

Source: Primary Data

It is found from the above table that the mean monthly expenditure ranges from 8.66 for agriculture group to 13.11 for service group of respondents and the monthly expenditure

is higher in service group than all other groups and is least in agriculture group of respondents. Thus, the study revealed that mean monthly expenditure is higher in the service group than all other groups and this shall be perhaps due to their regular monthly income.

Null Hypothesis: There is no significant difference in the mean monthly income score among different occupational group of respondent.

The following table shows calculated ANOVA for the family monthly of 850 respondents who are using the selected branded retail outlets.

Table No. 24: ANOVA - Family monthly income

Source	SS	DF	MS	F
Between groups	310.0532	4	77.51329	28.59**
Within groups	2290.672	845	2.710854	

**Significant at 1 % level

Since the F is significant, the null hypothesis of no difference in the mean monthly income score among different groups of respondents is rejected. The mean income score among different respondents is furnished below:

The table describes classification based on the occupational group of family monthly income for retail outlet users with mean income score of respondents selected for the study. The occupational group of family income is classified as agriculture, business, professional, service and others.

Table No. 25: Family monthly income

Occupation	Respondents	Mean income score
Agriculture	226	2.25
Business	204	3.38
Professional	234	3.46
Service	123	3.89
Others	63	3.84

Source: Primary Data

The above table indicates that the mean monthly income score ranges from 2.25 to 3.89 and it is higher in service group of respondents than all other groups and is least in agriculture.

Thus, the study indicates that there is variations in the monthly income score among the respondents of retail outlet users and is higher in the service group of respondent of retail outlet users than all other occupational groups of respondents.

Null Hypothesis: There is no significant difference in the mean number of dependents among different occupational groups of respondents.

Table No. 26: ANOVA - Number of dependents

The following table shows that the calculated ANOVA for number of dependents of 850 respondents who are using the selected branded retail outlets.

Source	S S	D F	M S	F
Between groups	180.3122	4	45.07806	10.09**
Within groups	3776.987	845	4.469807	

**Significant at 1 % level

Since the F is significant, the null hypothesis of no difference in the mean number of dependents among different groups of respondents is rejected. The mean score among different groups of respondents is furnished below:

The table describes classification based on the occupational group of number of dependents for retail outlet users with mean number of dependents of respondents selected for the study. The occupational group dependents is classified as agriculture, business, professional, service and others.

Table No. 27: Number of dependents

Occupation	Respondents	Mean number of dependents
Agriculture	226	4.50
Business	204	4.39
Professional	234	4.13
Service	123	3.22
Others	63	3.38

Source: Primary Data

It is renowned from the above table that the mean number of dependents ranges from 3.22 to 4.50 and is higher in agriculture group than other groups and is least in service respondents. The study revealed that there are variations in the mean number of dependents among occupational groups of respondents of retail outlet users and the mean number of dependents is higher in agriculture group.

Null Hypothesis: There is no significant difference in the mean number of earners among different occupational groups of respondents of retail outlet users.

The following table (no.28) shows that the calculated ANOVA for number of earners in a family of 850 respondents who are using the selected branded retail outlets.

Table No. 28: ANOVA - Number of earners in a family

Source	SS	DF	MS	F
Between groups	45.62859	4	11.40715	4.68**
Within groups	2058.447	845	2.436032	

**Significant at 1 % level

As the F is significant, the null hypothesis of no difference in the mean score among different groups of respondents is rejected. The mean score among different respondents is furnished below:-

The table (no: 29) explains the classification based on the occupational groups and number of earners in a family of 850 respondents of retail outlet users with mean number of earners of respondents selected for the study. The occupational group of number of earners in a family is classified as agriculture, business, professional, service and others.

Table No. 29: Number of earners in a family

Occupation	Respondents	Mean number of earners
Agriculture	226	2.55
Business	204	2.02
Professional	234	2.34
Service	123	1.98
Others	63	2.02

Source: Primary Data

It is found from the above table that the mean number of earners ranges from 1.98 to 2.55 and it is higher in agriculture group than all other groups of respondents and is least in service group of respondents of retail outlet users. Thus the study revealed that among the occupational groups of respondents of retail outlet users there is variations in the mean number of earners and it is higher in agriculture groups of respondents of retail outlet users.

The following table shows whether the 850 respondents will recommend the retail outlet to others or they won't. It is classified as 'yes' and 'no'.

Table No. 30: Recommend the retail outlet to others

Participate (Recommend)	Respondent	Percentage
Yes	795	93.5
No	55	6.5
Total	850	100

It is noted from the table that 93.5 percent would recommend the retail outlet for others, whereas the rest 6.5 percent won't recommend. Thus, the study showed that majority of the respondents would recommend the retail outlet for others.

It is depicted from the following table that the respondents visit the retail outlet again or not. It is classified as „yes’ and „no’.

Table No. 31: Visit again the same retail outlet

Participate (Visit again)	Respondent	Percentage
Yes	799	94.0
No	51	6.0
Total	850	100

It is inferred from the table that 94 percent would again visit the same retail outlet whereas the rest six percent won’t visit again. Thus the study showed that majority of the members would visit again; because of good ambiance, price, parking, arrangement and so on.

Inferences: Socio-economic factors in the selected branded retail outlets of the respondents:-

Coimbatore being the metropolis, retailing sectors is concentrating to a greater extent; the above study stated the general and socio – economic factors in the BRO in Coimbatore city. Out of 850 respondents, 43.9 percent made monthly purchase in branded retail outlet (BRO), and the rest of the 8.9 percent of the respondents made the purchase occasionally. Among the total respondents, 34.6 percent use the branded retail outlet „Big Basaar’, followed by 24.8 percent who use „More’, 23.8 percent prefer „Nilgiris’ , 10.1 percent who use „Reliance’ and the rest 6.7 percent who use „Spencer’s for their monthly retail purchase. It is stated from the above analysis that the mean number of dependents ranges from 3.22 to 4.50 and is higher in agriculture group than other groups and is least in service respondents. The study inferred that there are variations in the mean number of dependents among occupational groups of respondents of retail outlet users and the mean number of dependents is higher in agriculture group. It is noted from the above analysis that 93.5 percent would recommend the retail outlet for others where as the rest 6.5 percent won’t recommend it for others. Out of 850 respondents 94 percent would again visit the same retail outlet whereas the rest six percent won’t visit again the same retail outlet.

Objectives 2: To determine the factors on purchase of products in branded retail outlets in Coimbatore city.

The awareness level of the promotional efforts taken by the BROs in different forms can have a drastic effect on the growth of BROs (branded retail outlets). With the help of BROs based on the study, results are given below.

The following table shows that the awareness of selected branded retail outlet of 850 respondents from Coimbatore city. It is classified as personal awareness, friends / relatives, media, business circle, newspaper and magazines and internet.

Table No. 32: Sources of awareness

Sources	Respondents	Percentage
Personal awareness	287	33.8
Friends / Relatives	332	39.1
Media	96	11.3
Business circle	35	4.1
Newspapers and Magazines	86	10.1
Internet	14	1.6
Total	850	100.0

Source: Primary Data.

From the above table it is inferred that that among 850 total respondents, 39.1 percent of the respondents were aware through friends / relatives, 33.8 percent were aware personal awareness of branded retail outlet, followed by 11.3 percent through media, 10.1 percent through newspapers and magazines, 4.1 percent through business circle and the rest 1.6 percent through internet. It can be revealed that friends / relatives influence comparing to other sources. It could be clear that word of mouth is the leading source towards awareness on purchase of product in the selected branded retail outlet (BRO).

It can be deduced that friends / relatives influence to the greater extent as source of awareness among other sources towards the perception of the selected BRO. Hence, the tradition “word of mouth” acts as the major tool in creating awareness among customers of BRO.

Factor Analysis

Factor analysis is a multivariate statistical technique used to condense and simplify the set of large number of variables to smaller number of variables, called factors. This technique is helpful to identify the underlying factors that determine the relationship between the observed variables and provides an empirical classification scheme of clustering of statements into groups called factors.

In order to group the awareness on 19 purchase attributes of branded retail outlet on priority basis based on the strength of inter-correlations between them called ‘Factors’ and cluster these attributes into the factors extracted, Factor analysis is performed and the results are presented in the following tables.

Test of KMO and Bartlett’s Test

The Kaiser-Meyer-Olkin measure of sample adequacy is a statistic which indicates the proportion of variance in the variable, which is common variance, i.e. which might be caused by underlying factors. A high value (close to 1.0) generally indicates that a factor analysis may be useful.

The Bartlett’s test indicates whether the correlation matrix is an identity matrix, which would indicate that the variables are uncorrelated. The significance level of the correlation higher than .01 may indicate that the data is not suitable for factor analysis. The above two tests are performed to find out the suitability of data for factor analysis and the results are furnished below.

The below table (no: 33) shows the KMO and Bartlett’s Test for awareness of the respondents with the branded retail outlets.

Table No. 33: KMO and Bartlett's Test of awareness

Kaiser-Meyer-Olkin	Measure of sampling adequacy	.876
Bartlett's Test of Sphericity	Approx. Chi-Square	4538.968
	DF	190
	Sig	.000

Source: Primary Data

In the result, it is inferred that the correlation is significant.

The table (no: 34) indicates the Cronbach's Alpha Reliability Test for awareness of the respondents with the selected branded retail outlets.

Table No. 34: Reliability statistics of awareness

Cronbach's Alpha	No. of cases	No. of items
0.861	840	19

Source: Primary Data

The reliability of scales used in this study was calculated by Cronbach's coefficient alpha and normally it ranges between 0 and 1. All constructs obtained an acceptable level of a coefficient alpha above .7, indicating the scales used in this study were reliable.

From the above study, it depicts that there is a good reliability between the various items of a multiple items scale.

Using all the 19 awareness attributes for purchase namely A1, A2,.....A19, factor analysis is performed and the results are presented in the following tables.

Table No. 34 (a): Awareness Parameter

Parameters	Awareness on purchase attributes
A 1.	Brand
A 2.	Products Category
A 3.	Branches – (City wise)
A 4.	Advertisement
A 5.	Quality
A 6.	Customer Service
A 7.	Price
A 8.	Promotions
A 9.	Discounts
A 10.	Trademarks
A 11.	Brand Personality
A 12.	Physical Environment
A 13.	Coupons
A 14.	Free Gifts
A 15.	Traffic
A 16.	Proximity
A 17.	Secured Shopping
A 18.	Self Service
A 19.	Quantity

The following table indicates the rotated factor loadings and eigen values for awareness of purchase attributes of branded retail outlet users.

Table No. 35: Rotated factor loadings of awareness of purchase attributes of branded retail outlets.

Awareness on purchase attributes	Factors					Communality
	I	II	III	IV	V	
A1	-0.116	0.046	0.237	-0.046	0.770	0.666
A2	0.224	0.093	-0.051	0.131	0.776	0.681
A3	0.477	-0.153	0.201	0.289	0.463	0.589
A4	0.615	-0.139	0.145	0.333	-0.016	0.530
A5	0.767	-0.011	0.027	0.015	0.092	0.598
A6	0.729	0.095	-0.077	0.158	0.068	0.575
A7	0.351	-0.031	0.200	0.616	0.041	0.546
A8	0.071	0.178	0.447	0.138	0.234	0.311
A9	-0.196	0.016	0.655	0.287	0.220	0.598
A10	-0.004	0.314	0.067	0.641	0.171	0.543
A11	0.219	0.164	0.080	0.665	0.001	0.523
A12	0.538	0.444	-0.001	-0.060	0.091	0.499
A13	0.594	0.121	0.383	0.131	-0.025	0.532
A14	0.485	0.114	0.496	0.207	-0.056	0.541
A15	0.330	0.214	0.633	-0.041	-0.030	0.558
A16	0.175	0.550	0.410	-0.151	0.051	0.527
A17	-0.096	0.550	0.250	0.332	0.047	0.487
A18	-0.086	0.632	0.236	0.094	0.049	0.474
A19	0.185	0.647	-0.130	0.295	-0.019	0.557
Eigen value	3.070	1.916	1.903	1.868	1.577	10.334
% of variance	16.159	10.083	10.018	9.829	8.300	54.390
Cum % of variance	16.159	26.242	36.260	46.089	54.390	

Source: Primary data

The above table depicts the rotated factor loadings, communalities, eigen values and the percent of variance explained by the factors. Out of the 19 attributes, five factors have been extracted, and these five factors put together, explain the total variance of these problems to the extent of 54.390 percent. In order to reduce the number of factors and enhance the interpretability, the factors are rotated. The rotation increases the quality of interpretation of the factors. The varimax rotation, to obtain better result for interpretation is employed and the results are given in Table No. 36 is given below.

The below table (no: 36) indicates the rotated factor loadings awareness of purchase attributes of branded retail outlet users.

Table No. 36: Clustering of awareness attributes for purchase into factors

Factors	Purchase attributes	Rotated factor loadings
I. (16.159%)	Branches – City wise	0.477
	Advertisement	0.615
	Quality	0.767
	Customer service	0.729
	Physical environment	0.538
	Coupons	0.594
II. (10.083%)	Proximity	0.550
	Secured shopping	0.550
	Self service	0.632
	Quantity	0.647
III. (10.018%)	Promotions	0.447
	Discounts	0.655
	Free gifts	0.447
	Traffic	0.655
IV. (9.829%)	Price	0.616
	Trademarks	0.641
	Brand personality	0.665
V. (8.300%)	Brand	0.770
	Products category	0.776

Source: Primary Data

Five factors were identified as being maximum percent variance accounted. The six purchase attributes, A 3, A 4, A 5, A 6, A 12 and A 13 were grouped together as Factor I and account for 16.159 percent of the total variance. The four purchase attributes, A 16, A 17, A 18 and A 19 constituted Factor II and account for 10.083 percent of the total variance. The four purchase attributes, A 8, A 9, A 14 and A 15 constituted Factor III and account for 10.018 percent of the total variance. The three purchase attributes, A 7, A 10 and A 11, constituted the Factor IV and account for 9.829 percent of the total variance. The two purchases attribute, A 1 and A 2 constituted Factor V and account for 8.300 percent of the total variance. Thus, the factor analysis condensed and simplified the 19 purchase attributes, A 1- A 19 and grouped into five factors explaining 54.390 percent of the variability of all the 19 purchase attributes.

19 purchase attributes are grouped in to five, on priority basis. Thus, the first group consists of six purchase attributes and explanatory variable of 16.159 percentage of total variance of the 19 attributes. Finally, six awareness purchase attributes are substantially very important because of branches – city wise, advertisement, quality, customer service, physical environment and coupons. The retailer should give top priority for the above six purchase attribute in order to increase the market share.

Awareness level

Null Hypothesis: There is no significant difference in the mean awareness scores on the purchase attributes of branded retail outlets among the respondents.

Table No. 37: ANOVA Awareness level of branded retail outlet on the purchase attributes

The below table (no: 37) indicates the Analysis of Variance for group mean on the purchase attributes of branded retail outlet users.

Source	DF	S S	M S	F
Between groups	18	1204.766	66.931	138.33**
Within groups	16131	7805.078	.484	

Source: Primary data

**Significant at 1 % level

Since the F is significant, the null hypothesis of no difference in the mean awareness score on purchase attributes among the respondents is rejected and there is significant difference in the mean scores among respondents. The mean scores among the respondents are furnished below:-

The below table (no: 38) describes the mean awareness score by branded retail outlet users.

Table No. 38: Mean awareness score of branded retail outlets

S. No	Purchase attributes	Weighted average Awareness score	Rank
1	Brand	4.538	1
2	Product Category	4.012	2
3	Branches	3.717	7
4	Advertisements	3.427	16
5	Quality	3.767	3
6	Customer Service	3.645	11
7	Price	3.604	12
8	Promotions	3.577	14
9	Discounts	3.755	4
10	Trademarks	3.731	6
11	Brand Personality	3.681	8
12	Physical Environment	3.587	13
13	Coupons	3.325	18
14	Free Gifts	3.216	19
15	Traffic	3.372	17
16	Proximity	3.504	15
17	Security Shopping	3.660	10
18	Self Service	3.745	5
19	Quantity	3.661	9

Source: Primary Data

The above table indicates that, among the respondents, the awareness weighted average mean score ranged between 3.216 to 4.538 and the awareness of the attribute brand has secured higher weighted average score among the respondents and stood the top followed by the attribute product category secured higher mean score and stood at second, the attribute quality secured next higher mean score and stood at third and finally the attribute free gift has secured the least mean score and stood at last. The least weighted average score is in free gifts.

The table (no: 39) describes the personal characters and awareness, Chi-Square values, degrees of freedom and their significance.

Table No. 39: Association between personal characters and awareness about branded retail outlet

Personal characters	Calculated χ^2	Table Value of χ^2	DF	Significance
Sex	3.409	5.99	2	NS
Age	22.587	12.59	6	S
Marital status	11.899	9.49	4	S
Education	35.526	18.31	10	S
Type of family	10.551	9.49	4	S
Area of residence	11.248	9.49	4	S
Occupation	38.602	15.51	8	S
Family income	30.119	18.31	10	S

Source: Primary Data S-Significant at 5 % level NS-Not-Significant at 5 % level

Chi-Square test is used to find out the association between the personal characters and awareness of purchase by the respondents. Significant Chi-Squares indicate that there is association between all the personal characters except sex, of the retail outlet users and the awareness about branded retail outlet. Thus, the study showed that the personal characters had significant association with the awareness about branded retail outlets and these personal characters influence their purchase behavior.

To estimate and compare the overall awareness, perception, satisfaction, acceptance and problem scores among different groups of branded retail outlet users, analysis of variance is performed and the results are furnished in the tables given below.

Null Hypothesis: There is no significant difference in the overall awareness score among different age group of retail outlet users.

The table (no: 40) indicates the Analysis of Variance for problem score among different age groups of respondents of branded retail outlets.

Table No. 40: ANOVA - Awareness among age groups

Source	SS	DF	MS	F
Between groups	955.2601	3	318.42	3.80*
Within groups	70853.22	846	83.75085	

Source: Primary data

*significant at 5 % level

Since the F is significant, the null hypothesis is rejected and there is significant difference in the overall awareness among different groups of branded retail outlet users. The overall score among different age group of respondents is furnished below:-

The following table explains the overall awareness score among the age groups. It is classified as 15 – 20 years, 21 - 30 years, 31 – 40 years, 41 years and above.

Table No. 41: Overall awareness score among age groups

Age	Respondents	Overall mean awareness score
15 – 20 yrs	102	71.89
21 – 30 yrs	335	69.87
31 – 40 yrs	263	68.69
41yrs and above	150	68.49

Source: Primary Data

It is seen from the above table that the overall mean awareness score ranges from 68.49 to 71.89 among the age groups and it is higher in 15-20 years age group than all other age groups and it is least in the age group 41 yrs and above. Thus the study revealed that the mean awareness scores varies among the age groups of the respondents of the retail outlet and brand awareness is higher in the younger age group.

Null Hypothesis: There is no significant difference in the overall mean awareness scores on the attributes of branded retail outlet used among the respondents.

The table (no: 42) indicates the Analysis of Variance for awareness score among different age groups of respondents of branded retail outlets.

Table No. 42: ANOVA - Awareness score among the retail outlets

Source	DF	S S	M S	F
Between groups	4	1316.047	329.01	26.92**
Within groups	845	10324.03	12.22	

**Significant at 1 % level

The above Table shows that F is significant and the null hypothesis is rejected, hence there is significant difference in the overall mean awareness attributes of branded retail outlet among the respondents. The mean scores among the respondents are furnished below:-

The following table (no: 43) depicts the overall awareness score of the respondents of selected branded retail outlets in Coimbatore city. It is classified as Big Basaar, More, Nilgiris, Reliance and Spencer's.

Table No. 43: Overall awareness score

Branded retails outlets used	Respondents	Mean score
Big Basaar	294	69.51
More	211	69.55
Nilgiris	202	69.15
Reliance	86	71.21
Spencer's	57	67.96

Source: Primary Data

It is found from the above table that the overall mean awareness score ranges from 67.96 to 71.21 and it is higher for the retail outlet used namely „Reliance’ among the respondents and it is least for the retail outlet used namely „Spencer’ among the branded retail outlets. Thus the study revealed that the overall mean awareness about the retail outlet varies among the respondents and is higher in “Reliance’ than other retail outlets in the study area.

Inferences: Factors on purchase of products in branded retail outlets in Coimbatore among 850 respondents:-

From the above analysis it is stated that among 850 total respondents, 39.1 percent of the respondents were aware through friends / relatives, 33.8 percent were aware personal awareness of branded retail outlet, followed by 11.3 percent through media, 10.1 percent through newspapers and magazines, 4.1 percent through business circle and the rest 1.6 percent through internet. Five factors were identified as being maximum percent variance accounted. The six purchase attributes, A 3, A 4, A 5, A 6, A 12 and A 13 were grouped together as Factor I and account for 16.159 percent of the total variance. The four purchase attributes, A 16, A 17, A 18 and A 19 constituted Factor II and account for 10.083 percent of the total variance. The four purchase attributes, A 8, A 9, A 14 and A 15 constituted Factor III and account for 10.018 percent of the total variance. The three purchase attributes, A 7, A 10 and A 11, constituted the Factor IV and account for 9.829 percent of the total variance. The two purchase attributes, A 1 and A 2 constituted Factor V and account for 8.300 percent of the total variance. Thus, the factor analysis condensed and simplified the 19 purchase attributes, A 1- A 19 and grouped into five factors explaining 54.390 percent of the variability of all the 19 purchase attributes. It is noted from the above analysis that the overall mean awareness score ranges from 68.49 to 71.89 among the age groups and it is higher in 15-20 years age group than all other age groups and it is least in the age group 41 yrs and above age group. Coimbatore being the metropolis, retailing sectors is concentrating to a greater extent in creating awareness among the customers. Branded retail outlets are yet to improve their programmes in maximising the awareness towards the weekly offers on the products. Respondents are inclined towards the discount offers during the weekends. This can be achieved through electronic media at a minimal cost.

Objective 3: To analyse the customers' perception towards branded retail outlets in Coimbatore city

With respect to time, age, income, culture and external factors from time to time the perception of individual about BROs varies radically. The following are the analysis of the perception related factors towards the BROs in Coimbatore city.

Using the perception on 20 purchase attributes namely A1, A2,.....A20, factor analysis is performed and the results are presented in the following tables:-

Table No. 43 (a): Perception parameter

Parameters	Perception level of purchase attributes
A 1.	Acceptance of branded retail outlet
A 2.	Complaints clearance
A 3.	Shopping environment
A 4.	Credit and Debit Cards Acceptance
A 5.	Free door delivery
A 6.	Reasonable price
A 7.	Credit purchase
A 8.	Effective CRM
A 9.	Speedy packing and billing
A 10.	Customer friendly
A 11.	Availability of all branded products
A 12.	Offers for loyal customer
A 13.	Replacement / exchange option
A 14.	Privilege Card
A 15.	Multi point paying (bill payment) facility
A 16.	Trolley facility
A 17.	Kids entertainment area / junction
A 18.	Emergency exit
A 19.	Rest room
A 20.	Waiting hall

Test of KMO and Bartlett's Test for Factor Analysis

The below table (no: 44) shows the KMO and Bartlett's Test for customers satisfaction of the respondents with the branded retail outlets.

Table No. 44: KMO and Bartlett's Test of customer perception

Kaiser-Meyer-Olkin	Measure of sampling adequacy	.865
Bartlett's Test of Sphericity	Approx. Chi-Square	2695.749
	DF	199
	Sig	.000

From KMO statistics, the value lies between 0 to 1. So, it depicts that the application of factor analysis and also the value of KMO statistics be greater than 0.5 and the result of the correlation is significant.

Table No. 45: Reliability statistics of customer perception

The below table (no: 45) indicates the Cronbach's Alpha Reliability Test for customer perception of the respondents with the branded retail outlets.

Cronbach's Alpha	No of cases	No of items
.858	850	20

With the help of the analysis, that the indicating scales used in this study were reliable.

The table (no: 46) indicates the rotated factor loadings and eigen values of perception level of purchase attributes of the respondents on different variables of the branded retail outlets.

Table No. 46: Rotated factor loadings of perception level of purchase attributes

Perception level on the purchase attributes	Factors				Communality
	I	II	III	IV	
A1	-0.122	0.185	0.116	0.668	0.508
A2	0.214	0.087	0.070	0.745	0.614
A3	0.185	0.088	0.704	0.287	0.620

Perception level on the purchase attributes	Factors				Communality
	I	II	III	IV	
A4	0.171	0.046	0.781	-0.080	0.647
A5	0.688	-0.199	0.330	0.157	0.647
A6	0.574	-0.020	0.400	-0.015	0.490
A7	0.203	0.230	0.543	0.207	0.432
A8	0.122	0.444	0.153	0.243	0.295
A9	-0.040	0.606	0.009	0.242	0.427
A10	0.036	0.637	0.314	-0.024	0.506
A11	0.214	0.440	0.444	-0.080	0.443
A12	0.670	0.227	0.094	-0.063	0.514
A13	0.728	0.172	0.230	-0.010	0.612
A14	0.565	0.250	0.254	-0.009	0.446
A15	0.376	0.440	0.288	-0.027	0.419
A16	0.123	0.504	0.206	-0.124	0.327
A17	0.151	0.616	-0.109	0.392	0.569
A18	0.234	0.640	-0.063	0.158	0.494
A19	0.480	0.496	0.000	0.187	0.511
A20	0.641	0.236	-0.087	0.241	0.532
Eigen value	3.204	2.991	2.282	1.574	10.051
% of variance	16.022	14.953	11.409	7.872	50.256
Cum % of variance	16.022	30.975	42.384	50.256	

Source: Primary Data

Table 46, gives the rotated factor loadings, communalities, eigen values and the percent of variance explained by the factors. Out of the 20 attributes, four factors have been extracted and these four factors, put together, explain the total variance of these problems to the extent of 50.256 percent and the results are given in Table: 47.

The table (no: 47) indicates the rotated factor loadings and eigen values for purchase attributes into factors of the respondents on different variables of the branded retail outlets.

Table No. 47: Clustering of perception on purchase attributes into factors

Factor	Purchase attributes	Rotated factor loadings
I. (16.022%)	Free door delivery	0.688
	Reasonable price	0.574
	Offers for loyal customer	0.670
	Replacement / exchange option	0.728
	Privilege Card	0.565
	Waiting hall	0.641
Factor	Purchase attributes	Rotated factor loadings
II. (14.953%)	Effective CRM	0.444
	Speedy packing and billing	0.606
	Customer friendly	0.637
	Multi point paying (bill payment) facility	0.440
	Trolley facility	0.504
	Kids entertainment area / junction	0.616
	Emergency exit	0.640
III. (11.409%)	Shopping environment	0.704
	Credit and Debit Cards Acceptance	0.781
	Credit purchase	0.543
	Availability of all branded products	0.444
IV. (7.872%)	Acceptance of branded retail outlet	0.668
	Complaints clearance	0.745

Source: Primary data

Four factors were identified as being maximum percent variance accounted. The six purchase attributes, A 5, A 6, A 12, A 13, A 14 and A 20 were grouped together as Factor I and account for 16.022 percent of the total variance. The eight purchase attributes A 8, A 9, A 10, A 15, A 16, A 17, A 18 and A 19 constituted Factor II and account for 14.953 percent of the total variance. The four purchase attributes A 3, A 4, A 7 and A 11 constituted the Factor III and account for 11.409 percent of the total variance. The two purchase attributes A 1 and A 2 constituted the Factor IV and account for 7.872 percent of the total variance. Thus, the factor analysis condensed and simplified the 20 purchase attributes A 1- A 20 and grouped into four factors explaining 50.256 percent of the variability of all the 20 purchase attributes.

The 20 perception level of purchase attributes are grouped into four on priority basis. The first group consists of six perception purchase attributes and explanatory variable of 16.022 percentage of the total variance of 20 perception attributes. Thus, the factor analysis depicted that the perception of branded retail respondents are very much interested in six perception attributes, they are free door delivery, reasonable price, offers for loyal customer, replacement / exchange option, privilege card and waiting hall. The retailer should concentrate more on the above said points to ease the customer walk in and there by the perception of a retail customer can be fulfilled to a certain extent.

The table (no: 48) describes the personal characters and perception of the respondents, Chi-Square values, degrees of freedom and their significance.

Table No. 48: Association between personal characters and perception

Personal characters	Calculated χ^2	Table Value of χ^2	DF	Significance
Sex	7.710	5.99	2	S
Age	30.662	12.59	6	S
Marital status	15.622	9.49	4	S
Education	35.410	18.31	10	S
Type of family	9.483	9.49	4	NS
Area of residence	3.048	9.49	4	NS
Occupation	23.599	15.51	8	S
Family income	30.666	18.31	10	S

Source: Primary Data S-Significant at 5 % level

NS-Non-Significant at 5 % level

Chi-Square test is used to find out the association between the personal characters and perception among the respondents of branded retail outlet. Significant Chi-Square indicates that there is association between all the personal characters except type of family and area of residence, and perception about the retail outlets. Thus the study revealed that there is significant association between the personal characters of the respondents of retail outlet and their perception about the branded retail outlets in the study area.

Null Hypothesis: There is no significant difference in the overall mean perception score among different age groups of branded retail outlet users.

The below table (no: 49) describes the Analysis of Variance for perception among the age group of the branded retail outlet users.

Table No. 49: ANOVA - Perception among age group

Source	S S	D F	M S	F
Between groups	4234.242	3	1411.414	12.15**
Within groups	98279.74	846	116.1699	

**Significant at 1 % level

Since the F is significant, the null hypothesis of no difference in the overall perception score among different groups of respondents is rejected. The overall score among different groups of branded retail outlet is furnished below:-

The following table explains the overall perception score among the age groups. It is classified as 15 – 20 years, 21 - 30 years, 31 – 40 years, 41 years and above.

Table No. 50: Overall perception score

Age group	Respondents	Overall mean perception score
15 – 20 yrs	102	77.26
21 – 30 yrs	335	72.83
31 – 40 yrs	263	70.24
41 yrs and above	150	70.42

Source: Primary Data

It is renowned from the above table that the overall perception score ranges from 70.24 to 77.26 and it is higher in 15-20 years age group than other age groups and it is least in 31-40 years of age group. Thus the study showed that the overall perception score varies among the respondents and it is higher in the younger age group.

Null Hypothesis: There is no significant difference in the overall mean perception score among different groups of branded retail outlet users.

The below table (no: 51) indicates that there exists no significant difference in perception among the branded retail outlet users.

Table No. 51: ANOVA - Perception among branded retail outlet users

Source	SS	DF	MS	F
Between groups	297.6713	4	74.41782	0.62 ns
Within groups	102216.3	845	120.966	

NS- Non-Significant at 5 % level

As the F is not-significant, the null hypothesis of no difference in the overall mean perception score among different groups of respondent is accepted. The overall score among different groups of branded retail outlet users is furnished below:-

The table (no: 52) depicts the overall perception score of the respondents among the branded retail outlets. The various types of branded retail outlets are Big Basaar, More, Nilgiris, Reliance and Spencer's.

Table No.52: Overall perception score of selected branded retail outlets

Branded retail outlet used	Respondents	Over all mean perception score
Big Basaar	294	71.74
More	211	72.41
Nilgiris	202	72.97
Reliance	86	71.16
Spencer's	57	71.65

Source: Primary Data

It exhibits from the above table that the overall perception score among the respondents ranges from 71.16 to 72.97 and it is on par among the respondents of retail outlet users. Thus, the study showed that there is not much variation in the overall mean perception about the branded retail outlets among the respondents.

Null Hypothesis: There is no significant difference in the mean perception scores on the attributes of branded retail outlet among the respondents.

Table No. 53: ANOVA - Overall perception score of selected branded retail outlets

The below table (no: 53) describes the Analysis of Variance for overall perception score of the respondents for the selected branded retail outlets.

Source	DF	SS	MS	F
Between groups	19	1316.047	69.265	113.93**
Within groups	16980	10324.03	.608	

**Significant at 1 % level

Since the F is significant, the null hypothesis of no difference in the mean perception score on factors among the respondents is rejected and there is significant difference in the mean scores among respondents. The mean scores among the respondents are furnished below:-

The below table (no: 54) shows the mean perception score of the respondents among the branded retail outlets.

Table No.54: Mean perception score of branded retail outlets

Perception level of purchase attributes	Weighted Average Score	Rank
Acceptance of branded retail outlet	4.511	1
Complaints clearance	3.864	2
Shopping environment	3.851	4
Credit and Debit Card acceptance	3.499	14
Free door delivery	3.594	10
Reasonable price	3.549	13

Perception level of purchase attributes	Weighted Average Score	Rank
Credit purchase	3.420	16
Effective CRM	3.600	9
Speedy packing and billing	3.862	3
Customer friendly	3.679	6
Availability of all branded products	3.664	7
Offers for loyal customer	3.436	15
Replacement / exchange option	3.276	19
Privilege Card	3.308	18
Multi-point paying (bill payment) facility	3.575	11
Trolley facility	3.722	5
Kids entertainment area / junction	3.629	8
Emergency exit	3.562	12
Rest room	3.358	17
Waiting hall	3.187	20

Source: Primary Data

It is indicated from the above table that, among the respondents, the perception mean score ranged between 3.187 to 4.511 and the perception on the purchase „acceptance of branded retail outlet, has secured higher mean score and stood at the top, followed by „complaints clearance’ secured next higher mean score and stood at the second, the attribute „speedy packing and billing ,, has secured next higher mean score and stood at third and finally the purchase attribute „waiting hall’ has secured the least among the respondents in perception of a branded retail outlet.

Inferences: Customer’s perception’s on the branded retail outlets in Coimbatore among 850 respondents:-

The Cluster of perception on purchase attributes identified four major factors as being maximum percent variance accounted. The following six purchase attributes, A 5, A 6, A 12, A 13, A 14 and A 20 were grouped together as Factor I which account for

16.022 percent of the total variance. The next eight purchase attributes constituting Factor II are A 8, A 9, A 10, A 15, A 16, A 17, A 18 and A 19 which account for 14.953 percent of the total variance. The four purchase attributes A 3, A 4, A 7 and A 11 constituted the Factor III, account for 11.409 percent of the total variance. The last two purchase attributes A 1 and A 2 constituted the Factor IV at 7.872 percent of the total variance. Thus, the factor analysis concentrated and simplified the 20 purchase attributes A 1- A 20 and grouped into four factors explaining 50.256 percent of the variability of all the 20 purchase attributes.

Objective 4: To analyse the level of satisfaction of branded retail outlets in Coimbatore city.

The satisfaction of the customer in branded retail outlet can increase the store revenue. Contributions of the study include the analysis of behavioral consequences of customer satisfaction in the branded retail outlet are given below.

The overall mean satisfaction with the branded retail outlet among different groups, namely, gender, age, marital status, education, occupation and income of consumers are furnished in the tables given below. The association between the personal characters and the level of overall satisfaction with the branded retail outlet are studied and furnished.

The below table (no: 55) describes the level of satisfaction and gender, with percentage, overall mean score, range with minimal and maximum with standard deviation with the branded retail outlets.

Table No. 55: Gender and level of satisfaction with branded retail outlets

Gender	Respondent		Overall Mean satisfaction score	Range		SD
	No	%		Min	Max	
Male	580	68.2	62.6	31	85	9.3
Female	270	31.8	64.3	35	85	8.9
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

Table: 55 shows that the gender and level of satisfaction with branded retail outlet. It is inferred that, out of 850 respondents, 68.2 percent respondents are males whereas the rest of 31.8 percent are females. Male respondents have less satisfaction compared to females. The number ranges from 31 to 85 for males and from 35 to 85 for females. The standard deviation for males and females are 9.3 and 8.9 respectively.

The below table (no: 56) shows the association between gender and various levels of satisfaction with the branded retail outlets.

Table No. 56: Association between gender and satisfaction level

Gender	Level of satisfaction with branded retail outlet			Total
	Low	Medium	High	
Male	227	171	182	580
Female	74	104	92	270
Total	301	275	274	850

Source: Primary Data

X^2 cal= 12.223** X^2 tab (DF= 2) =9.21 **Sig at 1 % level

Chi-Square test is used to find out the association between gender and level of satisfaction. The significant Chi-Square revealed that there is an association between the gender and level of satisfaction with the branded retail outlet among the respondents. Thus the study showed that among the respondents of retail outlets significant association exists between gender and satisfaction level and the gender of the respondent influences the purchase behaviour in the branded retail outlet.

The following table (no: 57) describes the age and level of satisfaction with percentage, mean satisfaction score, range and standard deviation of the branded retail outlet users.

Table No.57: Age and level of satisfaction with branded retail outlets

Age in years	Respondent		Mean satisfaction Score	Range		SD
	No	%		Min	Max	
15 – 20	102	12.0	67.1	37	85	10.6
21 – 30	335	39.4	63.6	31	85	9.0
31 – 40	263	30.9	61.6	35	85	8.3
41 and above	150	17.6	62.3	40	85	9.4
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

It is observed from the above table that among the 850 respondents, 39.4 percent of respondents belong to the age group 21-30 years. The mean overall satisfaction score on branded retail outlet is higher (67.1) in 15-20 years of age group with the range from 37 to 85 with the standard deviation of 10.6 and is lower (61.6) in 31-40 years of age group with range from 35 to 85 with the lowest standard deviation of 8.3.

The below table (no: 58) shows the association between age and various levels of satisfaction with the branded retail outlet users.

Table No. 58: Association between age and satisfaction level

Age	Level of satisfaction with branded retail outlet			Total
	Low	Medium	High	
15 – 20	25	25	52	102
21 – 30	111	116	108	335
31 – 40	106	84	73	263
41 and above	59	50	41	150
Total	301	275	274	850

Source: Primary Data

X^2 cal= 22.75*

X^2 tab (DF= 6) =16.81 **Sig at 1 % level

The significant Chi-Square revealed that there is association between the age and level of satisfaction with the respondents. Thus, the study showed that among the respondents the satisfaction level of the respondents of retail outlets depends on their age and age influences their purchase behaviour in the retail outlet.

The below table (no: 59) describes the marital status and level of satisfaction of percentage, mean score, range with minimal and maximum and standard deviation of the selected branded retail outlet users.

Table No. 59: Marital status and level of satisfaction with branded retail outlets

Marital status	Respondent		Mean	Range		SD
	No	%		Min	Max	
Married	588	69.2	63.3	35	85	9.3
Unmarried	233	27.4	62.8	31	85	9.5
Others	29	3.4	61.2	50	72	4.3
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

The table shows that out of 850 respondents, 69.2 percent of the respondents are married. The mean overall satisfaction score on branded retail outlet is higher (63.3) in married group and is lower (61.2) in the other groups of branded retail outlet users.

The below table (no: 60) shows the association between marital status and various levels of satisfaction with the branded retail outlet users.

Table No. 60: Association between marital status and satisfaction level

Marital status	Level of satisfaction with branded retail outlet			Total
	Low	Medium	High	
Married	208	180	200	588
Unmarried	83	79	71	233
Others	10	16	3	29
Total	301	275	274	850

Source: Primary Data

$X^2_{cal} = 10.515^*$

$X^2_{tab} (DF= 4) = 9.49$ *Sig at 5 % level

Chi-Square test is used to find out the relationship between the marital status and level of satisfaction. The significant Chi-Square showed that there is association between the marital status and level of satisfaction among the respondents. Thus, the study indicated that marital status of the respondent is an important factor and the satisfaction level among the respondents of the retail outlet depends on their marital status and it influences their purchase behaviour.

The table (no: 61) describes the education and level of satisfaction of percentage, mean score, range with minimal and maximum and standard deviation of the branded retail outlet users.

Table No. 61: Education and level of satisfaction with branded retail outlets

Education	Respondent		Mean	Range		SD
	No	%		Min	Max	
Illiterate	26	3.1	62.9	37	85	11.9
School	37	4.4	65.8	44	85	10.4
Hr. Sec.	78	9.2	64.0	48	85	8.6
UG	280	32.9	63.5	31	85	9.2
PG	192	22.6	63.2	40	85	9.0
Professional	237	27.9	62.0	35	85	9.1
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

It is observed from the table that, among 850 respondents, 32.9 percent of respondents are undergraduates. The mean overall satisfaction score is higher (65.8) in school group and is lower (62) in professional respondents.

Table (no: 62) shows the association between education and various levels of satisfaction with the branded retail outlet users.

Table No. 62: Association between education and level of satisfaction

Education	Level of satisfaction with branded retail outlet			Total
	Low	Medium	High	
Illiterate	8	7	11	26
School	12	8	17	37
Hr. Sec	24	24	30	78
UG	97	84	99	280
PG	69	58	65	192
Professional	91	94	52	237
Total	301	275	274	850

Source: Primary Data

$X^2_{cal} = 20.372^*$ $X^2_{tab} (DF= 10) = 18.31$ *Sig at 5 % level

Chi-Square test is used to find out the relationship between education and level of satisfaction among the respondents. The significant Chi-Square showed that there is association between education and level of satisfaction among the respondents. Thus the study revealed that education of the respondents plays important role and it influences the respondent's purchase behaviour and satisfaction depends on the educational status of the respondents.

Table (no: 63) describes the type of family and level of satisfaction of percentage, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city.

Table No.63: Type of family and level of satisfaction with branded retail outlets

Type of family	Respondent		Mean	Range		SD
	No	%		Min	Max	
Nuclear	495	58.2	63.4	31	85	9.6
Joint	355	41.8	62.7	37	85	8.7
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

It is observed from the above table that out of 850 respondents, 58.2 percent of the respondents belong to nuclear family. The mean overall satisfaction score on branded retail outlets is higher (63.4) in nuclear family group and is lower (62.7) in joint family group.

The table (no: 64) shows the association between type of family and various levels of satisfaction with the branded retail outlet users. It is classified as nuclear type of family and joint type of family.

Table No. 64: Association between type of family and level of satisfaction

Type of family	Level of satisfaction with branded retail outlets			Total
	Low	Medium	High	
Nuclear	176	151	168	495
Joint	125	124	106	355
Total	301	275	274	850

Source: Primary Data

$X^2_{cal} = 2.326$ NS

$X^2_{tab} (DF= 2) = 5.99$ NS-Non Significant at 5 % level

The Chi-Square test is used to find out the relationship between the education and level of satisfaction among the branded retail outlet users. The non-significant Chi-Square showed that there is no association between the type of family and level of satisfaction among the respondents. Thus, the study showed that the association between type of family and satisfaction level among the respondents of the retail outlet users do not exist and the purchase behaviour is independent of the type of family of the respondents.

The below table (no: 65) describes the occupation and level of satisfaction percentage for 850 respondents, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city.

Table No. 65: Occupation and level of satisfaction with branded retail outlets

Occupation	Respondent		Mean	Range		SD
	No	%		Min	Max	
Agriculture	226	26.6	63.4	37	85	10.1
Business	204	24.0	63.9	44	85	7.8
Professional	234	27.5	63.1	35	85	9.0
Service	123	14.5	62.4	31	85	10.1
Others	63	7.4	61.5	40	85	9.1
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

It is inferred from the above table that, among the total respondents, 27.5 percent of respondents are professionals. The mean overall satisfaction score on branded retail outlet is higher (63.9) in business group and is least (61.5) in other groups of branded retail outlets users.

It explains the association between occupation and various levels of satisfaction with the branded retail outlets of 850 respondents in Coimbatore city.

Table No. 66: Association between occupation and level of satisfaction

Occupation	Level of satisfaction with branded retail outlets			Total
	Low	Medium	High	
Agriculture	90	60	76	226
Business	50	87	67	204
Professional	83	70	81	234
Service	48	40	35	123
Others	30	18	15	63
Total	301	275	274	850

Source: Primary data

$X^2_{cal} = 23.442^{**}$

$X^2_{tab} (DF= 8) = 20.09$

**Sig at 1 % level

Chi-Square test is used to find out the relationship between the occupation and level of satisfaction among the respondents. The significant Chi-Square revealed that there is association between the occupational status and level of satisfaction among the respondents. Thus, the study showed that the satisfaction level depends on their occupational status and the purchase behaviour also depends on the occupational status of the respondents.

The table (no: 67) describes the area of residence and level of satisfaction of percentage, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city.

Table No. 67: Area of residence and level of satisfaction with branded retail outlets

Area of residence	Respondent		Mean	Range		SD
	No	%		Min	Max	
Rural	428	50.4	63.2	43	85	8.9
Semi-urban	217	25.5	64.2	37	85	9.1
Urban	205	24.1	62.0	31	85	9.8
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

It is observed from the above Table that among the total respondents, 50.4 percent of the respondents belong to rural area of residence. The mean overall satisfaction score branded on retail outlets is higher (64.2) in semi urban area of residence and is least (62) in urban area of residence.

The below table (no: 68) shows the association between area of residence and various levels of satisfaction of the respondents for the study.

Table No. 68: Association between area of residence and level of satisfaction

Area of residence	Level of satisfaction with branded retail outlets			Total
	Low	Medium	High	
Rural	154	133	141	428
Semi-urban	66	81	70	217
Urban	81	61	63	205
Total	301	275	274	850

Source: Primary Data

X^2 cal= 5.056 NS X^2 tab (DF= 4) =9.49 NS-Non Significant at 5 % level

The Chi-Square test is used to find out the relationship between the area of residence and level of satisfaction among the respondents. The non-significant Chi-Square showed that there is no association between the area of residence and level of satisfaction among the respondents of branded retail outlets. Thus the study showed that the area of residence does not influence on the satisfaction level.

The table (no: 69) describes the classification of total family income of respondents selected for the study and level of satisfaction of percentage for 850 respondents, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city. The total family income of the 850 respondents is classified as below 10, 000, 10, 001 – 15, 000, 15, 001 – 20, 000, 20, 001 – 25, 000, 25, 001 – 30, 000 and above 30, 000.

Table No.69: Family income and level of satisfaction with branded retail outlets

Family income (Rs)	Respondent		Mean	Range		SD
	No	%		Min	Max	
Below 10,000	190	22.4	64.2	35	85	10.2
10,001 – 15,000	159	18.7	65.0	43	85	8.7
15,001- 20,000	145	17.1	61.8	31	85	9.2
20,001 -25,000	135	15.9	62.6	44	85	8.0
25,001- 30,000	81	9.5	62.4	45	85	8.8
Above 30,000	140	16.5	61.9	37	85	9.4
Total	850	100.0	63.1	31	85	9.2

Source: Primary Data

It is observed from the above table that among the total respondents, 22.4 percent of the respondents belong to the below Rs. 10,000 income group. The mean overall satisfaction score on branded retail outlets is higher (65) in Rs 10,001 to 15,000 income group and is least (61.8) in Rs. 15,001 to Rs. 20,000 income group of the respondents.

The below table (no: 70) shows the association between family income and various levels of satisfaction of the respondents for the study.

Table No. 70: Association between family income and level of satisfaction

Family income (Rs)	Level of satisfaction with branded retail outlets			Total
	Low	Medium	High	
Below 10,000	73	43	74	190
10,001 – 15,000	42	47	70	159
15,001- 20,000	53	50	42	145
20,001 -25,000	48	53	34	135
25,001- 30,000	33	25	23	81
Above 30,000	52	57	31	140
Total	301	275	274	850

Source: Primary Data

X^2 cal= 33.018**

X^2 tab (DF= 10) =23.21

**Sig at 1 % level

Chi-Square test is used to find out the relationship between the family income and level of satisfaction among the respondents. The significant Chi-Square showed that there is association between the family income and level of satisfaction among the respondents. Thus the study showed that the satisfaction level depends on the family income of the respondents of the selected branded retail outlets.

Table No. 71: Frequency of purchase and level of satisfaction with branded retail outlets.

The below table (no: 71) describes the frequency of purchase and level of satisfaction of percentage for 850 respondents, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city

Frequency	Respondent		Mean	Range		SD
	No	%		Min	Max	
Weekly	218	25.6	63.5	35	85	9.5
Fortnightly	183	21.5	62.2	40	85	9.2
Monthly	373	43.9	63.4	31	85	9.2
Occasionally	76	8.9	62.5	40	85	8.7
Total	850	100.0	63.1	31	85	9.2

Source: Primary data

It is observed from the above table that among the total respondents, 43.9 percent of the respondents made monthly purchase. The mean overall satisfaction score branded retail outlets is higher (63.5) in monthly frequency group and is least (62.2) in fortnightly purchase groups.

The below table (no: 72) shows the association between frequency of purchase and various levels of satisfaction among the respondents in the selected branded retail outlets.

Table No. 72: Association between frequency of purchase and level of satisfaction

Frequency	Level of satisfaction with branded retail outlets			Total
	Low	Medium	High	
Weekly	79	71	68	218
Fortnightly	70	60	53	183
Monthly	125	111	137	373
Occasionally	27	33	16	76
Total	301	275	274	850

Source: Primary Data

X^2 cal= 10.474 ns

X^2 tab (DF= 6) =12.59 NS-Non Significant at 5 % level

The Chi-Square test is used to find out the relationship between the frequency of purchase and level of satisfaction among the respondents. The non-significant Chi-Square showed that there is no association between frequency of purchase and level of satisfaction among the respondents of branded retail outlet. Thus the study indicates that the satisfaction level among the retail outlet users is independent of the frequency of purchase.

Test of KMO and Bartlett’s Test

The below table (no: 73) shows the KMO and Bartlett’s Test for satisfaction of the respondents with the branded retail outlets.

Table No. 73: KMO and Bartlett’s Test of satisfaction

Kaiser-Meyer-Olkin	Measure of sampling adequacy	.876
Bartlett’s Test of Sphericity	Approx. Chi-Square	4538.968
	DF	190
	Sig	.000

The above table results are observed that the correlation is significant.

The below table (no: 74) indicates the Cronbach’s Alpha Reliability Test for satisfaction of the respondents with the branded retail outlets.

Table No. 74: Reliability statistics of satisfaction

Cronbach’s Alpha	No. of cases	No. of items
0.861	840	20

The above table (no. 74) depicts that an acceptable level of a co-efficient alpha is above .7, so the scales used in this study were reliable.

Table No. 74 (a): Satisfaction parameter

Parameters	Satisfaction variables
A 1.	Service
A 2.	Quality
A 3.	Price
A 4.	Availability of products
A 5.	Parking facility
A 6.	Visually appealing physical facilities
A 7.	Promises
A 8.	Willingness to help customers
A 9.	Response
A 10.	After sales service
A 11.	Employee's knowledge of the product
A 12.	Mode of payment
A 13.	Hygienic (food) condition
A 14.	Complaint handling
A 15.	Follow-up
A 16.	Whether employees are concerned about the customer
A 17.	Quantity

The below table (no: 75) indicates the rotated factor loadings, eigen values, percentage of variance and cumulative percentage of variance for satisfaction of the respondents on different variables of the branded retail outlets.

Table No. 75: Rotated factor loadings of satisfaction variables among the selected branded retail outlets

Satisfaction variables	Factors					Communality
	I	II	III	IV	V	
A1	0.096	-0.028	0.810	-0.008	0.050	0.668
A2	0.686	-0.069	0.395	-0.081	0.218	0.685
A3	0.642	0.149	0.250	0.256	0.057	0.566
A4	0.701	0.304	-0.183	0.249	-0.038	0.680
A5	0.277	0.775	0.143	-0.002	0.047	0.699
A6	0.506	0.511	-0.169	0.117	0.247	0.620
A7	0.358	0.347	0.204	0.362	0.079	0.427
A8	0.135	0.195	0.041	-0.032	0.813	0.721
A9	-0.123	0.118	0.788	0.194	0.037	0.690
A10	0.190	0.152	0.620	0.201	0.190	0.520
A11	0.311	0.197	0.238	0.650	0.073	0.619
A12	0.527	0.256	-0.234	0.442	-0.007	0.593
A13	0.082	0.692	0.040	0.315	0.107	0.597
A14	0.070	0.596	0.149	0.432	0.223	0.619
A15	0.115	0.237	0.161	0.765	0.089	0.688
A16	-0.037	0.279	0.285	0.113	0.656	0.604
A17	0.145	-0.277	0.005	0.484	0.633	0.732
Eigen value	2.335	2.325	2.248	2.093	1.729	10.729
% of variance	13.735	13.675	13.221	12.311	10.172	63.113
Cum % of variance	13.735	27.410	40.631	52.942	63.113	

Out of the 17 attributes, five factors have been extracted and these five factors put together explain the total variance of satisfaction to the extent of 63.113 percent and the results are given in table. 76.

The below table (no: 76) indicates the rotated factor loadings of the various parameters of satisfaction of the respondents with the branded retail outlets for the study.

Table No. 76: Clustering of variable into factors

_Factor	Parameters	Rotated factor loadings
I. (13.735%)	Quality	0.686
	Price	0.642
	Availability of products	0.701
	Mode of payment	0.527
II. (13.675%)	Parking facility	0.775
	Visually appealing physical facilities	0.511
	Hygienic (food) condition	0.692
	Complaint handling	0.596
III. (13.221%)	Service	0.810
	Response	0.788
	After sales service	0.620
IV. (12.311%)	Promises	0.362
	Employee's knowledge of the product	0.650
	Follow-up	0.765
V. (10.172%)	Willingness to help customers	0.813
	Whether employees are concerned about the customer	0.656
	Quantity	0.633

Source: Primary Data

Five factors were identified as being maximum percent variance accounted. The four satisfaction variables A 2, A 3, A 4 and A 12 were grouped together as factor I and account for 13.735 percent of the total variance. The four satisfaction variables A 5, A 6, A 13 and A 14 constituted factor II and account for 13.675 percent of the total variance. The three satisfaction variables A 1, A 9, and A 10 constituted factor III and account for 13.221 percent of the total variance. The three satisfaction variables A 7, A 11 and A 15 constituted factor IV and account for 12.311 percent of the total variance. The three satisfaction variables A 8, A 16 and A 17 constituted factor V and account for

10.172 percent of the total variance. Thus, the factor analysis condensed and simplified the 17 satisfaction variables A 1- A 17 and grouped into five factors explaining 63.113 percent of the variability of the entire 17 satisfaction variable.

The 17 satisfaction variables are grouped into five on priority basis. The first group consists of four satisfaction variable and explanatory variable of 13.735 percentage of total variance of 17 satisfaction variable. It is noted from the factor analysis that the satisfaction variables are keenly stated and four are important variable among the retail respondents. They are quality, price, availability of products and mode of payment. So, by and large the retail management has to take necessary steps to improve the above points to face the competitive global market, there by the retail outlet can improve the market marginally.

Satisfaction with retail outlet purchase

In order to study the relationship between the explanatory variables, namely, X 1- awareness, X 2-perception, X 3-acceptance, X 4-problem and Y-satisfaction on the branded retail outlets, the inter-correlation matrix is obtained and furnished in the table given below:-

The below table (no: 77) indicates the inter-correlation between explanatory variables: awareness, perception, acceptance, problem and satisfaction.

Table No. 77: Inter-correlation matrix between explanatory variable

	X 1	X 2	X 3	X 4	Y
X 1-Awareness	1.000				
X 2-Perception	0.573**	1.000			
X 3-Acceptance	0.474**	0.553**	1.000		
X4-Problem	0.269**	0.351**	0.405**	1.000	
Y-Satisfaction	0.592**	0.724**	0.625**	0.340**	1.000

Source: Primary Data

**Significant at 1 % level

It is seen from the above table the correlation between all the explanatory variables are highly significant and positive. Further it is also seen that all these explanatory variables are highly, significantly and positively correlated with the dependent variable connected load.

Path coefficient analysis

The below table (no: 78) indicates the direct and indirect effects of explanatory variables on satisfaction.

Table No. 78: Direct & indirect effect of explanatory variables on Y - satisfaction

	X1	X2	X3	X4	Y
X 1-Awareness	0.198	0.260	0.130	0.005	0.592**
X 2-Perception	0.113	0.453	0.151	0.006	0.724**
X 3-Acceptance	0.094	0.250	0.274	0.007	0.625**
X4-Problem	0.053	0.159	0.111	0.017	0.340

**Significant at 1 % level

It is indicated from the above table that among the four explanatory variables, three explanatory variables namely X 1, X 2 and X 3 had high positive direct effect on the dependent variable Y. The variable X 1 also had high positive indirect effect on Y through X 2 and X 3. Similarly the variable X 2 also had positive indirect effect on the dependent variable through X1 and X3. The variable X 3 also had positive indirect effect on Y through X 1 and X 2. Hence the three explanatory variables X 1, X 2 and X 3 are substantially important contributing variable to Y.

Regression analysis

Step-wise multiple regression analysis of Y- Overall customer satisfaction score was performed with overall score of the variables X 1-Awareness, X 2- Perception, X 3-Acceptance, X 4 –Problems is performed in order to establish the functional relationship between them and the following regression model is fitted for performance:-

$$Y = b_0 + b_1X_1 + b_2 X_2 + b_3 X_3 + \dots\dots\dots$$

where b 1, b 2, b 3 and b 4 are partial regression coefficients; b₀-constant the results are presented in the following table.

The below table (no: 79) indicates the Step-wise multiple regression analysis of Y- Overall customer satisfaction with overall score of the variables X 1-Awareness, X 2- Perception, X 3-Acceptance and X 4 –Problems.

Table No. 79: Regression model for y - satisfaction with branded retail outlets

Variables	Regression Coefficient	Standard Error	t- value (d.f = 846)	R ²
(Constant)	6.635	1.612	4.117	.622
Perception- X 2	0.383	0.024	16.277**	
Acceptance – X 3	0.682	0.064	10.701**	
Awareness – X 1	0.199	0.027	7.478**	

*Significant at 5 % ** Significant at 1% level.

Regression Fitted: $Y = 6.635 + 0.199 X_1 + 0.383 X_2 + 0.682 X_3$

The below table (no: 80) describes the Analysis of Variance for satisfaction among the branded retail outlet users.

Table No. 80: Analysis of variance for regression

Source	S S	D F	M S	F
Regression	44939.39	3	14979.8	463.68**
Residual	27331.1	846	32.3	

** Significant at 5 % level

The step wise multiple regression model indicated that out of the four explanatory variables under study, three variables namely, X 1, X 2 and X 3 have significantly contributing to Y. The analysis of variance of multiple regression model for Y indicates the overall significance of the model fitted. The coefficient of determination R² value showed that these variables put together explained the variations of Y to the extent of 62.2 percent.

Discriminate function analysis

Discriminate analysis is a statistical technique, which allows to study the differences between two or more groups with respect to several variables simultaneously, and provide a means of classifying any object / individual into the group, with which it is most closely associated, and to infer the relative importance of each variable used to discriminate between different groups. A linear combination of predictor variables, weighted in such a way that it will best discriminate among groups with the least error is called a linear discriminate function and is given by:

$D = L_1.X_1 + L_2.X_2 + \dots + L_K.X_K$, where X_i ,s are predictor variables, L_i 's represents the discriminate coefficients, and D is the value of the discriminate function of a particular individuals/element such that if this value is greater than a certain critical value $D^*=(D1 \text{ bar} +D2 \text{ bar})/2$, the individual would be classified in group I ; otherwise the individual would be classified in Group III.

In the present study, there are three groups, namely, respondents with lower satisfaction (Group I: $n_1=298$), with medium satisfaction (Group II: $n_2=284$) and with higher satisfaction (group III: $n_3=268$). Group two has been excluded from the above analysis. Four Predictor variables considered for the analysis include the following:

X 1-, Awareness, X 2- Perception, X 3-Acceptance, and X 4- Problems

The below table (no: 81) shows the mean score of the respondents with lower and higher level of satisfaction with the selected branded retail outlets.

Table No. 81: Mean score of the independent variable

Independent Variables	Mean Score	
	Respondents with lower satisfaction with selected branded retail purchase ($N_1=298$)	Respondents with higher satisfaction with selected branded retail purchase ($N_3=268$)
Awareness - X 1	63.859	76.351
Perception -X 2	63.956	81.616
Acceptance-X 3	19.443	24.817
Problem-X 4	51.826	61.108

Source: Primary Data

The below table (no: 82) describes the Analysis of Variance with Univariate for group mean among the branded retail outlet users.

Table No. 82: ANOVA: Tests of equality of group means univariate

Independent Variables.	Wilk's Lambda	F (DF=1,564)	Sig
Awareness-X 1	0.60	376.86**	0.00
Perception -X 2	0.48	620.47**	0.00
Acceptance-X 3	0.57	423.17**	0.00
Problem-X 4	0.85	97.51**	0.00

Source: Primary Data

**-Significant at 5 % level

Connanical discriminate function fitted:

$$D = -1.556 + .048 X1 + .069 X2 + .136 X3 - .004 X4$$

Test Functions

Eigen value: 1.6725

Percent of variation explained: 100

Wilks Lambda = .4374

Chi-Square = 552.266** ; DF = 4 ; p = .000

Canonical Correlation: .791

Classification of individual

Using the Discriminate Function fitted and the observed predictor variables of respondent, the respondents are classified, and the correct percent of classification is presented below:-

The below table (no: 83) describes the percent of correct classification of respondents using Discriminate Function.

Table No. 83: Percent of correct classification by using Discriminate Function

Satisfaction Level	Classification using the Discriminate Function fitted respondents		Total
	Lower satisfaction	Higher satisfaction	
Lower satisfaction	280	18	298
Higher satisfaction	33	235	268

Source: Primary Data

From the above table it is observed that out of 298 respondents with lower satisfaction, 280 respondents (94 percent) were correctly classified; out of 268 respondents with higher satisfaction, 235 respondents (87.7 percent) were correctly classified. Hence, the percent of correct classification is $(515/546)*100$ percent or 91 percent of original grouped cases correctly classified. The percent of correct classification of respondents using the observed observation clearly indicates adequacy of the model in discriminating between the two groups.

Relative importance of predictor variable

The relative importances of each predictor variables in discriminating between the two groups are obtained and the results are presented below.

The below table (no: 84) describes the relative importance of variables in discriminating between the groups.

Table No. 84: The relative importance of variables in discriminating between the groups

Independent Variables	Importance value of the variable (Ij)	Relative Importance (Rj)	Rank
Awareness-X 1	0.6015	23.3	3
Perception-X 2	1.2115	46.9	1
Acceptance-X 3	0.7326	28.3	2
Problem-X 4	0.0393	1.5	4
Total	2.5849	100.0	

Source: Primary Data

Among the variables under study, two variables namely, perception - X 2 and acceptance-X 3 are substantially important variables in discriminating between groups, namely, respondents with lower and with higher satisfaction on selected branded retail outlet.

Level of satisfaction

Null Hypothesis: There is no significant difference in the mean satisfaction scores on the services among the respondents.

The below table (no: 85) describes the Analysis of Variance of the mean satisfaction score on the services of branded retail outlets.

Table No. 85: ANOVA – Level of satisfaction of branded outlet users

Source	DF	SS	MS	F
Between groups	16	1349.172	84.323	132.07**
Within groups	14463	9234.391	.638	

*- Significant at 1 % level

As the F is significant, the null hypothesis of no difference in the mean satisfaction score on the services of a branded retail outlet among the respondents is rejected, and there is significant difference in the mean scores among respondents. The mean scores among the respondents are furnished below:-

The below table (no: 86) describes the mean satisfaction score on the services of branded retail outlets.

Table No. 86: Mean satisfaction score of a branded retail outlets

Satisfaction variable	Weighted Average Score	Rank
Service	4.485	1
Quality	4.002	3
Price	3.667	8
Availability of products	3.487	14
Parking facility	3.577	11

Satisfaction variable	Weighted Average Score	Rank
Visually appearing physical Facilities	3.514	12
Promises	3.464	16
Willingness to help customers	3.580	10
Response	4.418	2
After sales service	3.785	4
Employee's knowledge of the products	3.731	6
Mode of payments	3.508	13
Hygienic conditions	3.700	7
Complaint handling	3.414	17
Follow-up	3.466	15
Whether employees are concerned about the customers	3.611	9
Quantity (weight)	3.742	5

Source: Primary Data

It is seen from the above table that among the total respondents, the satisfaction mean score ranged between 3.414 to 4.485 and the satisfaction variable „service’, has secured higher mean score and stood at the top, followed by „Response’ secured next higher mean score and stood at the second, „Quality’ has secured next higher mean score and stood at third and the satisfaction variables „complaint handling’ has secured the least among the respondents in satisfaction of the branded retail outlets.

The below table (no: 87) describes the Analysis of Variance of satisfaction among age group in the selected branded retail outlets.

Table No.87: ANOVA Satisfaction among age groups

Source	SS	DF	MS	F
Between groups	2388.405	3	796.1351	9.64**
Within groups	69882.08	846	82.60294	

Source: Primary Data

**Significant at 1 % level

Since the F is significant the null hypothesis of no difference in the overall satisfaction score among different groups of respondents is rejected. The overall score is furnished below:

The below table (no: 88) describes the overall satisfaction score of age group on the services of branded retail outlets.

Table No. 88: ANOVA - Overall satisfaction score of age

Age	Respondents	Mean score
15 – 20	102	67.07
21 – 30	335	63.57
31 – 40	263	61.58
41 and above	150	62.27

Source: Primary data

It is observed from the above table that the overall satisfaction score ranged from 61.58 to 67.07 and it is higher in 15 - 20 years age group than other age groups and it is least in 31- 40 years of age group of the respondents of retail out let users. Thus, the study revealed that more number of youngsters prefer the selected branded retail outlet.

Null Hypothesis: There is no significant difference in the overall satisfaction score among the respondents of a branded retail outlet.

The below table (no: 89) describes the overall satisfaction score among different groups of respondents of branded retail outlets.

Table No. 89: ANOVA - Satisfaction among branded retail outlet users

Source	SS	DF	MS	F
Between groups	388.5385	4	97.13462	1.14 ns
Within groups	71881.95	845	85.0674	

ns- Non-significant at 5 % level

Since the F is non-significant, the null hypothesis of no difference in the overall satisfaction score among different groups of respondent is accepted. The overall score is furnished below:-

The below table (no: 90) depicts the overall satisfaction score of the respondents of selected branded retail outlets.

Table No. 90: Overall satisfaction score

Branded retail outlet use	Respondents	Mean score
Big Basaar	294	62.77
More	211	62.57
Nilgiris	202	64.29
Reliance	86	63.40
Spencer's	57	62.75

Source: Primary Data

It exhibits from the above table that the overall satisfaction score among the respondents ranged from 62.57 to 64.29 and it is on par among the branded retail outlet. Thus, the study revealed that the satisfaction level is on par among the branded retail outlets among the users.

Inferences: Satisfaction in the branded retail outlets in Coimbatore city among 850 respondents:-

From the analysis it is inferred that out of 850 respondents, 68.2 percent respondents are males whereas the rest of 31.8 percent are females. Male respondents have less satisfaction compared to females. The number ranges from 31 to 85 for males and from 35 to 85 for females. The standard deviation for males and females are 9.3 and 8.9 respectively. Five factors were identified as being maximum percent variance accounted. The four satisfaction variables A 2, A 3, A 4 and A 12 were grouped together as factor I and account for 13.735 percent of the total variance. The four satisfaction variables A 5, A 6, A 13 and A 14 constituted factor II and account for 13.675 percent of the total variance.

The three satisfaction variables A 1, A 9, and A 10 constituted factor III and account for 13.221 percent of the total variance. The three satisfaction variables A 7, A 11 and A 15 constituted factor IV and account for 12.311 percent of the total variance. The three satisfaction variables A 8, A 16 and A 17 constituted factor V and account for 10.172 percent of the total variance. Thus, the factor analysis condensed and simplified the 17 satisfaction variables A 1- A 17 and grouped into five factors explaining 63.113 percent of the variability of the entire 17 satisfaction variable. It is seen from the table (no: 86) that among the total respondents, the satisfaction mean score ranged between 3.414 to 4.485 and the satisfaction variable „service’, has secured high mean score and stood at the top, followed by „Response’ secured next higher mean score and stood at the second, „Quality’ has secured next higher mean score and stood at third and the satisfaction variables „complaint handling’ has secured the least among the respondents in satisfaction of branded retail outlet. The affluent middle class is evolving as the major consumer base for the retailing industry in Coimbatore. With an increasing number of double income families, customers had more to spend and less time to shop. In addition, respondents were concerned about the quality and hygiene of their purchase and the customer service offered.

Objective 5: To analyse acceptance of service level of branded retail outlets in Coimbatore city.

The different strategies implemented by the BROs, the changing social and cultural behaviour, the purchase power, shopping as a celebration and outing, the snob value of BROs has made the present and the potential customer accept the changing market trend towards retail purchase. The analyses of the acceptance of service level of BROs are given below.

The below table (no: 91) indicates the reasons for purchasing in particular branded retail outlets by the respondents while shopping.

Table No. 91: Reasons for purchasing in a particular branded retail outlets

Reasons	Respondents	Percent
Parking facility	253	29.8
Correct weighing machine	148	17.4
No adulteration	83	9.8
Reasonable price	201	23.6
Offers	136	16.0
Credit purchase	29	3.4
Total	850	100.0

Source: Primary Data.

It is seen from the above table that among the total respondents, 29.8 percent have purchased in a particular retail outlet due to parking facility, 23.6 percent due to reasonable price, followed by 17.4 percent who purchased due to correct weighing machine, 16 percent due to offers, 9.8 percent due to no adulteration and the rest 3.4 percent due to credit purchase. Thus, the study showed that most of the respondents purchased in a particular branded retail outlet because of proper parking facility.

The below table (no: 92) indicates the type of product purchased in selected branded retail outlets. It is classified as branded products and non-branded products.

Table No. 92: Type of product purchase

Type of product	Respondents	Percent
Branded products	646	76.0
Non-branded products	204	24.0
Total	850	100.0

Source: Primary Data.

It is found from the above table that among the respondents 76 percent have purchased branded products whereas the rest 24 percent have purchased non-branded products from the branded retail outlet. Thus, the studies showed that majority of the respondents have purchased branded products from the branded retail outlet.

Null Hypothesis: There is no significant difference in the mean acceptance score on the on service level of branded retail outlet among the respondents

The below table (no: 93) describes the Analysis of Variance with mean acceptance score on the service level of branded retail outlet among the respondents.

Table No. 93: ANOVA - Acceptance of service level of branded retail outlets

Source	DF	SS	MS	F
Between groups	5	369.344	73.868	59.818*
Within groups	5094	6290.510	1.234	

* Significant at 1 % level

As the F is significant, the null hypothesis of no difference in the mean acceptance score on the service level of branded retail outlet among the respondents is rejected, and there is significant difference in the mean acceptance score among the respondents. The mean score among factors is furnished below:-

The below table (no: 94) describes the weighted average of acceptance score on the service level of branded retail outlet among the respondents.

Table No. 94: Acceptance on service level of branded retail outlets

Acceptance of service level	Weighted Average Score	Rank
Quote your opinion towards if a product is out of stock in a retail outlet: "I would substitute rather than go to another store to get it.	4.282	1
I would rather shop in a large retail outlet than a small retail outlet.	3.682	2

Acceptance of service level	Weighted Average Score	Rank
I use as many coupons as I can to keep my grocery bill down.	3.486	5
The way branded retail outlet_is laid out makes it easy to find the products I need.	3.485	6
Computerised checkout scanners benefit shoppers.	3.657	3
I normally buy some products on my grocery shopping trip that planned.	3.505	4

Source: Primary Data.

It is seen from the above table that among 850 respondents, the acceptance on service level mean score ranged between 3.485 to 4.282 and the acceptance on service level variable „quote your opinion towards if a product is out of stock in a retail outlet: I would substitute rather than go to another store to get it’ has secured high mean score and stood at the top, followed by „I would rather shop in a large branded retail outlet than a small retail outlet’ and the service level variables „the way branded retail outlet_are laid out makes it easy to find the products I need’ has secured the least among the respondents in on service level variable of branded retail outlet.

The below table (no: 95) shows the relationship between the personal characters and reasons to purchase in particular branded retail outlet with percentage for 850 respondents, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city.

Table No. 95: Association between personal characters and reasons to purchase in particular branded retail outlets

Personal characters	Calculated χ^2	Table Value of χ^{2s}	DF	Significance
Sex	.926	11.07	5	NS
Age	73.680	25.0	15	S
Marital status	25.844	18.31	10	S
Education	100.548	37.65	25	S
Type of family	30.229	18.31	10	S
Area of residence	92.684	18.31	10	S
Occupation	119.712	31.41	20	S
Family income	88.270	37.65	25	S

Source: Primary Data S-Significant at 5 % level NS-Non-Significant at 5 % level

Chi-Square test is used to find out the relationship between the personal characters and reasons to purchase among the respondents. Significant Chi-Square indicates that there is association between all the personal characters of the respondents except sex and reasons to buy at particular retail outlets. Thus, the study showed that there is significant association between the personal characters and reasons to purchase in the branded retail outlets. The reasons to purchase in the particular retail outlets depends on the personal characteristics of the respondents.

The below table (no: 96) shows the relationship between the personal characters and acceptance among the respondents with percentage, mean score, range with minimal and maximum and standard deviation of 850 respondents of the selected branded retail outlets in Coimbatore city.

Table No. 96: Association between personal characters and acceptance of selected branded retail outlets

Personal characters	Calculated χ^2	Table Value of χ^2	DF	Significance
Sex	5.510	5.99	2	NS
Age	32.125	12.59	6	S
Marital status	38.197	9.49	4	S
Education	32.604	18.31	10	S
Type of family	10.926	9.49	4	S
Area of residence	6.551	9.49	4	NS
Occupation	29.105	15.51	8	S
Family income	34.319	18.31	10	S

Source: Primary Data S-Significant at 5 % level NS-Non Significant at 5 % level

Chi-Square test is used to find out the relationship between the personal characters and acceptance among the respondents. Significant Chi-Square indicates that there is association between all the personal characters of the respondents except sex, area of residence and acceptance. Thus the study showed that the acceptance of the branded retail outlets depends on the personal characteristics of the respondents.

Null Hypothesis: There is no significant difference in the overall acceptance score among different age groups of the branded retail outlet users.

The below table (no: 97) describes the overall acceptance score among different age group of the respondents.

Table No. 97: ANOVA - Acceptance among age group of selected branded retail outlets

Source	SS	DF	MS	F
Between groups	532.7587	3	177.5862	13.00 **
Within groups	11554.8	846	13.65815	

**Significant at 1 % level

As the F is significant the null hypothesis of no difference in the overall acceptance score among different groups of respondents is rejected. The overall score is furnished below:-

The below table (no: 98) describes the overall acceptance score among different age groups of respondents of branded retail outlets.

Table No. 98: ANOVA - Overall acceptance score of selected branded retail outlets

Age	Respondents	Overall mean acceptance score
15 – 20	102	23.79
21 – 30	335	22.37
31 – 40	263	21.22
41 and above	150	21.80

Source: Primary Data

The above table reveals that the overall mean acceptance score ranged from 21.22 to 23.79 among the retail out let users and it is higher in 15-20 years age group than other age groups and it is least in 31-40 years of age group. Thus the study indicates that there are variations in the acceptance level among the age groups of the respondents and it is higher in the younger age group of the respondents of the selected retail outlets.

Null Hypothesis: There is no significant difference in the overall acceptance score among different groups of respondent of selected branded retail outlets.

The below table (no: 99) depicts the overall acceptance score of the respondents of selected branded retail outlets.

Table No. 99: ANOVA - Acceptance among branded retail outlets

Source	SS	DF	MS	F
Between groups	22.78772	4	5.696931	0.40 ns
Within groups	12064.77	845	14.27783	

* NS- Non-Significant at 5 % level

As the F is not-significant the null hypothesis of no difference in the overall acceptance score among different groups of respondent is accepted. The overall score of respondent is furnished below:-

The below table (no: 100) indicates the overall acceptance score of various branded retail outlets among the respondents.

Table No. 100: Overall acceptance score of selected branded retail outlets use

Retail outlet use	Respondents	Mean score
Big Basaar	294	21.94
More	211	22.09
Nilgiris	202	22.07
Reliance	86	22.47
Spencer's	57	22.35

Source: Primary Data

It indicates from the above table that the overall acceptance score ranged from 21.94 to 22.47 among the respondents and it is on par in the branded retail outlet. Thus, the study showed that the acceptance level is on par among the respondents of retail outlets.

Inferences: Acceptance on service level about the branded retail outlets in Coimbatore among 850 respondents:-

From the above analysis that among the total respondents, 29.8 percent have purchased in a particular retail outlet due to parking facility, 23.6 percent due to reasonable price, followed by 17.4 percent who purchased due to correct weighing machine, 16 percent due to offers, 9.8 percent due to no adulteration and the rest 3.4 percent due to credit purchase. It is found from the interpretation that 76 percent of the respondents have purchased branded products whereas the rest 24 percent have purchased non-branded products from the branded retail outlet. It is seen from the above table (no: 94) that among 850 respondents, the acceptance on service level mean score ranged from 3.485 to 4.282 and the acceptance on service level variable „quote your opinion towards if a product is out of stock in a retail outlet: ‚I would substitute rather than go to another store to get it’ has secured high mean score and stood at the top, followed by ‚I would rather shop in a large branded retail outlet than a small retail outlet’ and the service level variables ‚the way branded retail outlet are laid out makes it easy to find the products I need’ has secured the least among the respondents on service level variable of the branded retail outlet. In this fast moving internet era, the respondents are accepting the service offered by the branded retail outlet in Coimbatore. As the corporate employees are offered with the coupons as a part of their salary, they are highly motivated to make their purchase at the branded retail outlet only. As there is limited time for the customer to shop, the BROs use this opportunity to attract the customer by implementing the latest technologies which help the customers to do shopping within their available time.

Objective 6: To analyse the problems faced by Customers in the branded retail outlets.

A BRO (Branded Retail Outlet) should direct a customer during their visit. It should have knowledgeable people to direct and address the needs if the BRO fails to direct by itself. The billing system, parking convenience should have speed and accuracy to attract the customer. Moreover customer’s attitude towards shopping is looked as a pressure tranquiliser, so the BROs should have more space, food courts and entertainment

for the entire family which could influence the customer's frequency of visit to the BRO. All these issues said above can be taken as an opportunity given by the market to increase its growth rather than looking it as problems.

Using all the 16 variables on problems faced, factor analysis is performed and the results are presented in the following Tables:-

Table No. 100(a): Problem faced parameter

Parameter	Problem faced variables
A 1.	Poor outlet maintenance
A 2.	Lack in quality
A 3.	High price
A 4.	Less in salesmanship
A 5.	Improper communication
A 6.	Limited billing booths
A 7.	Lack of service
A 8.	Lack of knowledge
A 9.	Improper outlet location
A 10.	Less space inside the store
A 11.	Incorrect weights and measurements
A 12.	Lesser salesperson
A 13.	Clumsy display
A 14.	Duplicate products
A 15.	Lack of food court
A 16.	Quantity available (like 100gms, 200gms,)

The below table (no: 101) indicates the rotated factor loadings with eigen values, percentage of variance and cumulative percentage of variance for problems faced by the branded retail outlet users.

Table No. 101: Rotated factor loadings of problem faced by the branded retail outlet users

Problems faced on variable	Factor			Communality
	I	II	III	
A 1.	0.857	0.103	0.134	0.763
A 2.	0.742	0.220	0.222	0.648
A 3.	0.288	0.551	0.133	0.405
A 4.	0.082	0.736	0.148	0.570
A 5.	0.358	0.683	-0.041	0.596
A 6.	0.000	0.634	0.078	0.408
A 7.	0.800	0.100	0.233	0.705
A 8.	0.630	0.229	0.390	0.601
A 9.	0.445	0.427	0.385	0.528
A 10.	-0.035	0.628	0.463	0.609
A 11.	0.394	0.546	0.252	0.517
A 12.	0.218	0.559	0.414	0.531
A 13.	0.202	0.372	0.614	0.556
A 14.	0.406	0.176	0.567	0.518
A 15.	0.311	0.059	0.675	0.555
A 16.	0.129	0.105	0.703	0.522
Eigen value	3.261	3.207	2.565	9.033
% of variance	20.379	20.043	16.032	56.454
Cum % of variance	20.379	40.422	56.454	

Source: Primary Data

Table: 101 gives the rotated factor loadings, communalities, eigen values and the percent of variance explained by the factors. Out of the 16 problems faced, three factors have been extracted and these three factors put together explain the total variance of these problems to the extent of 56.454 percent and the results are given in table: 102.

The below table (no: 102) indicates the rotated factor loadings for problems faced by the branded retail outlet users clustering into 3 factors.

Table No. 102: Clustering of parameters into factors

Factor	Parameter	Rotated factor loadings
I. (20.379%)	Poor outlet maintenance	0.857
	Lack in quality	0.742
	Lack of service	0.800
	Lack of knowledge	0.630
	Improper outlet location	0.445
II. (20.043%)	High price	0.551
	Less in salesmanship	0.736
	Improper communication	0.683
	Limited billing booths	0.634
	Less space inside the store	0.628
	Incorrect weights and measurements	0.546
	Lesser salesperson	0.559
III. (16.032%)	Clumsy display	0.614
	Duplicate products	0.567
	Lack of food court	0.675
	Quantity available (like 100gms, 200gms,)	0.703

Source: Primary Data

Three factors were identified as being maximum percent variance accounted. The five problem parameters A 1, A 2, A 7, A 8 and A 9 were grouped together as factor I and account for 20.379 percent of the total variance. The seven problem parameters A 3,A 4,A 5,A 6,A 10, A 11 and A 12 constituted the factor II and account for 20.043 percent of the total variance. The four problem parameters A 13, A 14, A 15 and A 16 constituted the factor III and account for 16.032 percent of the total variance. Thus, the factor analysis condensed and simplified the 16 problems and grouped into three factors explaining 56.454 percent of the variability of all the 16 problems.

16 problem faced variables are grouped into five on priority basis. Thus, the first group consists of four problem variable and explanatory variable of 20.379 percentage of the total variance. The result can be observed from the factor analysis that five problem variables are sustainably very important they are poor outlet maintenance, lack in quality, lack of service, lack of knowledge and improper outlook location. The retailer should concentrate on the above said points to increase the sales margin gradually and over look the problems faced by the customer in due course of time.

Null Hypothesis: There is no significant difference in the mean problems scores on factors among the respondents.

The below table (no: 103) indicates the Analysis of Variance for group mean problem score among the branded retail outlet users.

Table No. 103: ANOVA - Problems faced by the branded retail outlets

Source	DF	S S	M S	F
Between groups	15	963.594	64.239	59.27**
Within groups	13584	14719.41	1.083	

** Significant at 1 % level

As the F is significant, the null hypothesis of no difference in the mean problem score on factors among the respondents is rejected and there is significant difference in the mean scores among respondents. The mean scores among the respondents are furnished below:-

The below table (no: 104) describes the weighted average with the rank of problem faced by branded retail outlet users for the study.

Table No. 104: Mean score on problems faced by branded retail outlets

Problem faced variables	Weighted average score	Rank
Poor outlet maintenance	4.145	1
Lacking quality	3.504	7
High price	3.518	6
Less in salesmanship	3.207	16
Improper communication	3.367	10
Limited billing booth	3.295	14
Lack of service	4.013	2
Lack of knowledge	3.640	3
Improper outlet location	3.584	4
Less space inside the store	3.235	15
Incorrect weights & measurement	3.455	8
Lesser sales persons	3.304	13
Clumsy display	3.393	9
Duplicate products	3.362	11
Lack of food court	3.539	5
Quantity available (like 100gms, 200gms,)	3.338	12

Source: Primary Data

It is seen from the above table that, among the respondents, the problem mean score ranged between 3.207 and 4.145 and the problem on „poor outlook maintenance’ has secured high mean score and stood at top, followed by the „lack of service’ which

secured next higher mean score and stood second, the problem faced variable „lack of knowledge’ has secured next higher mean score and stood third and finally the problem faced variable „less in salesmanship’ has secured the least mean score and stood at last among the problem variables faced by the respondents of retail outlets.

Null Hypothesis: There is no significant difference in the overall problems score of branded retail outlet users.

The below table (no: 105) indicates the Analysis of Variance for group mean problem score among different age groups.

Table No. 105: ANOVA - Problems among age groups

Source	SS	DF	MS	F
Between groups	5468.844	3	1822.948	14.80*
Within groups	104169	846	123.1312	

*Significant at 1 % level

As the F is significant, the null hypothesis of no difference in the overall problem score among different groups of respondents is rejected. The overall score of respondents is furnished below:-

The below table (no: 106) describes the overall problem score among different age groups of respondents of selected branded retail outlets for the study.

Table No. 106: Overall problems scores

Age	Respondents	Mean score
15 – 20	102	62.32
21 – 30	335	55.03
31 – 40	263	56.25
41 and above	150	53.35

Source: Primary Data

It exhibits from the above table that the overall problem score ranged from 53.33 to 62.32 and it is higher in 15-20 years age group than other age groups and it is least in 41 years and above age group. Thus, the study indicated that over all problems mean score varies among the age groups of the respondents and it is least in 41 years and above age group of respondents of the selected retail outlets.

Null Hypothesis: There is no significant difference in the overall problems mean score of branded retail outlet users.

The below table (no: 107) indicates the Analysis of Variance for problem score among different age groups of respondents of branded retail outlets.

Table No. 107: ANOVA - Problems among branded retail outlet users

Source	SS	DF	MS	F
Between groups	1890.465	4	472.6162	3.71*
Within groups	107747.4	845	127.5117	

*Significant at 5 % level

As the F is significant, the null hypothesis of no difference in the overall problem score among different groups of respondent is rejected. The mean score of respondents are furnished below:-

The below table (no: 108) depicts the overall problem score of the respondents of selected branded retail outlets.

Table No. 108: Overall problems score of selected branded retail outlet users

Branded retail outlet use	Respondents	Mean score
Big Basaar	294	54.73
More	211	57.28
Nilgiris	202	54.84
Reliance	86	57.81
Spencer's	57	59.00

Source: Primary Data

It is noted from the above table that the overall problem score ranged from 54.73 to 59.00 and it is higher in Spencer's group of respondents than other groups of respondents and it is least in „Big Basaar' branded retail outlet users. Thus, the study revealed that the overall problems mean score varies among the respondents of selected retail outlets and it is least in the „Big Basaar' retail outlet.

Inferences: Problems faced by respondents of selected branded retail outlets in Coimbatore:-

Three factors were identified as being maximum percent variance accounted. The five problem parameters A 1, A 2, A 7, A 8 and A 9 were grouped together as factor I and account for 20.379 percent of the total variance. The seven problem parameters A 3, A 4, A 5, A 6, A 10, A 11 and A 12 constituted the factor II and account for 20.043 percent of the total variance. The four problem parameters A 13, A 14, A 15 and A 16 constituted the factor III and account for 16.032 percent of the total variance. Thus, the factor analysis condensed and simplified the 16 problems and grouped into three factors explaining 56.454 percent of the variability of all the 16 problems. In this competitive market, the branded retail outlet must improve the customer loyalty by reducing the problems faced by the respondents. The major challenge faced by the respondents is the retailer's poor outlet maintenance; they can improve the ambiance to attract more customer walk in.