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Store Attributes Affecting Consumers Choice of Apparel Stores in Guwahati City

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ABSTRACT

The objective of the study is to identify and analyse the factors that affect consumers' choice of apparel stores in Guwahati city. The study is based on primary data and a structured questionnaire was used for collecting responses and for drawing conclusions for the study.The samples selected for this study are the consumers having access to both modern and traditional apparel retail stores in Guwahati city from the six different zones under the Guwahati Municipal Corporation. A sample size of 512 in the age group of 15 to 65 years and above was used for the present study. There were 25 statements (assertions) on the store attributes and the respondents were asked to express their opinion (either agreement or disagreement) in a five point Likert- Scale. To identify the factors affecting consumer's choice of store attributes exploratory factor analysis was used. Further the mean scores were used to identify which factor had the major impact on consumer's behaviour. 6 components namely Employees Attitude, Store Atmospherics, Merchandise, Store Facilities, Consumer Service and Convenience were derived based on factor analysis. Amongst the 6 components Employees attitude accounts for the maximum variance of 10.075. However the results of mean score analysis concludes that the consumers were in agreement that Store atmospherics followed by Merchandise were the most important factors for the consumers while choosing a modern apparel store.

KEYWORDS: Apparel Stores, Factor Analysis, Principal component Analysis, Mean Score

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1.0 INTRODUCTION

Consumer behaviour can be defined as the study of how individuals or organizations use the available resources in hand like time, money and effort to select, buy, use, and dispose various goods, and services to satisfy their needs. Thus, consumer behaviour can be defined as the decisions and actions that influence the purchasing behaviour of a consumer. The study of consumer behaviour is considered an inter-disciplinary social science that draws upon the disciplines of anthropology, psychology, sociology, marketing and economics.

The rapid growth of the Indian economy had led to a fundamental alteration amongst the consumers. "The real average household disposable income has roughly doubled since 1985. With rising incomes household consumption has soared and a new Indian middle class has emerged."[1]. Another study by McKinsey Global Institute suggest that given the countries growth rate in 2007 the average household income was expected to triple over and become the world's fifth largest consumer economy by 2025. The report further suggests that India's middle class will grow from 50 million people in 2005 to 583 million people in2025 and their spending power will crease four-folds from about 17 trillion Indian rupees ($372 billion) in 2005 to 70 trillion Indian rupees in 2025.[2] Much of the anticipated growth in the middle class and their spending power is expected to be in the urban areas particularly the metros, mini-metros and the cities. The results from NCAER Market Information Survey of Households categorize the population based on their yearly income.The middle class comprises of Seekers and Strivers.[3]

The ever growing Indian population and its rapidly rising household income are likely to increase the consumer spending. Much of the change in consumer's spending power is felt on India's retailing sector which has also undergone a massive change from the days of haats and melas to the neighbourhood kirana shops to now existing modern formats from super-markets to malls. Besides the impact of consumer's behaviour, the momentum and dynamism to India's retailing is added by the presence of International retailers which are experimenting in the Indian market to suit the taste and needs of Indian consumers.

1.1 BACKGROUND OF THE STUDY

There has been a massive change in the Indian Retailing with the advent modern retailing formats. The dynamism and momentum is added by the presence of international retailers and the domestic players resorting to innovative step to attract and suit the needs of the Indian consumers. As a result the organised retailing sector has witnessed a rapid growth with the wave of retail boom. The change in the tastes and preference of the Indian consumers provides a tremendous opportunity for the modern formats to evolve especially in the smaller cities of the nation. The Indian retail is

expected to be one of the major retail destinations of the world and much of it can be attributed to the change in the consumer behaviour.

North-east in spite of being bountiful and beautiful the retailers were reluctant for expansion in this region primarily due to lack of information. However, with the advent of Vishal Megamart setting up a store in the Guwahati city many modern retail outlets like Big Bazaar, Pantaloons, Westside, Reliance Trends, Shoum Shoppee, Sohum Emporio, HUB, Dona Planet, Cube Central Mall, and Roodraksh Mall started came up in the region mostly in Guwahati, Assam. Assam known as gateway to the north-east has witnessed significant development in the field of shopping malls and large retail outlets. Being a Tier II City, Guwahati has been at the forefront of the revolution in the modern retail sector. The consumer response is promising with fashion and brand conscious youth segment and steady increase in purchasing power and growing consumer awareness. With the advent of modern formats and its burgeoning growth,changes in the pattern of buying habits of the consumers are expected. So, Guwahati as the area of study is proposed. This study tries to identify and analyse the factors affecting the consumers' choice of modern apparel stores.

1.2 RELATED LITERATURE

The consumer buying behaviour involves an understanding of decision variables regarding how, when, where and what to shop? Consumer behaviour is influenced by a gamut of factors like the product design, price, promotion, packaging, positioning and distribution. Also, the personal factors such as age, gender, education and income level and psychological factors such as buying motives, perception of the product and attitudes towards the product influences the consumer buying behaviour. These variables are considered important by the retailers while taking decision about the criteria related to shopping. Therefore, shoppers' response to retail marketing mix is considered as an important factor that impacts the firm's success in the long run. Shopping and consumer buying behaviour is dynamic in nature. As such it has inspired many researchers to study the various issues related to the elements of retail market. This section deals with the attributes of the store that determines the consumer's choice of a particular store.

Decision means selection of an option from two or more alternative choices. Consumers tend to differ in their evaluations of certain store attributes. Store image is one of the major determinants of store choice and is largely based on store attributes. Store attributes can be useful to determine the appropriate retail marketing strategy based on store attributes

A study conducted in Georgia and tried to determine the motives of consumers for retail patronage. The study was based on the response of 261 female shopperson the questionnaire

comprising 20 assertions related to shopping centre, 10 assertions related to lifestyle and 7 assertions of demographic variables.The study identified four factorsnamely quality of centre, presence of related services and variety under one roof and convenience which affected the motives of consumer in patronising a retail store.[4]

Another studyexamined the differences between consumers′ expectations and perceptions of service quality when shopping apparel specialty stores from a sample size of 181 respondents. Four determinants of service quality namely personal attention, reliability, tangibility and convenience emerged from the study. The findings indicate that the disparity between expectations and perceptions were maximum for the personal attention.[5]A study conducted in USA tried to observe the perception of a consumer towards store image based on the stigmatised appearance of an obese salesperson. The study concluded that the stores employing obese salespersons were perceived to be less successful by the examined group of respondents. These affected the stores image and in turn affected the intents of the consumers to visit the store.[6]

Yet another study tried to examine the four aspects of approach-avoidance behaviour namely physical, exploratory, communication, performance and satisfaction of older apparel consumers aged 65 and above. The study also examined the differences in age and shopping orientations relative to the importance of retail store attributes based on a sample of 208 older consumers residing in the Southeastern part of the USA. Five factors namely importance of store attributes, spend more money, spend more time, avoid looking around and avoid returning determined the perception of the older consumers towards the apparel stores. Further, it was found that around 32 percent of the older consumers preferred to shop department stores and mass merchandisers for clothing.[7]

A study conducted in Greece examined the factors that affected the purchasing behaviour of the Greek consumers for imported high fashion apparel over Greek designers' high fashion apparel. 200 high fashion consumers from the city of Larissa, Greece constituted the sample. 28 items relating to reasons for purchase of imported high fashion apparel were used to examine the purchasing behaviour. The results found that the consumers perceived that the imported high fashion apparel have better aesthetics, a better line and are produced from quality textiles, compared to the domestic high fashion apparel. four factors namely "status and image", "quality of the product", "marketing reasons" and "in fashion" were perceived as important in the purchase of imported high fashion apparels in Greece.[8]

Another study tried to understand how the products and store attributes influence consumer's choice of formats especially the modern retail formats. A sample of 100 urban consumers from three major cities of Punjab namely Jalandhar, Amritsar and Ludhiana was collected through stratified random sampling for two types of goods namely convenience goods and shopping goods. The retail formats considered for the study included. The results derived from the study depicts that consumers preferred malls and specialty stores to purchase various shopping goods like clothing, footwear and jewellery as compared to convenience goods. The findings indicates that modern retails were preferred because they offered quality and variety in brand, better parking facilities, and also had better trained sales personnel and better security.[9]

A study from 12 retail outlets in Hyderabad and Secunderabad through structured questionnaire identified the attributes influencing the purchasing behaviour of apparel consumers in the context of evolving organized retail industry in India from a sample of 178 apparel retail customers. The store factors identified for the study were – quality at store, appeal, assortments at the stores, fashion and store image factors besides shopper demographics and temporal aspects that were perceived to affect the store patronage behaviour of the shoppers. Seven factors namely – demand, value, diversity, credibility, concern, referral groups and style were revealed by the study. Of the identified factors style followed by value were found to be the most important attributes that influenced consumers buying behaviour in organized apparel stores in Hyderabad and Secunderabad.[10]

Another study focused on understanding the buying behaviour of the consumers and the factors affecting the buying behaviour for FMCG in Haryana from a sample of 500 respondents. The identified six factors namely – Product, Promotion, Value, Attitude, Interest and Demographics to influence the buying behaviour of the rural consumers. Of the identified factors value for money was found to be the most important factor FMCG goods. Besides quality, performance, reliability and brand emerged as critical aspects influencing the buying behaviour of the consumers.[11]Again**,** one study tried to identify the factors influencing the consumers to buy from organized and unorganized retailers from 100 customers from Udaipur district in Rajasthan. Chi-square test and weighted averages were used to analyze the data. The various identified shopping factors namely – variety of product quality, mode of payment, etc., played a crucial role in choice of retail format and hence purchase from it.[12]

A study conducted in Zimbabwe tried to quantify the effect of selected variables namely – familiarity, store image, demographic factors, and consumer characteristics on private level brand perception. The results of the survey are based from the responses of 43 respondents revealed

familiarity and store image perception have a significant and positive effect on private label brand perception.[13]

Another study attempted to identify the factors buying behaviour of consumers towards clothing/apparel in Bangladesh. The study examined the attributes of clothing/apparel and their impact on consumers buying attitude. The data collected from a sample of 125 respondents' revealedeight factors namely – preference for distinctiveness, age, generic preference for ethnic dressing, and attitude toward the value for money, attitude towards perceived risk, attitude toward towards the foreign country of origin, preference for celebrity endorsements and finally, attitude towards shopping time. The results of regression analysis show a significant positive relationship between the identified factors and consumer's preference for clothing apparel of designer brands of boutiques and fashion houses in Bangladesh.[14]

2.0 EXPERIMENTAL SECTION

This section deals with the method of data collection and analysis of the collected data for the study. The objective of the study is to identify the factors affecting choice of apparel stores in consumers which is sought to be fulfilled through the analysis of the primary data.

2.1 Methodology

To study the consumer behaviour and thereby analyzing the factors determining their store choice, a micro level study is done on consumer behaviour in modern apparel retail stores, for which a field survey is conducted in Guwahati city, Assam. For the purpose of the field work, the unit for the study comprises all the in-store consumers (shoppers) residing in different parts of Guwahati city. Guwahati is considered as a universe for the study and the information was gathered from the respondents from the city. As per provisional reports of Census India, population of Guwahati in 2011 is 962,334. However, the urban or metropolitan population is 957,352 and conducting a study for the overall population of the area under study is not an easy task. As such a structured questionnaire was used for collecting responses and for drawing conclusions for the study.In this study individuals from Guwahati city making in-store purchases and residing in different parts of Guwahati city forms the unit of observation. The age group considered for the study i.e. from teenagers to 65 years and above is found to practice in –store shopping.

For the study, sample was drawn by the method of Mall Intercept Technique from different store formats within the city. The samples selected for this study are the consumers having access to both modern and traditional apparel retail stores in Guwahati city. The sample for the study was selected from the six different zones namely West, Central, South, East, Dispur and Lakhara Zones

of Guwahati city under the Guwahati Municipal Corporation. A total of 530 respondents were contacted using mall intercept technique. Only the completed questionnaire was used for further analysis. Of the 530 questionnaire 18 questionnaire were found to incomplete with partial information and hence was excluded from the survey.Therefore, a sample size of 512 was used for the present study.

The primary data collected through a self-administered structured questionnaire comprised of dichotomous type, multiple choice and 5 point likert scale.A total of 30 assertions were made relating to various store attributes like the products offered in the store, the ambience of the store, the behaviour of the employees etc. A five point likert scale was used to know the level of agreement or disagreement of the respondents with the assertions made. 1= strongly agree, 5= strongly disagree.The questionnaire was pre-tested by administrating to 30 consumers of Guwahati city through a pilot survey to judge the reliability and validity of the questionnaire. Based on the pilot survey necessary modification in the questionnaire was made in terms of elimination of ambiguous statements and highly correlated statements on the factors affecting consumer's choice of stores, change of format of presentation of the questionnaire and deleting areas of monotonous responses. As such in the final draft of the questionnaire only 25 statements relating to store factors was retained and the results were drawn based on the retained assertions.

To identify the factors affecting consumer's choice of store attributes exploratory factor analysis was used. Further the mean scores were used to identify which factor had the major impact on consumer's behaviour.

The mean score of the factors give an idea of which factors is considered most important by the consumers while choosing particular apparel retail store. The factors obtained by the method of Exploratory Factor Analysis have standardized factors with mean zero and standard deviation 1. Therefore, a new variable (factor) was created using the statements loaded in the respective components by taking the average of the variables (statements for the particular component).Thus computing six factors gives six mean scores which does not equal to zero and can be used for further analysis. The details of the analysis are presented in the sections that follow.

2.1.1 Objective

    (i)   To identify the factors affecting choice of apparel stores in consumers

    (ii)   To check which of these factors is more important to the consumers while choosing a particular apparel retail store

2.2 *Measuring the Internal Consistency and Reliability of The Construct*

To measure the consistency and reliability of the construct for the present study, Cronbach's alpha (α) was calculated. Depending on nature of a study as a rule of thumb a reliability coefficient of 0.9 is considered excellent, a coefficient of 0.8 as very good and 0.7 as adequate.

Table No. 1: "Overall Reliability Statistics for Constructs"

S. No	Cronbach's Alpha	No. Of Items	No. Of Cases
1	.747	25	512

Source: Field Study

As seen from table 1 Cronbach Alpha (α) is estimated to be .747 for all the 25 assertions relating to store attributes. This can be considered to be in a very good range. Since Cronbach's alpha (α) is a test of reliability, therefore the least correlated items are usually deleted. But the decision to delete the variables is based on their contribution to the overall research. Hence the variable loading, communality, total variance explained needs to be taken into consideration before deleting any least correlated item. So, all the 25 variables were retained for further analysis because the deletion of any variables would have led to the loss of data and the alpha value would have fallen below 0.70 to an unacceptable limit.

Table 2 gives an idea about the reliability analysis of the individual variables in terms of the value of alpha if an item were deleted.

In the table 2 the column labeled **Corrected Item-Total Correlation** gives the correlations between each item and the total score from the questionnaire. If the scale were reliable all the items should correlate with the total. So any item less than about 0.3 does not correlate very well with the overall scale and hence needs to be dropped from the analysis. As we can see in the table 2 the corrected item total correlation for most of the items do not correlate very highly. But if we drop these items the Cronbach's alpha (α) falls below .70 and the scale becomes unreliable. So we consider our Cronbach's alpha (α) reliable and retain all the 25 items.

Again in table 5.2 for the column labeled **Cronbach's alpha (α)if Item is deleted**gives the values of the overall alpha **(α)** if that item isn't included in the calculation. As such, they reflect the change in Cronbach's alpha (α) that would be seen if a particular item were deleted. The overall value of alpha **(α)** for our studyis.747, and so all values in this column should be around that same value. Therefore, any item that result in substantially greater value than the overall alpha **(α)** needs to be deleted from the scale to improve reliability. But in our study all the items have their values of

alpha more or less around the overall alpha. This indicates that all items are positively contributing to the overall reliability. So we retain all the 25 items for further analysis.

<p align="center">Table No. 2: "Reliability Analysis for Individual Variables- (Alpha)"</p>

S. No	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	Better Product Quality	.496	.722
2	Ease of Movement within Store	.216	.743
3	Trial Rooms	.010	.753
4	Better Product Range/Variety	.376	.732
5	Employees neat and clean	.349	.736
6	Store Layout And Design	.238	.743
7	Knowledge of Store Personnels About Store items	.230	.742
8	Quick Consumer Services	.269	.740
9	Good fitting Trial Rooms	.307	.738
10	Branded Products	.421	.729
11	Security to Personal Belongings	.223	.743
12	Acceptance of different modes of Payment	.125	.748
13	Visually Appealing	.373	.732
14	Clean and Convenient Rest Rooms	.258	.741
15	Better Parking Facilities	.399	.731
16	Low Priced Specials	.447	.728
17	Non Crowding	.403	.731
18	Good lighting	-.023	.753
19	Positive Store Ambience	.341	.735
20	Regular Information about New Arrivals to Consumers	.301	.738
21	Accessible Store Location	.238	.742
22	Employees are Courteous and Well-behaved	.325	.737
23	Operating Hours	.245	.741
24	Higher Prices in Relation to Quality	.142	.747
25	Proper Display of Latest Items	.148	.752

Source: Field Study

2.3 Exploratory Factor Analysis

Exploratory factor analysis was used to identify the factors affecting consumer's choice of store attributes. But before that some prerequisite tests to measure sampling adequacy and multicollinearity was done as a part of preliminary analysis.

2.3.1 Preliminary Analysis: Sampling Adequacy of Data and Problem of Multicollinearity

As a part of preliminary analysis to identify the factors affecting choice of stores, factor analysis was performed on the 25 identified variables on the questionnaire and the correlation matrix was obtained. The matrix so obtained was found to be "positive definite" and so both **Kaiser–Meyer–Olkin measure of sampling adequacy** and **determinant** was obtained. Further to ascertain our results the sample was adequacy was also checked. The necessary sample size for factor analysis as per rule of thumb is 10–15 participants per variable. The sample size for the study was found to be adequate because there are 512 samples for the identified 25 constructs. Besides, **Comrey and Lee (1992)** class 300 as a good sample size, 100 as poor and 1000 as excellent.

The correlation matrix and the determinant value were checked for multicollinearity. For factor analysis to work and generate desired results variables under consideration needs to correlate fairly but not perfectly. and any variables that do not correlate or correlates perfectly are eliminated from the analysis. In our study the 25 variables under consideration correlates fairly but not perfectly as such can be used for further analysis. The correlation matrix was checked for pattern relationships and variables greater than 0.3 was checked. In our analysis only a few variables had values greater than 0.3 and thus can be used for further analysis. To check for multicollinearity in the data values greater than 0.9 were checked, but none were found in the retained 25 variables for the study. Therefore, from the correlation matrix the model seems to be good fit for the study.

Next the determinant of the correlation matrix was checked and it was found to be 2.37E-006 (which is 0.00000237) less than the necessary value 0.00001. Haitovsky's (1969) chi-square value to ascertain whether the determinant is 0 was also calculated. The equation is given as –

$$\text{Haitovsky's} \chi_H^2 = \left[1 + \frac{(2p+5)}{6} - N\right] \ln(1 - |R|)$$

Where –

pis the number of variables in the correlation matrix; *N* is the total sample size; |*R*| is the determinant of the correlation matrix: and lnis the natural logarithm. The resulting test statistic has a chi-square distribution with p (p − 1)/2 degrees of freedom.

For the sample considered for the study, p= the number of variables in the correlation matrix=25; N= the total sample size= 512; |*R*|=the determinant of the correlation matrix= 0.00000237

Therefore,

$$\text{Haitovsky's}\chi_H^2 = \left[1 + \frac{(2 \times 25 + 5)}{6} - 512\right]\ln(1 - .00000237)$$

$$= [1 + 9.17 - 512]\ln(0.99999763)$$

$$= (-501.83)(-.00000237)$$

$$= 0.001189$$

This test statistic has p (p − 1)/2 degrees of freedom (df) which is equal to 25(25− 1)/2= 300 df. and for 300 df the critical values are 341.40 at 0.05 level of significance. Further, for 300 df the critical values are 359.91 at 0.01 level of significance. And it is seen that the observed chi-square is much smaller than these values. So it is concluded that the determinant is not significantly different from zero.

Thus, the result the determinant and Haitovsky's chi-square test shows that multicollinearity is not a problem for these data. Thus it can be concluded that the all the statements on store attributes correlate reasonably well with all others and none of the correlation coefficients are excessively large. As such all the 25 statements can be retained. Hence, the model is considered best fit for the present study.

As a measure of Sampling Adequacy of Data: Kaiser–Meyer–Olkin measure of sampling adequacy and Bartlett's test of Sphericity was checked. Kaiser (1974) recommends a bare minimum of 0.5 and that values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb (Hutcheson & Sofroniou, 1999).

Table No. 3: "Measures of Sampling Adequacy"

S. No	Sampling Measure		Value
1	Kaiser–Meyer–Olkin measure of sampling adequacy		.631
2	Bartlett's test of Sphericity	(Approx. Chi Square)	6.499E3
3		df	300
4		Sig	.000

Source: Field Study

For the study the **Kaiser–Meyer–Olkin measure of sampling adequacy** 0.631, this falls in the recommended values of minimum 0.5. Thus it can be concluded that sample size is adequate.

The **Bartlett's test of Sphericity** teststhe null hypothesis that the original correlation matrix is an identity matrix and has a significance value less than .05. The Bartlett's test is significant ($p < .001$) for the data under consideration and thus factor analysis is appropriate for the present study.

2.4 An Initial Solution using Principal Component Analysis

After checking the reliability of scale and suitability of data adequacy **Exploratory FactorAnalysis** using **Principal Component Analysis** was used to extract and identify the factors that influence consumer behaviour in the choice of retail stores. The purpose of this study is to explore the data, so exploratory factor analysis is used. The technique used for exploring the data is principal component analysis. For extracting the factors linear components within the data set was determined by calculating the Eigen values of the R-matrix. Factors with Eigen values greater than 1 are retained for further analysis. However there are two criterions that are suggested to decide which factors to retain for further analysis – Eigen values and Scree Plot. But which criterion to use is debatable so the present study uses both the criterions and a comparison is made between both the criterions.

2.4.1 Eigen Values

The Eigen values associated with each factor represent the variance explained by that particular linear component. Table 4 lists the Eigen values associated with each linear component (factor) before extraction in the column labeled as Initial Eigen values, after extraction in the column labeled as Extraction Sums of Squared Loadings and after rotation in the column labeled as Rotation Sums of Squared Loadings.

Before extraction as seen in the column labeled Initial Eigen values in Table 4, 25 linear components within the data set were identified. The first few factors especially factor 1 explain 15.589% of the total variance while the subsequent factors explain only small amounts of variance. Again in the column labeled Extraction Sums of Squared Loadings all factors with Eigen values greater than 1 are extracted and 6 (six) factors are retained. The percentage of variance explained in the column labeled Extraction Sums of Squared Loadings is same as the percentage of variance explained in the column Initial Eigen values with the difference that the factors with Eigen values less than 1 (and also 3 Eigen values greater than one due to specification of 6 factors) are discarded and hence after the 6th factor the table is blank.

Table No.4: "Total Variance Explained"

S. No	Component	Initial Eigen Values			Extraction sums of squared loadings			Rotation sums of squared loadings		
		Total	% of variance	Cummulative %	Total	% of variance	Cummulative %	Total	% of variance	Cummulative %
1	1	3.897	15.589	15.589	3.897	15.589	15.589	2.519	10.075	10.075
2	2	2.385	9.541	25.130	2.385	9.541	25.130	2.342	9.367	19.442
3	3	2.092	8.367	33.497	2.092	8.367	33.497	2.204	8.818	28.260
4	4	1.866	7.465	40.962	1.866	7.465	40.962	2.179	8.717	36.976
5	5	1.635	6.542	47.504	1.635	6.542	47.504	2.043	8.173	45.149
6	6	1.427	5.708	53.212	1.427	5.708	53.212	2.016	8.063	53.212
7	7	1.154	4.616	57.829						
8	8	1.130	4.520	62.348						
9	9	1.071	4.285	66.634						
10	10	.986	3.944	70.578						
11	11	.940	3.759	74.337						
12	12	.878	3.511	77.848						
13	13	.805	3.220	81.067						
14	14	.712	2.847	83.914						
15	15	.650	2.600	86.514						
16	16	.622	2.487	89.001						
17	17	.608	2.433	91.433						
18	18	.488	1.954	93.387						
19	19	.432	1.727	95.115						
20	20	.388	1.553	96.668						
21	21	.299	1.194	97.862						
22	22	.224	.898	98.760						
23	23	.159	.636	99.396						
24	24	.150	.598	99.995						
25	25	.001	.005	100.000						

Source: Field Study

Note: Extraction Method: Principal Component Analysis

The third part of the table labeled Rotation Sums of Squared Loadings displays the Eigen values of the factors after rotation. Rotation has the effect of optimizing the factor structure. Before rotation, factor 1 accounted for considerably more variance than the remaining four factors i.e.15.589% compared to 9.541% (factor 2), 8.367% (factor 3), 7.465% (factor 4) ,6.542%(factor 5) and 5.708%(factor 6) respectively. But after extraction factor 1 accounts for only 10.075% of variance compared to 9.367% (factor 2), 8.818% (factor 3), 8.717% (factor 4), 8.173 %(factor 5) and 8.063 % (factor 6) respectively.

2.4. 2 SCREE PLOT

Based on Eigen values 9 factors are extracted as is evident from TableNo**.** 4: Total variance Explained. Based on Eigen Values criterion factors with Eigen values greater than 1 are retained. To check the applicability of Eigen Value to decide which factors to retain the technique Of Scree Plotadvocated by **Cattell (1966)** is used. The cutoff point for selecting factors based on Scree plot is the point of inflexion of the curve. Factors to the left of inflexion point excluding the factor at the point of inflexion itself are retained.
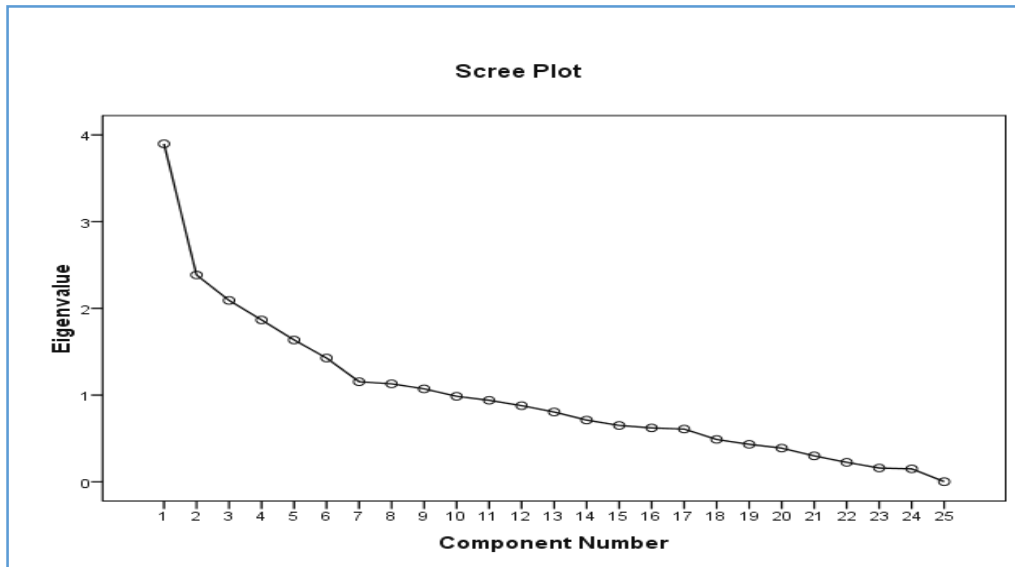

Figure No. 1: "Scree Plot"

Source: Field Study

As seen in the figure 1 there are two point of inflexion one at component 2 and the other at component 7. It is only after the second point of inflexion i.e. Component 7 there is a sharp descent in the curve followed by a tailing off. So we retain 6 components on the curve before the second point of inflexion i.e. before component 7 after comparing the results based on both Scree plot and Kaiser Criterion.

2.4.3 COMMUNALITY

The communalities before and after extraction were computed. The proportion of common variance present in a variable is known as the **communality**. As such, a variable that has no specific variance (or random variance) would have a communality of 1; a variable that shares none of its variance with any other variable would have a communality of 0.

Table No.5: "Communalities"

S. No	Variables	Initial	Extraction
1	Better Product Quality	1.000	.535
2	Ease of Movement within Store	1.000	.200
3	Trial Rooms	1.000	.214
4	Better Product Range/Variety	1.000	.741
5	Employees neat and clean	1.000	.703
6	Store Layout And Design	1.000	.482
7	Knowledge of Store Personnels About Store items	1.000	.391
8	Quick Consumer Services	1.000	.565
9	Good fitting Trial Rooms	1.000	.223
10	Branded Products	1.000	.468
11	Security to Personal Belongings	1.000	.453
12	Acceptance of different modes of Payment	1.000	.358
13	Visually Appealing	1.000	.605
14	Clean and Convenient Rest Rooms	1.000	.206
15	Better Parking Facilities	1.000	.956
16	Low Priced Specials	1.000	.532
17	Non Crowding	1.000	.958
18	Good lighting	1.000	.258
19	Positive Store Ambience	1.000	.548
20	Regular Information about New Arrivals to Consumers	1.000	.628
21	Accessible Store Location	1.000	.843
22	Employees are Courteous and Well-behaved	1.000	.719
23	Operating Hours	1.000	.851
24	Higher Prices in Relation to Quality	1.000	.381
25	Proper Display of Latest Items	1.000	.486

Source: Field Study
Note: Extraction Method: Principal Component Analysis

The table 5 represents of communalities before and after extraction through principal component analysis. Principal component analysis works on the assumption that all variance is common and before extraction. The communalities are all 1 as seen in the column labeled Initial. The communalities in the column labeled Extractionreflect this common variance. So, for the data set we can say that 53.5% of the variance associated with statement 1 is common.

2.5 EXAMINATION OF FACTOR LOADINGS

After the factors are extracted the loadings of the factor are examined. To interpret factors it is necessary to decide which factors loadings are worth considering. **Hair *et al.* (2011)** suggests factor loadings with .50 and higher as very significant, .40 and higher to be important and .30 and

higher to be significant. To examine the factor loadings the component matrix and the rotated component matrix are explained.

2.5.1 COMPONENT MATRIX

The component matrix before rotation contains the loadings of each variable onto each factor. All loadings less than 0.3 are suppressed in the output.

Table No. 6: "Component Matrix"

S. No	Variables	Component					
		COM 1	COM 2	COM 3	COM 4	COM 5	COM 6
1	Better Product Quality	.588	-.360				
2	Ease of Movement within Store			.307			
3	Trial Rooms			.351			
4	Better Product Range/Variety	.509		.320		-.390	.461
5	Employees neat and clean	.491	.601				
6	Store Layout And Design		-.548				
7	Knowledge of Store Personnels About Store items	.341	.487				
8	Quick Consumer Services	.345	.344		.454		
9	Good fitting Trial Rooms	.371					
10	Branded Products	.551					.363
11	Security to Personal Belongings				.555		
12	Acceptance of different modes of Payment				.515		
13	Visually Appealing	.504		-.381		-.352	
14	Clean and Convenient Rest Rooms	.348					
15	Better Parking Facilities	.559			-.459	.612	
16	Low Priced Specials	.550				-.381	
17	Non Crowding	.562			-.460	.611	
18	Good lighting		.419				
19	Positive Store Ambience	.470		-.370		-.303	
20	Regular Information about New Arrivals to Consumers	.378	.394		.516		
21	Accessible Store Location	.301		.714			-.459
22	Employees are Courteous and Well-behaved	.479	.616				
23	Operating Hours	.304		.727			-.455
24	Higher Prices in Relation to Quality			.409			.346
25	Proper Display of Latest Items		-.514		.311		

Source: Field Study

Note: Extraction Method: Principal Component Analysis (6 components extracted)

It can be seen in table 6 that before rotation most variables load highly onto first factor. 6 factors are extracted at this stage but Factor 1 accounts for most of the factors. To overcome this problem Factor rotations are suggested.

2.5.2 Factor Rotation (Rotated Component Matrix)

The technique of factor rotation was used to differentiate between factors and make interpretation comprehensive. For the present study varimax rotation is used because the study aims at identifying the factors and simplifies the interpretation of factors.

Table No.7: "Rotated Component Matrix"

S. No	Variables	Component					
		COM 1	COM 2	COM 3	COM 4	COM 5	COM 6
1	Better Product Quality		.347	.407	.334		
2	Ease of Movement within Store						.356
3	Trial Rooms		-.364				
4	Better Product Range/Variety			.832			
5	Employees neat and clean	.817					
6	Store Layout And Design	-.327	.568				
7	Knowledge of Store Personnels About Store items	.601					
8	Quick Consumer Services	.306				.677	
9	Good fitting Trial Rooms						
10	Branded Products			.608			
11	Security to Personal Belongings					.633	
12	Acceptance of different modes of Payment					.584	
13	Visually Appealing	.317	.672				
14	Clean and Convenient Rest Rooms		.397				
15	Better Parking Facilities				.966		
16	Low Priced Specials			.648			
17	Non Crowding				.966		
18	Good lighting		-.370				
19	Positive Store Ambience	.336	.644				
20	Regular Information about New Arrivals to Consumers	.333				.718	
21	Accessible Store Location						.914
22	Employees are Courteous and Well-behaved	.831					
23	Operating Hours						.917
24	Higher Prices in Relation to Quality			.531			
25	Proper Display of Latest Items	-.319	.571				

Source: Field Study

Note: Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalisation (Rotation converged in 6 iterations)

Table 7 gives the rotated component matrix which contains the same information as Table 6 for Component Matrix except for the fact that it is calculated after rotation. Here, factor loadings less than 0.3 are suppressed and the variables are sorted by size. In the table 6 the relative

importance of all the 6 factors are maximized after rotation as compared to the unrotated solution before rotation where most variables loaded highly onto the first factor.

2.6 RESULTS AND DISCUSSION

Cronbach Alpha (α) is estimated to be .747 for all the 25 assertions relating to store attributes. This can be considered to be in a very good range.

A principal component analysis (PCA) was conducted on the 25 items with varimax rotation. The Kaiser–Meyer–Olkin (KMO) measure confirmed the sampling adequacy for the analysis with KMO = .631, which is above the acceptable limit of 0.5.Besides it was also found that all KMO values for individual items were > .05, which is well above the acceptable limit of 0.5 (Field, 2009).

Bartlett's test of Sphericity χ^2 (300) = 6.499E3, $p < .001$, indicated that correlations between items were sufficiently large to apply Factor Analysis using Principal Component Analysis. An initial analysis was run to obtain Eigen values for each component in the data.

It was found that nine components had Eigen values over Kaiser's criterion of 1 and in combination explained 53.212% of the variance. However, the Scree plot showed two points of inflexions that justified retaining only 6 components. Given the sample size, and the divergence of the Scree plot and Kaiser's criterion on the number of components to be retained, 6 components were retained in the final analysis.

Table 7 titled Rotated Component Matrix shows the factor loadings after rotation. The items that cluster on the same components suggest that component 1 represents **Employees Attitude**, component 2 **Store Atmospherics**, component 3 **Merchandise**, component 4 **Store Facilities,** component 5 **Consumer Service** and component 6 **Convenience**.

Based on the results derived from factor analysis Table 8 summarises the findings on the factors that affect the choice of apparel stores in consumers and also gives the mean scores and standard deviations of the derived factors.

Table No.8: "Summary of the Factors, Mean Scores and Standard Deviations that Affect Choice of Apparel Stores in Consumers"

Components	Variables/Dimensions/Statements	Factor Loadings	Total Variance Explained	Mean	Standard Deviation
C1 Employees Attitude	Employees neat and clean	.817	10.075	2.3854	.57101
	Knowledge of Store Personnels About Store items	.601			
	Employees are Courteous and Well-behaved	.831			
C2 Store Atmospherics	Store Layout And Design	.568	9.367	2.6543	.42837
	Trial Rooms	-.364			
	Clean and Convenient Rest Rooms	.672			
	Visually Appealing	.397			
	Positive Store Ambience	.644			
	Proper Display of Latest Items	.571			
	Good lighting	-.370			
C3 Merchandise	Better Product Quality	.407	8.818	2.6477	.60777
	Better Product Range/Variety	.832			
	Branded Products	.608			
	Low Priced Specials	.648			
	Higher Prices in Relation to Quality	.531			
C4 Store Facilities	Better Parking Facilities	.966	8.717	2.6445	.54325
	Non Crowding	.966			
C5 Consumer Services	Quick Consumer Services	.677	8.173	2.3359	.51393
	Security to Personal Belongings	.633			
	Acceptance of different modes of Payment	.584			
	Regular Information about New Arrivals to Consumers	.718			
C6 Convenience	Ease of Movement within Store	.356	8.063	2.5124	.48264
	Accessible Store Location	.914			
	Operating Hours	.917			

Source: Field Study

The factors as evident from Table 8 are explained.

Factor 1 Employees attitude

Employees' attitude and looks can make or break a store image. Consumers are quite sensitive towards the behaviour of the retailers or the behaviour of their employees. As such employee's attitude accounts for the maximum variance of **10.075** and is considered as an important factor that affects the choice of apparel store in consumers. Three statements namely **employees neat and clean (.817), Knowledge of Store Personnels about Store Items (.601) and Employees Courteous and Well Behaved (.831)** loaded significantly to the **Factor Employees attitude**. Of the three statements, **Employees Courteous and Well Behaved** is the most important dimension.

Factor 2 Store Atmospherics:

Consumers give much importance to the outer and inner look of the stores and as such **Store Atmospherics** has accounts for **9.367 %**of the total variance. Seven statements namely **Store Layout and Design, Trial Rooms, Clean and Convenient Rest Rooms, Visually Appealing, Positive Store Ambience, Proper Display of Latest Items and Good Lighting** loaded significantly to the **Store Atmospherics.** Of these seven statements **Clean and Convenient Rest Rooms** (**.672)** followed by **Positive Store Ambience** (**.644)** are found to be the most important dimensions.

Factor 3 Merchandise:

This factor explains **8.818 %** of the total variance. Good quality and variety in apparel is deemed as the most important factors by the consumers. It have five dimensions namely **Better Product Quality, Better Product Range/Variety, Branded Products, Low Priced Specials, Higher Prices in Relation to Quality** loaded significantly to the factor **Merchandise.** Of these five dimensions **Better Product Range/Variety(.832)** followed by **Low Priced Specials** (**.648)** are found to be the most important dimensions. The respondents were in agreement that the modern formats offered better variety in products.

Factor 4 Store Facilities

Parking is a massive problem for people residing in cities. As such consumers are attracted towards stores that provides convenient parking space. Further consumers are engrossed in shopping where there are fewer crowds. As such **Store Facilities** also are an important factor that affects the choice of apparel store in consumers and explains **8.717%** of the total variance. Two dimensions **Better Parking Facilities** and **Non- Crowding** loads significantly into the factor store facilities and both the dimensions are found to be equally important with a factor loading of **.966** respectively.

Factor 5 Consumer Services

Although consumers prefer to shop in modern apparel stores and are even willing to pay a little more   to have an apparel of their choice but they prefer stores with quicker consumer service facilities. In the study **Consumer Service Facilities** accounted for **8.173** of the total variance and have five dimensions namely **Quick Consumer Services, Security of Personal Belongings, Acceptance of Different Modes of Payment and Regular Information about New Arrivals to Consumers.** Of the 4 dimensions Regular Information about **New Arrivals to Consumers** with a factor loading of **.718** emerged as the most important dimension followed by **Quick Consumer Services** with a factor loading of **.677**.

Factor 6 Convenience

Convenience which accounts for **8.063%** of the total variance emerged as another important factor that influences consumer's choice of stores. The location of the stores plays an important role in influencing the consumer's choice of stores. The closer is the store to a consumer's residence it is more likely that the consumer will choose that store over other stores located far away. Similarly the operating hours of the store also positively improves the store image and thus affects consumer's preference for that store. Three dimensions namely, **Ease of Movement within Store, Accessible Store Location** and **Operating Hours** loaded significantly to the factor **Convenience** of which **Operating Hours** with a factor loading of **.917** and **Store Location** with a factor loading of **.914** emerged as the most important dimensions

The mean scores, which explain the most important factors explaining the consumer behaviour in the choice of store apparels. Although factor 1 i.e. **Employees Attitude** explains the maximum variance **(10.075)** but the factor 2 **Store Atmospherics (2.6543)** has the highest mean score. This makes apparent that while choosing a particular apparel retail store consumers attach more importance to **Store Atmospherics** followed by Factor 3 **Merchandise** (**2.6477**) and Factor 4 **Store Facilities (2.6445)**.

The standard deviation tells us how the measurements for a group of variables are spread out from the average (mean) or expected value. Table 6.1 reveals that factor 2 **Store Atmospherics (.42837**) has the lowest standard deviation. This means that the opinion of all the respondents regarding store atmospherics is similar. All the sampled respondents regard store atmospherics to be the most important factor while choosing a modern apparel store. The look and feel of the store has a positive impact on the consumer behaviour.

However Factor 3 **Merchandise (.60777)** has the highest standard deviation which means that the consumer's opinion regarding merchandise as the most important factor is somewhat dissimilar. While for some of the respondents it might be the second most important factor for the other respondents it the same might not be true. But based on the mean scores it can be concluded that Merchandise is the second most important factor for a consumer while choosing a modern apparel store.

5.8 CONCLUSION:

This chapter explores the various store attributes that affects consumers choice of store. 25 assertions relating to various store attributes were given to check the perceptions of the consumers towards the stores. The reliability statistics Cronbach Alpha (α) is estimated to be .747 for all the 25 assertions relating to store attributes which considered being in a very good range. The Kaiser–Meyer–Olkin (KMO) measure confirmed the sampling adequacy for the analysis with KMO = .631, which is above the acceptable limit of 0.5. A principal component analysis (PCA) was conducted on the 25 items with varimax rotation 6 components namely **Employees Attitude**, **Store Atmospherics**, **Merchandise**, **Store Facilities, Consumer Service** and **Convenience**. Amongst the 6 components Employees attitude accounts for the maximum variance of **10.075.** However the exploratory factor analysis only explores and describes the factors consumers considers important in choice of modern apparel store. But it does not indicate which factors play a primary role in affecting consumer behaviour and their choice of stores. So to draw conclusions about the most important factor affecting consumer's behaviour, the mean scores for the factors obtained through exploratory factor analysis was calculated. This chapter probes into the most important store attributes that affects consumers choice of store. Six factors influencing consumer's behaviour in the choice of apparel stores were identified by factor analysis. Of the identified factors employees' attitude explained the maximum variance. The variance explained only gives weightage of a factor in terms percentage of the overall variance but does not tell anything about the impact of these factors on consumer behaviour. So the mean scores were used to identify the most important factor that influenced consumer behaviour. The results of mean score analysis concludes that the consumers were in agreement that **Store Atmospherics** followed by **Merchandise** were the most important factors for the consumers while choosing a modern apparel store.

REFERENCES:

1. Shukla, R.K., Dwivedi, S.K., and Sharma, A."The Great Indian Middle Class: Results from NCAER Market Information Survey of Households, National Council of Applied Economic Research (in association with Business Standard)" [online]. 2004 Available from: URL: http://www.ncaer.org/Downloads/PublicationsCatalog.pdf

2. The 'Bird of Gold': The Rise of India's Consumer Market. McKinsey &Company McKinsey Global Institute 2007.

3. Shukla, R.K., Dwivedi, S.K., and Sharma, A."The Great Indian Middle Class: Results from NCAER Market Information Survey of Households, National Council of Applied Economic Research (in association with Business Standard)" [online]. 2004 Available from: URL: http://www.ncaer.org/Downloads/PublicationsCatalog.pdf

4. Bellenger, D.N., Robertson, D.H. and Greenberg B.A. Shopping centre patronage motives.Journal of Retailing.1977; 53(2): 29-38.

5. Gagliano, B.K. and Hathcote, J. Customer Expectations and Perceptions of Service Quality in Retail Apparel Specialty Stores. Journal of Services Marketing. 1994; 8(1): 60-69.

6. Klassen, M.L., Dennis Clayson, D. and Jasper, C.R. Perceived effect of a salesperson's stigmatized appearance on store image: an experimental study of student's perceptions. The International Review of Retail, Distribution and Consumer Research. 1996; 6(2): 216-224.

7. Moye, L.N. and Giddings, V.L. An examination of the retail approach-avoidance behavior of older apparel consumers. Journal of Fashion Marketing and Management: An International Journal.2002; 6 (3):259-276.

8. Kamenidou, I., Mylonakis, J. and Nikolouli, K.An exploratory study on the reasons for purchasing imported high fashion apparels: The case of Greece. Journal of Fashion Marketing and Management: An International Journal, 2007; 11 (1): 148-160.

9. Jhamb, D. and Kiran, R. Emerging Retail Formats and It's Attributes: An Insight to Convenient Shopping. Global Journal of Management and Business Research. 2012; 12 (2): 63-71.

10. [10] Prasad, Y.R. A study on attributes influencing the purchasing behaviour of apparel consumers in organized outlets. African Journal of Business Management. 2012; 6(45):11294-11303.

11. [11] Sulekha and Mor, K. An Investigation of Consumer Buying Behavior for FMCG: An Empirical Study of Rural Haryana. Global Journal of Management and Business Research Marketing. 2013; 13(3): 45-49.

12. Talreja, M. and Jain, D. Changing Consumer Perceptions Towards Organized Retailing From Unorganized Retailing – An Empirical Analysis. International Journal of Marketing, Financial Services & Management Research. 2013; 2(6): 73-85.

13. Nyengerai, S., Jaravaza, D., Mukucha, P., Chirimubwe, R., and Manjoro, E. Determinants of Perception towards Private Label Brands in Zimbabwe: The Role of Familiarity, Store Image, Demographic Factors and Consumer Characteristics. Greener Journal of Business and Management Studies. 2013; 3(5): 224-230.

14. Ahmed, N. and Ahmed, N. Consumer Behavior towards Clothing Apparel of Designer Brands: A Study on the Boutiques and Fashion Houses in Bangladesh. Journal of Business Studies. 2013; XXXIV (3): 197-217.