CHAPTER -III

INSTRUMENTATION AND PSYCHOMETRIC PERFORMANCE OF SCALES

3.1 Introduction

Consumer products distribution starts with the producer and eventually ends at the ultimate consumer. The retailer, who links the producer and the ultimate consumer, is the intermediary between the producer and the consumer. The word "retail" is derived from the French word "retaillier" meaning "to cut a piece off" or "to break bulk" (Bajaj, Tuli and Srivastava, 2005). Retail sector basically comprises of organized and unorganized sectors. Organized retailing refers to the corporate-backed hypermarkets and retail chains and also the privately owned large retail businesses. The traditional formats of low cost retailing e.g. the local *kirana* shops, owner manned general stores, handcarts and pavement vends etc. comprise the unorganized retailing. People are purchasing their requirements from unorganized retail outlets since ancient times and many still prefer to visit these mom and pop shops due to advantages like personal care, price, location, trust, credit facility etc. But it is being observed that with the emergence of factors like changing lifestyle, increasing purchasing power, growing number of working ladies and double income group families in the society, more and more people in urban areas are shifting their preference to purchase their requirements from organized retail stores. Consequently small retailers in the unorganized sector are finding it difficult to hold on to their loyal customer base, let alone attract new ones. Ensuring store loyalty has thus become very important for the survival of these retailers. It is also the key determinant for the success of the retail stores belonging to the organized sector. The concept of store loyalty is originally derived from the concept of brand loyalty which refers to the tendency to repeat purchase at the same store. Osman (1993) in his review paper concluded that at the store level, store loyalty is linked to the urge to make repeated purchases from the same store for similar or other products.

Store loyalty leads to assured patronage, constancy and longevity of business, effective competitive advantage and an entry barrier which does not wear away easily (Kaul, 2006). Loyalty is also found to bring in an increased resistance to competitive messages, lower selling costs, decreased price sensitivity and favorable word-of-mouth

(Dick and Basu, 1994; Zeithaml, 2000). Store loyalty has of late assumed paramount significance in the backdrop of the prevailing economic slump sweeping across the world. There are several determinants and dimensions of loyalty which merit attention. Store loyalty is influenced by a number of factors viz. store image, brand image, brand loyalty, variety, product quality, service quality, customer satisfaction, convenient buying, interaction quality, interpersonal relationships, credit facility/payment flexibility, passage of time, services delivered at home, price, trust and demographics. Several authors have worked on the relation between store loyalty and sustainable financial viability of a firm (Reichheld, 1993, 2000; Heskett, Jones, Loveman, Sasser and Schlesinger, 1994; Jones and Sasser, 1995) but remarkably, no consensus has emerged over the drivers or determinants of customer loyalty. It was premised by Heskett, Jones, Loveman, Sasser and Schlesinger (1994) that customer satisfaction was the driver of customer loyalty, while Jones and Sasser (1995) found that customer satisfaction does not necessarily lead to loyalty and rather brand image and product quality were more important drivers of customer loyalty. It was established by Clottey, Collier and Stodnik (2011) that product quality, service quality and level of brand image are all positively associated with customer loyalty. Most consumers exhibit multiple store patronage which may differ across store types. Loyal shoppers shopping exclusively at a single store are extremely hard to find and practically negligible (Cunningham, 1961).

3.2 Objectives of the study

Retail industry in India has been going through a boom period for the last few years. This boom is despite the fact that government has only recently allowed FDI in this sector for multi-brand retailers. A revolution is under way at present in the store-dominated world of retailing both in developing as well as developed economies. The Indian retail sector has caught the world's imagination in the last few years. It topped the list of most attractive retail destination for consecutive three years from 2004 to 2007, ranked second in 2008 and ranked fourth in 2011 from among thirty emergent markets as reported by A. T. Kearney, the well-known international management consultancy firm (A.T. Kearney, GRDI, 2011). Indian cities are witnessing a paradigm

shift from traditional forms of retailing into a modern organized sector. The number of operational malls is expected to go up sharply on the back of major retail developments even in tier II and tier III cities in India. Retail industry in India is being hailed as one of the pillars of the Indian economy with a contribution of 22% to the national GDP and employing 8% of the total work force, which is next only to agriculture as can be found in the report on the Indian retail sector published by FICCI (FICCI Project, 2012). According to the global firms AC Nielsen and KSA Techno pack, India has the highest shop density in the world ("No FDI in Retail", Business Standard, Feb. 21, 2014). The explosion of retail outlets in the more busy streets of Indian villages, towns and cities is a visible testimony to this. Given the ever-increasing number of players jumping into the retail arena today, survival may prove to be extremely difficult especially in the light of the slowing economy. Then, there is also the case of small retailers who are expected to be adversely affected by an escalation of competition from corporate retail and FDI, which may hasten their decline (Kalhan, 2007). Customer loyalty may prove to be the ultimate weapon to fight competition and ensure survival in the long run. The retail industry in India is still dominated by the unorganized sector having a share of more than 90% of the total volume. But share of the organized sector is increasing steadily with large domestic players entering the industry bringing about a proliferation of shopping malls, supermarkets and other formats of organized retail not only in the metros but also in smaller cities and towns. There is tremendous international pressure on India for liberalizing its retail policy for allowing FDI in multi-brand retail. Global retail giants like Wal-Mart, Metro, Tesco and Carrefour have been pressurizing the Indian government to allow FDI in multi-brand retail business. Developed countries are witnessing saturated market scenario which is forcing top multinational retailers to penetrate into emerging markets like Brazil, Russia, India and China. The retail sector in India is largely out of bounds for the foreign players to protect the interests of millions of small store owners and full FDI is allowed only in single brand retail and wholesale business with stringent conditions attached while FDI in multi-brand retail can go up to the level of 51%. All the efforts of the previous government to open the multi-brand retail to FDI bore little fruit (only few states have agreed to allow FDI in multi-brand retail so

far) due to vehement opposition from various quarters and resistance from small traders who are worried about the impact of large-scale organized retail on their businesses.

A loyal customer would be tolerant of service problems of the particular store he patronizes over other stores and adjust any incongruity that arises from dissatisfaction by highlighting the attraction of other attributes and downplaying the importance of the store's weaknesses. But this holds true up to a threshold limit and a retailer should be aware that serious dissonance would dislodge loyalty and make the consumer transfer his loyalty to a rival store. Dissonance might be a result of a decline in the performance of the store or a big mismatch between the changing expectations of the customer and the offerings by the store.

The present study aims to explore the various determinants of store loyalty and their relative importance in recruitment and retention of customers. Store owners need to understand the factors that motivate customers to come back to a store again and again and bridge the gaps in ensuring repeat purchase by the target customers. The findings of the survey would point towards more effective strategy formulation by the retailers taking into account the various important dimensions mentioned above and help in the long term retention of the customers assuring them of continued patronage and share of wallet. The broad objective of the study is to develop a relationship framework by considering store loyalty as the dependent variable and a set of independent variables such as customer satisfaction, trust, value for money, demographics, shopping convenience, social class, ambience, availability, display etc. in the context of the consumers drawn mainly from the four metros: New Delhi, Mumbai, Kolkata, and Chennai. Some tier I, II and III cities from different parts of the country have been considered to make the study more representative and lend it a pan-Indian character that included Bangalore, Hyderabad, Pune, Ahmedabad, Bhubaneswar, Ranchi, Guwahati, Jodhpur, Siliguri and Darjeeling. The study has included all the retail store formats in the organized sector comprising of the established retail chains in the market and the various traditional formats in the unorganized retail sector.

In this backdrop the objectives of the study are as listed below:

1. To identify various antecedents of store loyalty and develop scales to measure these antecedents

2. To identify important reason behind store patronage and to assess the behavioral pattern of purchases including the share of wallet

3. To examine the store patronage behavior of customers and to trace the behavior of customers drawn from various cities (including the four metros and some tier I, II and III cities)

4. To investigate whether the shoppers have multiple store loyalty and to probe reasons behind such behavior

5. To explore the relative influence of various facets of customer patronage behavior leading to store loyalty

6. To assess the psychometric performance of various scales by employing a range of tests employed in psychometric literature

7. To make a comparative analysis of store patronage behavior and its antecedent variables for assessing attitude of shoppers towards organized as well as unorganized retail

8. To integrate the findings as stated above and suggest strategies to retain customers

3.3 Rationale of the study

This study is aimed at contributing to the extant literature on customer loyalty from the perspective of the retail segment. Although academic research on loyalty has received considerable attention, it has largely focused on different procedures of measuring the construct and the construct's correlation with customer characteristics (Kahn, Kalwani, and Morrison, 1986). There have been quite a sizeable work on the subject but many of the relevant dimensions have not been considered in those studies especially in the Indian context e.g. availability of credit facility, in-home services etc. Also, though one may find numerous articles on the subject of impact of organized retail on unorganized retail, very few of them dwelt on the issue of comparative store loyalty between these sectors. Consequently there is a scope to contribute by way of considering these attributes in a new study on retail loyalty with an eye to comparative analysis. This would render the proposed study holistic and relatively more complete in its

investigative capacity. Since there is a general perception that the organized retail in India is poised for a quantum jump in volume, strengthened by the belief that it is only a matter of time before Indian retail sector is fully opened to FDI, there is also an imminent need to take up a comparative study on the store loyalty behavior of shoppers with respect to the organized and the unorganized sector. The findings of this study will provide insights for retailers for developing and maintaining effective customer relationship, which could ensure survival and increased profitability in the long run. They could better meet their customers' needs by ensuring the presence of the attributes that delight their customers and eliminating completely or minimizing as far as possible, the negative attributes that dissatisfy and alienate their customers. Finally, the consumer educators, marketing and salespeople and retail professionals could get insights on how to help retailers to initiate and bring about the necessary developments in the store dimensions towards building and fostering a long-term, loyal relationship with their customers.

3.4 Research Questions

Based on the discussions presented above this study proposes to investigate the following questions:

1. Is there any definite relation between consumer trust and continued patronage of a store?

2. What effect does perceived value for money have on the level of customer loyalty?

3. Are demographic variables correlated to store loyalty?

4. Is there any association between perceived locational advantage and store loyalty?

5. Do product assortment and availability of brands influence store loyalty?

6. Do display and ambience have any effect on store loyalty?

7. Does attitude of shoppers vary significantly for organized and unorganized store with respect to various antecedents of store loyalty?

8. Can store loyalty be predicted incorporating a few relevant explanatory variables?

9. Can facets of various explanatory variables be used for clustering respondents into homogeneous groups?

3.5 Methodology

3.5.1 Phase I

A series of focus group interviews was undertaken to identify various factors that consumers consider while selecting a retail store. An initial pool of 36 items was generated through focus group interviews and depth interviews to comprehend various dimensions of store patronage behavior. An exploratory factor analysis was conducted to identify the underlying dimensions consumers consider important based on the structure and pattern of factor loadings.

3.5.2 Phase II

The research intends to quantify the effectiveness of various store attributes and dimensions influencing store loyalty and covers both the organized and unorganized sectors. Thus, it is a comparative study and an attempt to understand behavior of shoppers with regard to these two sectors. The research also makes an attempt to describe the attitudinal behavior of the respondents for their respective purchasing patterns. After identifying the relevant attributes and dimensions of store loyalty and purification of the measurement items, the data for the study were derived from shoppers belonging to a cross section of population using a convenience sample of respondents. This was done using a survey with the help of a structured questionnaire. After identifying the relevant attributes and dimensions of store loyalty and purification of the measurement items, the data for the study were derived from shoppers belonging to a cross section of population using a convenience sample of respondents. This was done using a survey with the help of a structured questionnaire. Due to the vast expanse of the survey area which stretched across cities and towns as distant as Bangalore and Guwahati, the study covered a cross section of respondents based on

the convenience sampling technique. This was done keeping in mind the logistic related constraints of deploying manpower in various cities and towns across India to contact the respondents and collect the data. Moreover, it is often found that in most occasions respondents in general are reluctant to give time to provide responses on multiple choice questionnaires even when it is not very lengthy. The data were mainly collected from the four metros: New Delhi, Mumbai, Kolkata and Chennai. Some tier I, II and III cities from different parts of the country have been considered to make the study more representative and lend it a pan-Indian character that included Bangalore, Hyderabad, Pune, Ahmedabad, Bhubaneswar, Ranchi, Guwahati, Jodhpur, Siliguri and Darjeeling. The study administered questionnaires to 1600 respondents across the various locations. Out of 454 responses obtained through internet, direct mail and personally administered questionnaire, 43 responses were rejected due to errors of omission and commission bringing down the total figure of valid responses to 411. In addition to meeting the respondents and directly administering the questionnaire either personally or through qualified representatives, it was also emailed to them. Further, in many cases the questionnaires have also been sent through post attaching stamped self-addressed envelopes. It took almost one year, the period beginning March 2013 to January 2014, to gather all the responses as in many cases reminders had to be sent to generate responses. 212 valid responses have been gathered though direct administration and the corresponding figures for email and post are 156 and 43 respectively. Scale items were developed from reviewing prior literature and were further refined by conducting reliability and validity tests frequently applied in marketing and psychometric research conducted in this area.

3.5.3 Sample Description and Psychometric Performance of Scales

In addition to employing factor analysis and multiple regression, other parametric and non-parametric statistical tools were also employed depending on the nature of the data. A brief description of the profile of respondents is given in Table 3.1.

Table- 3.1

Demographic Profile of Sample Respondents

Age Group	Frequency	Percentage
Below 30Years	59	14.4
31 to 40 Years	146	35.5
41 to 50 Years	139	33.8
Above 50 Years	67	16.3
Occupation		
Executives	209	50.9
Non-Executives	106	25.8
Businessmen with:		
No of Employees 1 to 9	65	15.8
No of Employees 10+	31	7.5
Education		
Below Graduate	04	01.0
Graduate	108	26.3
Post-Graduate	299	72.7
Net Income		
Less than ₹ 30,000	61	14.8
₹ 30,001 to ₹ 60,000	87	21.2
₹ 60,001 to ₹ 90,000	74	18.0
₹ 90,001 to ₹ 1,20,000	116	28.0
₹ 1,20,001 to ₹ 1,50,000	57	13.9
₹ 1,50,0001 +	16	3.9
Gender (Chief Wage Earner)		
Male	370	90.0
Female	41	10.0
Marital status		
Married	357	86.9
Single	54	13.1

The data have been collected mainly from respondents belonging to A1A2 class of the social stratification scale as developed by Market Research Society of India (MRSI) which is mostly followed by the reserchers doing research with different social classes in India particularly by the marketing research practitioners as well as academicians. In order to understand the profile of the respondents, two important explanatory variables have been considered along with the age and income of sample respondents. The following cross tables demonstrate the pattern of age distribution and income distribution to better understand the profiles of the respondents included in this study. It is revealed that the relatively young shoppers exhibit lesser degree of trust towards organized stores. The variability in the response pattern is more or less same for the

shoppers across different age categories. The 95% confidence interval for mean depicts the lower and upper bounds of the responses obtained. The same pattern is observed in the case of the unorganized segment.

Table -3.2

Cross Table: Trust and Age (Organized)

Trust of Org	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
<30 Years	59	12.39	2.150	.280	11.83	12.95
31 – 40 Years	146	12.78	2.405	.199	12.39	13.17
31 – 40 Years	139	13.05	2.269	.192	12.67	13.43
51 + Years	67	13.09	2.598	.317	12.46	13.72

It is observed from the above table that the mean is lowest for respondents who are below the age of 30 years and increases as the age goes up which indicates that lower the age of the respondents, lower would be their trust for the organized store. The plausible reason for his could be the unwillingness or lack of interest of relatively aged people to try new stores or get attracted by new features incorporated by the established ones. The lower and upper bounds are also within acceptable range at 95% confidence interval for mean which corroborates this observation.

Table -3.3

Cross Table: Trust and Age (Unorganized)

Trust of Unorganized	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
<30 Years	59	11.86	1.889	.246	11.37	12.36
31 – 40 Years	146	12.34	1.888	.156	12.03	12.65
31 – 40 Years	139	12.55	2.263	.192	12.17	12.93
51 + Years	67	12.70	2.412	.295	12.11	13.29

A look at the above table shows that the mean of trust scale is lowest for respondents who are below the age of 30 years and increases as the age goes up which indicates that lower the age of the respondents, lower would be their trust for the unorganized store. The plausible reason for this is the same as in the case of organized segment. The lower and upper bounds are also within acceptable range at 95% confidence interval for mean which corroborates this observation.

Table -3.4

Cross Table: Trust and Income (Organized)

Trust of Org	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Up to ₹ 30000	61	11.05	1.953	.250	10.55	11.55
₹30001- ₹60000	87	12.86	2.200	.236	12.39	13.33
₹60001-₹90000	74	12.73	2.555	.297	12.14	13.32
₹90001-120000	116	13.29	2.143	.199	12.90	13.69
₹120001-₹150000	57	13.93	2.290	.303	13.32	14.54
>₹150001-	16	13.56	1.750	.438	12.63	14.50
Total	411	12.87	2.361	.116	12.64	13.10

It is observed from the above table that the mean of trust scale is lowest for respondents whose income is up to ₹ 30,000 and increases as the income goes up which indicates that lower the income of the respondents, lower would be their trust for the organized store. The probable reason for his could be the aversion of customers in taking risk in making purchase decisions as well as their price sensitiveness. However, for people having income above ₹ 150,000 there is slight reversal in this trend as the trust goes down a bit. The lower and upper bounds are also within acceptable range at 95% confidence interval for mean which corroborates this observation.

Table -3.5

Cross Table: Trust and Income (Unorganized)

Trust of Unorganized	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Up to ₹ 30000	61	11.85	1.537	.197	11.46	12.25
₹30001- ₹60000	87	11.95	1.982	.212	11.53	12.38
₹60001-₹90000	74	12.27	2.109	.245	11.78	12.76
₹90001-120000	116	12.49	2.015	.187	12.12	12.86
₹120001-₹150000	57	13.33	2.573	.341	12.65	14.02
>₹150001-	16	13.56	2.449	.612	12.26	14.87
Total	411	12.40	2.119	.105	12.20	12.61

It is observed from the above table that the mean of trust scale is lowest for respondents whose income is up to ₹ 30,000 and increases as the income goes up which indicates that lower the income of the respondents, lower would be their trust for the unorganized store. The likely explanation for this could be the unwillingness or lack of interest of relatively aged people to try new stores or get attracted by new features incorporated by the established ones. The lower and upper bounds are also within acceptable range at 95% confidence interval for mean which corroborates this observation.

A Paired Sample 't' Test was conducted to comprehend the sample characteristics. The findings of paired sample statistics are presented in Tables 3.6, 3.7 and 3.8. It is revealed that the trust towards unorganized sector, perceived satisfaction and store loyalty are higher than the corresponding values for the unorganized sector. For all other variables, the organized sector performs better compared to the unorganized counterpart.

Table-3.6

Paired Samples Statistics

Paired Variables		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Trust of Org	12.40	411	2.361	.116
	Unorg. Trust	12.87	411	2.119	.105
Pair 2	Value for money	12.44	411	2.227	.110
	Unorg. VM	9.91	411	1.876	.093
Pair 3	Availability	11.48	411	2.116	.104
	Unorg. Availability	10.62	411	2.128	.105
Pair 4	Display	11.45	411	2.768	.137
	Unorg. Display	9.41	411	1.710	.084
Pair 5	Ambience	11.43	411	2.836	.140
	Unorg. Ambience	10.08	411	3.190	.157
Pair 6	Satisfaction	9.46	411	1.490	.074
	Unorg.Satisfaction	9.69	411	1.460	.072
Pair 7	Store Loyalty	13.37	411	2.181	.108
	Unorg. Store Loy	14.55	411	2.237	.110

Table-3.7

Paired Samples Correlations

Paired Variables	N	Correlation	Sig.
Pair 1 Trust of Org & Unorg. Trust	411	.220	.000
Pair 2 Value for money & Unorg. VM	411	.285	.000
Pair 3 Availability & Unorg. Availability	411	.188	.000
Pair 4 Display & Unorg. Display	411	.165	.001
Pair 5 Ambience & Unorg. Ambience	411	185	.000
Pair 6 Satisfaction & Unorg.Satisfaction	411	.027	.582
Pair 7 Store Loyalty & Unorg. Store Loy	411	.489	.000

The pair wise correlations are all significant except satisfaction which is higher for the unorganized retail. Statistically significant differences have been observed for all the variables included in the study. However, the unorganized sector is performing well in terms of trust, store loyalty and perceived satisfaction.

Table-3.8

Paired Samples Test

Paired Variables	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Trust of Org - Unorg. Trust	-0.465	2.803	.138	.193	.737	-3.361	410	.001
Pair 2 Value for money - Unorg. VM	2.526	2.469	.122	2.286	2.765	20.741	410	.000
Pair 3 Availability - Unorg. Availability	.861	2.705	.133	.599	1.124	6.456	410	.000
Pair 4 Display - Unorg. Display	2.044	3.005	.148	1.752	2.335	13.790	410	.000
Pair 5 Ambience - Unorg. Ambience	1.350	3.060	.151	1.054	1.647	8.946	410	.000
Pair 6 Satisfaction - Unorg.Satisfaction	-.226	2.058	.101	.027	.426	2.229	410	.026
Pair 7 Store Loyalty - Unorg. StoreLoy	-1.187	2.821	.139	.914	1.461	-8.533	410	.000

To establish scale dimensionality, an exploratory factor analysis with varimax rotation was carried out initially to extract underlying dimensions keeping the Eigen value ≥ 1.00 using a principal component method. The five dimensions were extracted and the cumulative percentage of variance explained was slightly greater than 61%. The goodness of fit measured by chi square was found to be significant. However, the predictive validity as measured by factor analysis and multiple regression demonstrate that the dependent variable, store loyalty, can be predicted by the explanatory variables considered in this study. The goodness of fit of factor analysis measured by KMO and Bartlett's Test is significant beyond p<0.000 and the percentage of variance is more than 61% which is quite satisfactory considering the diverse constructs included in predicting the store loyalty behavior of shoppers.

Table -3.9

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.864
Bartlett's Test of Sphericity	Approx. Chi-Square	6873.075
	df	210
	Sig.	.000

Table- 3.10

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.471	30.815	30.815	6.471	30.815	30.815	3.386	16.125	16.125
2	2.085	9.926	40.742	2.085	9.926	40.742	2.673	12.730	28.855
3	1.705	8.120	48.862	1.705	8.120	48.862	2.663	12.683	41.538
4	1.369	6.518	55.380	1.369	6.518	55.380	2.364	11.259	52.797
5	1.252	5.964	61.344	1.252	5.964	61.344	1.795	8.547	61.344

Note: Based on Eigen value>1

The component matrix reveals that display, ambience and value for money loaded with factor 1 and value for money and availability fused into a single latent dimension making it very difficult to interpret since these variables were not supposed to load with a single latent component. The same observation could be made for value for money and store loyalty. These factors emerged as hybrid factors which cannot be meaningfully interpreted. The display, ambience and value for money may be clubbed into a single variable which can be labeled as attractiveness of the store, but the second hybrid factor cannot be combined into a single dimension as they are unrelated to each other.

The exploratory factor analysis extracted five factor solution keeping in view the eigen value factors > 1.00 which did not match with the results expected. In view of this outcome, the number of factors had to be fixed considering the confirmatory factor analysis output with a forced seven factor solution. The factor output is found to be satisfactory since the factor loadings are in conformity with the constructs considered in this study.

Figure- 3.1

Scree Plot
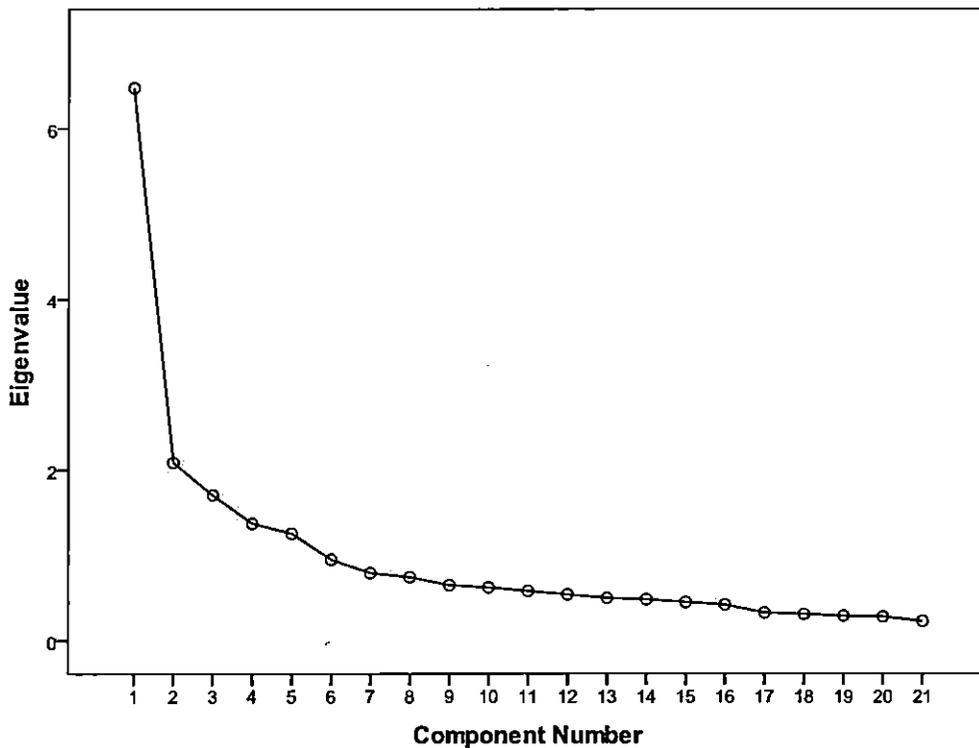
Note: Eigen value>1

Table -3.11

Rotated Component Matrix

	Component				
	1	2	3	4	5
TRUST1	.037	.120	.001	.796	.078
TRUST2	.093	.177	-.023	.856	.036
TRUST3	.105	.218	.015	.733	.024
SLOYALTY1	.119	.700	.088	.119	.122
SLOYALTY2	.074	.706	.161	.115	.118
SLOYALTY3	.074	.696	.095	.125	.138
VALUE1	.568	-.016	.467	.256	.087
VALUE2	.583	-.001	.428	.298	.074
VALUE3	.479	.064	.455	.363	.057
AVAIL1	.134	.234	.750	-.060	.023
AVAIL2	.174	.210	.820	-.009	.041
AVAIL3	.145	.155	.750	-.034	.064
SAT1	-.005	.097	.075	.070	.715
SAT2	.059	.098	.063	.034	.831
SAT3	.093	.075	-.008	.020	.711
AMB1	.454	.554	.218	.151	-.017
AMB2	.447	.536	.307	.183	-.019
AMB3	.398	.504	.191	.246	-.022
DIS1	.752	.216	.098	-.025	.062
DIS2	.840	.180	.085	-.019	.049
DIS3	.729	.171	.100	.057	.045

Note: Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 7 iterations, Eigen value>1

Table- 3.12

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.471	30.815	30.815	6.471	30.815	30.815	2.276	10.840	10.840
2	2.085	9.926	40.742	2.085	9.926	40.742	2.260	10.761	21.601
3	1.705	8.120	48.862	1.705	8.120	48.862	2.193	10.443	32.044
4	1.369	6.518	55.380	1.369	6.518	55.380	2.190	10.427	42.471
5	1.252	5.964	61.344	1.252	5.964	61.344	1.993	9.492	51.963
6	.947	4.510	65.853	.947	4.510	65.853	1.926	9.172	61.135
7	.789	3.757	69.610	.789	3.757	69.610	1.780	8.475	69.610

Note: Forced Seven Factor.Solution, Extraction Method: Principal Component Analysis

Accordingly, a confirmatory factor analysis was conducted with seven underlying dimensions which could reveal seven latent factors with no hybrid factors or misloadings and split loadings. The forced factor solutions extracted almost 70 percent variation in the original data set which can be considered as quite satisfactory. The goodness of fit measured by KMO Barlett's Test of Sphericity was found to be highly significant.

Table -3.13

Rotated Component Matrix

	Component						
	1	2	3	4	5	6	7
TRUST1	.059	.053	-.006	.852	.003	.122	.090
TRUST2	.069	-.023	.122	.871	.126	.101	.032
TRUST3	.019	-.046	.234	.695	.221	.110	.010
SLOYALTY1	.161	.098	.069	.124	.766	.108	.079
SLOYALTY2	.064	.128	.147	.085	.794	.122	.073
SLOYALTY3	.051	.092	.035	.116	.650	.297	.127
VALUE1	.242	.219	.783	.080	.076	.138	.061
VALUE2	.238	.165	.813	.108	.099	.152	.047
VALUE3	.187	.239	.702	.210	.131	.156	.034
AVAIL1	.085	.756	.159	-.040	.114	.213	.034
AVAIL2	.155	.838	.192	.026	.126	.126	.040
AVAIL3	.139	.773	.162	.002	.084	.087	.063
SAT1	.101	.149	-.086	.137	.106	-.092	.707
SAT2	.065	.058	.071	.035	.143	-.043	.820
SAT3	-.053	-.084	.134	-.043	-.004	.245	.739
AMB1	.254	.177	.168	.119	.233	.746	.038
AMB2	.265	.282	.163	.167	.206	.724	.036
AMB3	.217	.142	.194	.209	.253	.620	.017
DIS1	.737	.126	.195	.012	.107	.233	.061
DIS2	.854	.125	.219	.031	.102	.161	.038
DIS3	.751	.146	.180	.113	.087	.149	.037

Note: Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations, Forced Seven Factor Solution

Figure- 3.2

Scree Plot
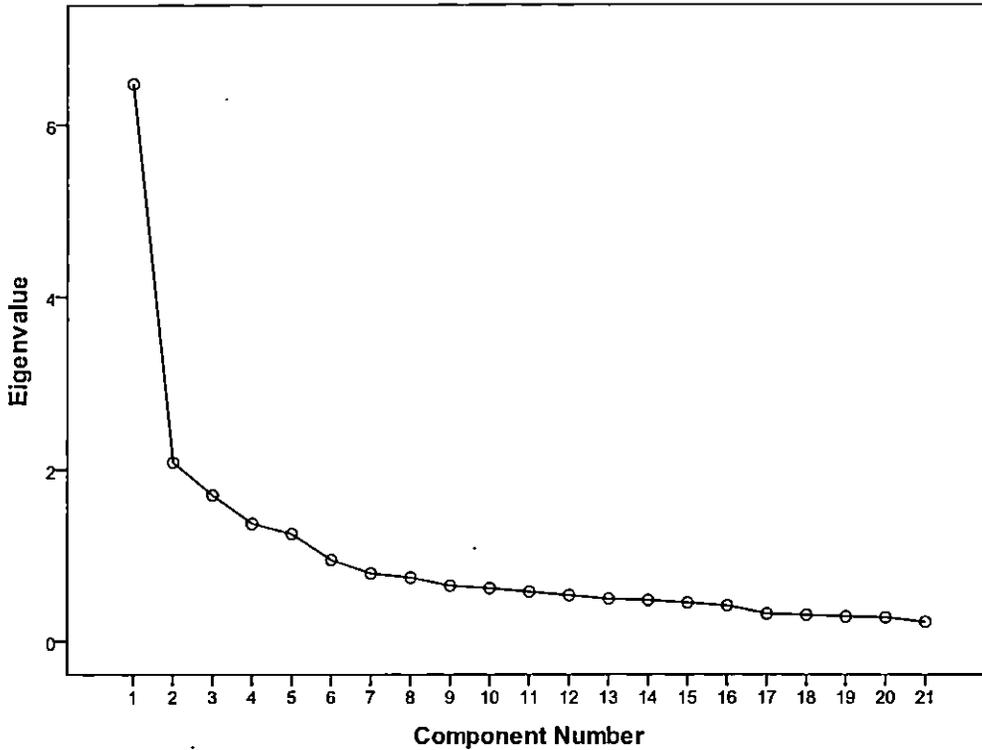
Note: Eigen value>1

The reliability measures amply demonstrate internal consistency of the measures employed to quantify various antecedents of store loyalty. Despite a smaller number of items included in each scale, the reliability measures are quite acceptable. The reliability coefficient of overall satisfaction was found to be quite low in comparison to the other measures employed in this regard. The initial pool of items for the variables was as under (Table 3.14):

Table- 3.14

Initial Pool of Items

Construct	No. of Items
Trust	5
Loyalty	5
Value for Money	5
Availability	6
Satisfaction	5
Ambience	5
Display	5

While developing the scale items, a wide body of relevant literature was thoroughly considered to select the variables that influence the store loyalty behavior of shoppers. A plethora of scales are available in literature in this field which created problem in including the antecedent variables. A preliminary sample (n=23) was selected based on convenience and the respondents were requested to give their views on the antecedent variables that influence store choice behavior. After scrutinizing the responses and their theoretical premise, the study considered six most important variables based on the response of a relatively small sample of respondents. In an endeavor to reduce the number of items to a manageable set, most frequently spoken variables have been considered for final selection of items. However, to purify the variables included initially, a pilot survey was conducted using a student sample doing their BBA program. The most popular method is the Item to Total Correlation which is a measure of the association between the item score and the total score that purports to measure a particular dimension. Theoretically, the item which is measuring a particular construct should have significant correlation with the total score since they are measuring the same construct. Initially the study included 36 items to measure seven constructs which were reduced to 21 items based on the Item to Total Correlation as well as Item to Item Correlation. The Item to Item Correlations that are significant and high have been retained for final analyses. In order to keep the questionnaire short and easy to

comprehend, only three items were kept for measuring the constructs that were retained for finalizing the purified questionnaire.

The purified questionnaire was also judged by (n=4) experts who are familiar with the retail sector having good publications in national and international journals. The experts' opinions were incorporated in the final questionnaire keeping in view their observations regarding the sequence, order, layout and question formats.

<u>Draft Questionnaire</u>

1. Your Age:
   Below 20 years O   21-to-30 years O   31-to-40 years O   41-to-50 years O   Above 50 years O
2. Your Occupation
   If employed then,   If unemployed then,
   <u>Service</u>
   Executive   O   Student   O
   Non Executive   O   House Wife   O
   <u>Business</u>   O
   No. of Employees: 1-to-9   O   10+   O
3. Your Education: Below Graduation   O   Graduate   O   Post Graduate   O
4. Your Net Income from all sources :
   Up-to- 15,000   O   15,001-to-30,000   O   30001-to-45000   O   45001-to-60000   O   60001-to-75,000   O
   Above 75,000   O
5. Your Gender: Male O   Female O
6. You are: Single O   Married O
7. Where do you shop from? Supermarket(s)/Organized Store(s)   Yes O No O   Small Stores   Yes O No O
8. Do you shop from multiple stores?   Yes O No O
9. What is your average monthly shopping budget?
   Below 5000 O 5001-to-15000 O   15001-to-25000 O   25001-to-35000 O   35001-to-45000 O Above 45000 O
10. What percent of your shopping budget do you spend in Supermarket(s)/Organized Store(s)?
    Up to 25 %   O   26-to-50   O   51-to-75   O   76-to100   O
11. Please specify your response on the statements given below when you shop from Organized Store(s):

	Very Strongly Agree	Strongly Agree	Agree	Disagree	Strongly Disagree	Very Strongly Disagree
TRUST						
Store X gives me a feeling of confidence	O	O	O	O	O	O
I have faith in store X	O	O	O	O	O	O
Store X is honest in its dealing	O	O	O	O	O	O
Store X is a good store	O	O	O	O	O	O
Store X is highly reputed	O	O	O	O	O	O
AMBIENCE						
Store X has nice atmosphere	O	O	O	O	O	O
Store X is clean, tidy and modern looking	O	O	O	O	O	O
Store X looks bright and attractive	O	O	O	O	O	O
Store X provides spacious shopping	O	O	O	O	O	O
Store X is pleasant to shop in	O	O	O	O	O	O

VALUE FOR MONEY

The merchandize sold in store X is a good value for money	O	O	O	O	O	O
Only high quality products are sold in store X at better price	O	O	O	O	O	O
I get more in store X for the same amount spent in other stores	O	O	O	O	O	O
Store X offers better Discounts/Promotional Offers /Benefits	O	O	O	O	O	O
Store X offer low prices	O	O	O	O	O	O

DISPLAY

Store X has very attractive merchandize display value for money	O	O	O	O	O	O
Display in Store X makes it very convenient to locate items I want to purchase	O	O	O	O	O	O
Store X allocates proportionate display for different kinds of products	O	O	O	O	O	O
Display areas are brightly lit	O	O	O	O	O	O
Store X has well spaced merchandize	O	O	O	O	O	O

SATISFACTION

Store X understand my needs better than other stores	O	O	O	O	O	O
Store X offers quick billing service	O	O	O	O	O	O
Store X has friendly staff who are always willing to help	O	O	O	O	O	O
Store X has easy return policy	O	O	O	O	O	O
Overall, I am very satisfied with Store X	O	O	O	O	O	O

AVAILABILITY

A good selection of products was present in store X	O	O	O	O	O	O
Advertised merchandize is in stock in store X	O	O	O	O	O	O
Store X has stock of some products which are not available in other stores	O	O	O	O	O	O
I have never come back from store X without getting the product I was looking for	O	O	O	O	O	O
Store X offers better variety	O	O	O	O	O	O
Store X offers better assortment	O	O	O	O	O	O

STORE LOYALTY

I consider myself loyal to store X	O	O	O	O	O	O
Store X comes to my mind first whenever I intend to purchase something	O	O	O	O	O	O
I repeat purchase from store X	O	O	O	O	O	O
I only visit store X for all my purchases available in other stores	O	O	O	O	O	O
I do not visit any store other than store X	O	O	O	O	O	O

12. Please indicate whether the following factors are important when you shop from retail Store(s)?

Fast Service   Yes O No O   Empathy   Yes O No O   Location   Yes O No O

13. Please specify your response on the statements given below when you shop from Unorganized Store(s):

	Very Strongly Agree	Strongly Agree	Agree	Disagree	Strongly Disagree	Very Strongly Disagree
TRUST						
Store X gives me a feeling of confidence	O	O	O	O	O	O
I have faith in store X	O	O	O	O	O	O
Store X is honest in its dealing	O	O	O	O	O	O
Store X is a good store	O	O	O	.O	O	O
Store X is highly reputed	O	O	O	O	O	O
AMBIENCE						
Store X has nice atmosphere	O	O	O	O	O	O
Store X is clean, tidy and modern looking	O	O	O	O	O	O
Store X looks bright and attractive	O	O	O	O	O	O
Store X provides spacious shopping	O	O	O	O	O	O
Store X is pleasant to shop in	O	O	O	O	O	O
VALUE FOR MONEY						
The merchandize sold in store X is a good value for money	O	O	O	O	O	O
Only high quality products are sold in store X at better price	O	O	O	O	O	O
I get more in store X for the same amount spent in other stores	O	O	O	O	O	O
Store X offers better Discounts/Promotional Offers /Benefits	O	O	O	O	O	O
Store X offer low prices	O	O	O	O	O	O
DISPLAY						
Store X has very attractive merchandize display value for money	O	O	O	O	O	O
Display in Store X makes it very convenient to locate items I want to purchase	O	O	O	O	O	O
Store X allocates proportionate display for different kinds of products	O	O	O	O	O	O
Display areas are brightly lit	O	O	O	O	O	O
Store X has well spaced merchandize	O	O	O	O	O	O
SATISFACTION						
Store X understand my needs better than other stores	O	O	O	O	O	O
Store X offers quick billing service	O	O	O	O	O	O
Store X has friendly staff who are always willing to help	O	O	O	O	O	O
Store X has easy return policy	O	O	O	O	O	O
Overall, I am very satisfied with Store X	O	O	O	O	.O	O
AVAILABILITY						
A good selection of products was present in store X	O	O	O	O	O	O
Advertised merchandize is in stock in store X	O	O	O	O	O	O
Store X has stock of some products which are not	O	.O	O	O	O	O

available in other stores

I have never come back from store X without getting the product I was looking for	O	O	O	O	O	O
Store X offers better variety	O	O	O	O	O	O
Store X offers better assortment	O	O	O	O	O	O

STORE LOYALTY

I consider myself loyal to store X	O	O	O	O	O	O
Store X comes to my mind first whenever I intend to purchase something	O	O	O	O	O	O
I repeat purchase from store X	O	O	O	O	O	O
I only visit store X for all my purchases available in other stores	O	O	O	O	O	O
I do not visit any store other than store X	O	O	O	O	O	O

1. In case you shop from multiple Stores please indicate the reason(s) for the same?

	Organized Store	Unorganized Store
Better Price	O	O
Specialization	O	O
Proximity	O	O
Different Ambience	O	O
Better Variety	O	O
Parking Space	O	O
Discounts/Promotional Offers/Benefits	O	O
Entertainment Factors	O	O
Better Quality	O	O

My Location (Name of the city only):

Table -3.15

Reliability Statistics

Construct	Cronbach's Alpha	Test Retest Reliability	No. of Items
Trust	0.779	0.801	3
Loyalty	0.694	0.718	3
Value for Money	0.818	0.840	3
Availability	0.792	0.815	3
Satisfaction	0.633	0.655	3
Ambience	0.807	0.827	3
Display	0.805	0.826	3

After conducting Item to Total Correlation it was found that some items had very low correlation with the total item score which compelled reduction of a few items from the store loyalty as well as ambience scale. To keep parity in the measures employed as well as the length of the questionnaire, 3 items in each category were retained based on

the magnitude of correlation between each item and the total score for each category of measurement. The alpha values and test-retest reliability using a student sample (n=62) pursuing BBA program are found to be satisfactory despite smaller number of items in the scale employed.

Table -3.16

Item to Total Correlation

Variables	Correlation	Item to Item Correlation		
		Scale Item1	Scale Item2	Scale Item3
Trust1	.807	1	.678	.414
Trust2	.872	.678	1	.570
Trust3	.819	.414	.570**	1
Store Loyalty1	.813	1	.501**	.384**
Store Loyalty2	.789	.501**	1	.451**
Store Loyalty3	.769	.384**	.451**	1
Value For Money1	.852	1	.698**	.550**
Value For Money2	.873	.698**	1	.598**
Value For Money3	.855	.550**	.598**	1
Availability1	.813	1	.635**	.452**
Availability2	.867	.635**	1	.616
Availability3	.819	.452**	.616	1
Satisfaction1	.739	1	.450**	.259**
Satisfaction2	.772	.450	1	.434
Satisfaction3	.746	.259**	434	1
Ambience1	.812**	1	.694**	.517**
Ambience2	.866	.694**	1	.553**
Ambience3	.850	.517**	.553**	1
Display1	.811	1	.662**	.440**
Display2	.808**	.662	1	.647
Display3	.880**	.440**	.647	1

After establishing scale reliability and dimensionality, the predictive validity was established by employing a multiple regression analysis keeping all the explanatory variables to relate the store loyalty behavior of the urban shoppers.

Table -3.17

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.605[a]	.366	.361	1.82806

a. Predictors: (Constant), STORETYPE, SAT, TRUST, AVAIL, DIS, VALUE, AMB

Table -3.18

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1570.514	7	224.359	67.137	.000[a]
	Residual	2720.240	814	3.342		
	Total	4290.754	821			

a. Predictors: (Constant), STORETYPE, SAT, TRUST, AVAIL, DIS, VALUE, AMB
b. Dependent Variable: SLOYALTY

The R^2 value is found to be 0.366 and the standard error is also quite low. In social science studies researchers are quite often satisfied with statistically significant but low R^2 values since social phenomena are complex and multidimensional and it is very difficult to explain a big amount of variation. Moreover, R^2 gives information about "goodness of fit", not "goodness of prediction"(Pyzdek, 2003). Here, the overall goodness of fit is significant beyond p< 0.000 which is quite acceptable. The value for money and display coefficients are not significant though the direction of the coefficient justify the theoretical foundation. In addition to this variable, a dummy variable was incorporated by assigning 1 for organized sector and 0 otherwise. It is revealed that the shoppers display a higher degree of store loyalty for unorganized retail compared to the organized sector. The results of regression analysis establish the predictive or nomological validity of the measures employed in the study.

Table - 3.19

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistic	
	B	Std. Error	Beta			Tolerance	VIF
TRUST	.096	.032	.094	2.941	.003	.760	1.316
VALUE	.045	.032	.053	1.378	.169	.524	1.909
AVAIL	.079	.036	.075	2.205	.028	.674	1.484
SAT	.216	.045	.136	4.748	.000	.956	1.046
AMB	.365	.030	.494	12.268	.000	.481	2.080
DIS	.040	.030	.049	1.326	.185	.561	1.781
STORETYPE	-1.002	.158	-.219	-6.357	.000	.654	1.528

a. Dependent Variable: SLOYALTY

Note: The DW value is slightly less than the DL value

3.6 Conclusion

In this chapter an effort has been made to establish the scale reliability and validity which is a sine qua non for any scientific measurement. In an attempt to establish the scale reliability, the Cronbach's alpha, the most popularly reported in literature, has been reported. The alpha values are quite high despite a small number of items to measure a particular construct. The higher value of alpha obtained in our study may be due to the fact that the data have been mostly collected from the respondents belonging to A1A2 of the social class as developed by the MRSI (Market Research Society of India) who are sufficiently educated and have the ability to understand the questions given in the questionnaire. The purified questionnaire was evaluated by (n=4) experts who are familiar with the retail sector having good publications in national and international journals. The experts' opinions were incorporated in the final questionnaire keeping in view their observations regarding the sequence, order, layout and question formats.

The questionnaire was diligently administered and the respondents were explained about the purpose of the study for which the data on multiple items were sought from them. Considering the background of the respondents, the factor and reliability coefficients of the constructs are found to be quite satisfactory. Since the data are reliable and valid, the descriptive statistics has been discussed in the next chapter based on the demographic profiles of the respondents vis a vis their place of residence. As already mentioned, the respondents have been drawn from the four metros and some tier I, II and III cities from different parts of the country have also been considered to broaden the ambit of the study. Responses have been obtained through internet, direct mail and personally administered questionnaire. Some responses were rejected due to errors of omission and commission. Utmost care has been taken to ensure that the respondents comprehend the questionnaire properly and provide the appropriate answers so that the outcome of the data is unbiased and accurate as far as possible. Scale items have been developed from reviewing prior literature and were further refined by conducting reliability and validity tests frequently applied in marketing and psychometric research conducted in this area.

It is revealed that the relatively young shoppers exhibit lesser degree of trust towards organized stores. Similar result has been expressed in case of unorganized retail too. The variability in the response pattern is more or less same for the shoppers across various age categories. It is observed that lower the age of the respondents, lower would be their trust for the organized store and lower the income of the respondents, lower would be their trust for the organized store. Many such observations have been reported in this chapter.

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