CHAPTER 5
FINDINGS, DISCUSSION AND RECOMMENDATIONS

The objectives of this research study has been achieved and the data collected from the survey was analyzed and inferences drawn in the previous chapters.

5.1 FINDINGS

5.1.1 PROFILE OF RESPONDENTS

The overall respondents profile for each of the two cities - Chennai and Coimbatore and for each of the two retail formats – kiranas and combination stores were tabulated (Table7). Each cell in the table had more than 30 respondents. Nearly two thirds of the respondents in the age group 36 to 45 years shopped at a kirana store. Around 58% of the respondents in the 46 to 55 years age group also shopped at a kirana. However this trend is reversed in all other age groups with more number of respondents shopping at a combination store than a kirana. The distribution of males among kiranas and combination stores were almost equal but 57% of the female respondents shopped at a kirana. A majority of Single respondents (65%) preferred to shop at a combination store while 57% of married respondents shopped at a kirana. There was an increase in the number of shoppers at kiranas with a decrease in income and shift to combination stores with an increase in incomes. The same trend was seen with ‘monthly purchase volumes’. Respondents with lesser monthly purchase volumes (less than Rs. 2000) preferred to shop at a kirana but higher the purchase volumes, more the shift to combination stores.

Table 8 looked at respondents’ profiles city wise. A majority of Chennai respondents between the ages 36 to 55 years shopped at kiranas while a majority of all other age
groups shopped at a combination store. However, in Coimbatore, a higher percentage of respondents from all age groups shopped at a kirana. In Chennai, majority of males (63%) shopped at a combination store while 58% of the females shopped at a kirana. In Coimbatore, majority of both males and females shopped at a kirana. An overwhelming majority of single respondents (94%) and 55% of the married sample in Chennai shop for their monthly groceries at a combination store. In Coimbatore, single respondents were more or less equally distributed among kiranas and combination stores where as 60 % of the married respondents shopped at kiranas. In Chennai, majority of the respondents with incomes ranging from Rs. 10001 to Rs. 30000 shopped at a kirana. In Coimbatore, a majority of the respondents with incomes up to Rs. 20000 shopped at a kirana but with increasing incomes, there was a shift from kirana to combination store. At lower purchase volumes up to Rs. 2000, a majority of respondents shopped at a kirana, but with increasing purchase volumes, there was a shift seen from kiranas to combination stores irrespective of which city they belonged to.

5.1.2 DESCRIPTIVE STATISTICS

Univariate summary statistics like the mean, standard deviation, measure of service adequacy (MSA) and measure of service superiority (MSS) for the five dimensions of Service Quality – Reliability, Responsiveness, Assurance, Empathy and Tangibles were calculated for overall sample data (Table 9). The mean values for all perception variables for the overall sample were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. Responsiveness Dimension of Service Quality exhibited the highest mean reflecting a higher level of satisfaction. Empathy and Tangibles dimensions scored the lowest reflecting a lower level of satisfaction with these
dimensions. The mean values for all MSA (Measure of Service Adequacy) and MSS (Measure of Service Superiority) variables were all below 1. However all MSS scores were negative which implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.

Table 10 tabulates the univariate summary or descriptive statistics of the two cities Chennai and Coimbatore for the five dimensions of Service Quality. The mean values for all perception variables for both Chennai and Coimbatore were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The mean values for MSA for Chennai respondents were between 1.0 and 1.4 and for Coimbatore respondents were below 1. Thus Chennai respondents had a larger Perceived – Adequate gap than Coimbatore respondents. The mean values for MSS for Chennai respondents were between -0.7 and -1.1. The reliability, assurance and empathy dimensions had a higher MSS gap than responsiveness, tangibility and overall service quality. All MSS scores for Coimbatore were above -1.0. Chennai respondents also had a larger Perceived – Desired gap than Coimbatore residents. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.
The mean values for all perception variables for both Kiranas and Combination Stores (Table 11) were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The mean values for MSA for Kirana respondents were between 1.1 and 1.6 and for Combination respondents were below 1. Thus Kirana respondents had a larger Perceived – Adequate gap than Combination store respondents.

The mean values for MSS for Kirana respondents were between -0.6 and -1.1. The smallest Perceived – Desired gap was for the responsiveness dimension and highest was for Empathy among Kirana respondents. All MSS scores for Combination stores were above -1.0. Combination stores had a larger Perceived – Desired gap on two dimensions – responsiveness and assurance than Kiranas. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.

The mean values for all perception variables for all the age groups (Table 12) were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The MSA mean values for the age group < 25 years was the lowest among all the age groups and ranged from 0.4 to 0.62; thus the ‘< 25 yrs’ age group had the smallest Perceived – Adequate gap compared to all other age groups. The MSA mean value for the ‘36 - 55 yrs’ age groups was all above 1 and has the largest Perceived – Adequate gap. The MSS mean values for all the age groups were negative for all the
dimensions. The MSS mean values for the younger age groups were slightly lesser than the ‘36 – 55 yrs’ group. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.

The mean values for all perception variables for both male and female respondents (Table 13) were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The mean values for MSA for male respondents were less than 1 and for female respondents were above 1. The female respondents had a larger Perceived – Adequate gap than male respondents. The MSS mean values for both male and female respondents were similar. All MSS scores for both male and female respondents were above -1.0. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.

The mean values for all perception variables for both single and married respondents (Table 14) were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The mean values for MSA for single respondents were less than 0.8 and for married respondents were above 1. The married respondents had a
larger Perceived – Adequate gap than single respondents. The MSS mean values for married respondents were greater than single respondents. All MSS scores for both single and married respondents were above -1.0. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.

Table 15 reflects the mean values of all perception variables for all the income groups and were found to be greater than 3 on a five point scale except for one variable i.e. tangibility dimension for the < 10000 income level. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The MSA mean values for income levels < 10000 and > 30000 were less than 1. Income groups with income between 10001 and 30000 had mean MSA values nearer to 1 or greater than 1. The > 30000 income group had the smallest Perceived – Adequate gap while the < 10000 has the largest Perceived – Adequate gap. The MSS mean values for all income groups were negative for all the dimensions. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.
The mean values for all perception variables for all purchase volumes (Table 16) were greater than 3 on a five point scale. This implied a more than average level in Overall Perceived Service Quality and in the five dimensions of service quality among the sample respondents. The MSA mean values for monthly purchase volumes of up to Rs. 2000 were above 1 and larger purchase volumes of greater than Rs. 2000 has mean values less than one. The smallest Perceived – Adequate gap was observed in the group with monthly purchases > Rs. 3500 while the largest Perceived – Adequate gap was seen for the < Rs. 2000 groups. The MSS mean values for all monthly purchase volumes were negative for all the dimensions. The negative scores for MSS implied that the Desired level of Service Quality Expectations were greater than the perceptions of Service Quality. The positive scores of MSA implied that the Adequate level of Service Quality Expectations were lesser than the Perceptions of Service Quality. This implied that the Perceived level of Service Quality lies between the Adequate and Desired levels of Service Quality.

5.1.3 FACTORS THAT INFLUENCE SHOPPING AT A RETAIL GROCERY STORE (STORE PATRONAGE CRITERIA)

Ranking of Store Patronage Criteria (SPC)

The mean scores and ranks (Tables 19 & 17) for the five store patronage criteria reflect the importance customers attach to these factors in selecting a grocery store. The overall data (OD) reflects the ranking of all the respondents. Variety and quality of merchandise (F1) has been ranked the most important factor in selection of a grocery store, followed by prices of goods (F2), Location of the store (F4) and Services offered by the store (F3). Advertising of the store (F5) was the least important factor when selecting a grocery store. Coimbatore customers ranked variety and quality of goods first and prices of
goods second. They also ranked service offered by the store as more important than location of the store. For Kirana customers and for customers in the age group 36 – 45 years, price of goods was the most important factor followed by variety and quality of goods. Single customers ranked service offered by the store as more important than location of the store. Customers with monthly incomes less than Rs. 10000 and between Rs. 10001 and Rs. 20000 ranked prices of goods as the most important factor followed by variety and quality of goods in selection of a grocery store. However, customers with income between Rs. 20001 and Rs. 30000 have ranked both variety and quality of goods and prices of goods equally thus giving both these factors equal importance while selecting a grocery store. Customers with monthly incomes greater than Rs. 30000 have ranked variety and quality of goods as the most important factor followed by the price of goods. The same trend is seen with customers with lower volume of purchases who have ranked prices of goods as the most important factor whereas customers with higher volume of purchases have ranked variety and quality of goods as the most important factor in the selection of a grocery store. The five SPC - Variety and quality of merchandise, Price, Service, Location and Advertising did not have the same mean ranks and there was a significant difference in the mean ranks of factors that influence shopping at a retail grocery store for overall data (H01) and also between the sub-samples – cities (H01a), retail formats (H01b), age (H01c), gender (H01d), marital status (H01e), incomes (H01f) and purchase volumes (H01g).

Mean scores of Store Patronage Criteria

Overall sample

The mean scores for SPC (Table 19) were subjected to significance testing using hypothesis H02a to H02g between sub-samples i.e. between cities, retail formats, age
groups, gender, marital states, incomes and purchase volumes. Chennai and Coimbatore perceived prices of goods and location of the store in the same way; however they differed in their perception in the case of variety and quality of merchandise, location of the store and advertising of the store. Coimbatore considered variety and quality of merchandise and advertising of the store more important and location of the store less important than Chennai. Variety and quality of merchandise and location of the store are two factors that respondents consider equally important for both kiranas and combination stores. Respondents expect kiranas to be price competitive and expect better service at a combination store. Advertising for a kirana store was more important than for a combination store. Variety and quality of merchandise, prices of goods and service of the store were equally important for all grocery shoppers irrespective of age. Location of the store was more important for the 36 to 55 years age group and the least important for respondents less than 25 years. Advertising of the store was more important for the 26 to 45 years age group and the least important for respondents older than 55 years. Both male and female respondents gave equal importance for variety and quality of merchandise, prices of goods, service of the store and advertising of the store and females considered location of the store more important than males. Both single and married respondents did not differ in their perception of the importance of variety and quality of merchandise, prices of goods and advertising of the store. Single respondents however considered service of the store more important while married respondents considered location of the store more important. Variety and quality of merchandise was equally important to all respondents irrespective of income. Lower income groups were very price sensitive than higher income groups. Higher income groups gave more importance to location of the store, services offered by the store and advertising of the store than lower income groups. Respondents irrespective of their monthly purchase volume of groceries considered
variety and quality of merchandise and location of the store equally important. Respondents with lower purchase volumes gave more importance to price of goods. Respondents with higher purchase volumes gave more importance to service and location of the store than lower purchase volumes. Advertising of the store was more important for respondents with purchase volumes between Rs. 801 and Rs. 3500 and the least important for purchase volumes less than Rs. 800.

**Chennai respondents**

Variety and quality of merchandise and prices of goods were two factors that were considered equally important for both retail formats. However, Chennai Combination store respondents considered service of the store very important compared to kirana respondents. Location of the store and advertising of the store were more important for kirana respondents. Chennai respondents irrespective of age perceived location of the store similarly. Variety and quality of goods was more important for the 26-35 years age group when compared to other age groups. Price of goods was more important for respondents less than 25 years and least important for the 26 to 35 years age group. Service of the store was more important for the youngest (< 25 yrs) and the oldest respondents (> 55 yrs) and the least important among age groups for respondents 36 to 45 years. 36 to 45 year old respondents considered advertising more important and the youngest the least important among all age groups. Male and female respondents of Chennai had narrow differences in perceiving service and advertising of the store. All other factors were perceived similarly. Married people perceived location and advertising as more important and service of the store less important than single respondents. Respondents with incomes less than Rs. 10000 considered variety and quality of merchandise less important when compared to other respondents. Price of goods was the most important factor for the lower income group and decreased with importance with
increase in incomes. Service of the store was almost equally important for respondents of all incomes. Location of store was less important for the lower income group and progressively increased in importance with increase in incomes. Advertising of the store was more important for middle income groups and least important for the lower income group. Price of goods was more important for lower purchase volumes and progressively less important with increasing purchase volumes. Service of the store was less important for lower purchase volumes and progressively more important with increasing purchase volumes. Advertising of the store was more important for medium purchase volumes.

**Coimbatore respondents**

Kirana and Combination store respondents gave equal importance to location of the store. Variety and quality of merchandise and price of goods were more important for kirana consumers and service and advertising of the store were important for combination store consumers. Respondents irrespective of age, gender and marital status perceived the five store patronage criteria similarly. Price of goods was more important for lower income and purchase volumes and became increasingly less important with increasing incomes and purchase volumes. Service of the store was less important for lower income and purchase volumes and became increasingly important with increase in incomes and purchase volumes. Advertising of the store was more important for respondents with incomes between Rs. 20001 to Rs.30000 and less important for incomes less than Rs. 10000. It was also more important for purchase volumes greater than Rs. 3500 and progressively decreased in importance with decrease in purchase volumes.

**Kirana respondents**

Chennai and Coimbatore kirana consumers differ very significantly in their evaluation of the five Store Patronage Criteria. Coimbatore consumers consider variety and quality of merchandise, price of goods and service of the store relatively more important than
Chennai consumers. Chennai consumers consider location and advertising of the store more important. Kirana consumers less than 35 years of age and more than 55 years consider variety and quality of merchandise relatively more important than other age groups. Respondents between the ages 36 to 55 years consider location and advertising of the store relatively more important and those less than 25 years consider these two factors the least important. Men have relatively given more importance for variety and quality of merchandise while women have given more importance to location and advertising of the store. Single respondents expected a larger variety and better quality of products than married respondents. Married respondents expected convenient locations and better advertising of the store relative to single respondents. Respondents with incomes less than Rs. 10000 expected greater variety and quality of goods at competitive prices from their kirana store and this expectation decreased with increasing incomes. Respondents with higher incomes expected convenient and better location and advertising from their kirana store and this expectation decreased with decreasing incomes. Respondents irrespective of purchase volumes had similar expectations on all the five store patronage criteria.

**Combination Store respondents**

Chennai combination store consumers expect competitive prices and convenient locations than Coimbatore consumers; however, Coimbatore consumers expect better advertising from their combination store. The youngest and the oldest consumers expect competitive prices from their combination stores. With decreasing age, respondents expected more advertising of the store. Male, female, single and married consumers of combination stores viewed all five factors similarly. Higher income groups expected larger variety and better quality products, convenient locations and better advertising of the store while lower income groups expected competitive prices for goods. Respondents with higher
purchase volumes expected better variety and quality of goods and superior service while respondents with lower purchase volume expected competitive prices.

**Male respondents**

Coimbatore men preferred better variety and quality of merchandise and advertising of the store whereas Chennai men preferred more convenient locations. Kirana male consumers expected better variety and quality of merchandise and competitive prices while combination store male consumers expect superior service from their stores. Men older than 55 years and between 36 to 45 years were very price sensitive and men between 46 to 55 years the least price sensitive. Men between 36 to 55 years preferred more convenient location of the store. Married male respondents preferred more convenient locations. Male Respondents with incomes less than Rs. 20000 and greater than Rs. 30000 preferred better variety and quality of products. Men with incomes less than Rs. 10000 preferred competitive prices of goods and this preference decreased with increasing incomes. Men with incomes greater than Rs. 30000 preferred superior service and this decreased with decreasing incomes. Men with incomes greater than Rs. 20000 preferred convenient location and better advertising of the store. Competitive prices for goods were more important for small purchase volumes and decreased with increasing purchase volumes. Superior service was more important for larger purchase volumes and decreased with decrease in purchase volume.

**Female respondents**

Coimbatore female respondents gave more importance to service and advertising of the store while their Chennai counterparts gave more importance to location of the store. Kirana consumers gave more importance for prices of goods, location and advertising of the store whereas their combination store counterparts gave more importance to service of the store. Respondents irrespective of age perceived almost all the store patronage
criteria similarly. Single females expected superior service of the store. Women with lesser incomes gave more importance to price of goods and this decreased with increase in incomes. With increase in incomes, women preferred superior service and better location of the store. With decrease in purchase volumes, women gave more importance to price of goods and less importance to services offered by the store.

**Single respondents**

Coimbatore single respondents preferred more variety and better quality goods and better advertising of the store. Chennai single respondents preferred better services and convenient location of the store. Single kirana consumers preferred more variety and better quality goods, while combination store consumers preferred superior service and advertising of the store. Older single consumers gave very little importance to advertising of the store. Single women prefer a more convenient location of the store. Single respondents with lesser incomes prefer competitive prices for goods; with increase in incomes, they prefer superior services and convenient location of the store. Respondents with lower purchase volumes preferred competitive prices of goods.

**Married respondents**

Married Coimbatore consumers preferred more variety and better quality merchandise at competitive prices, superior service and better advertising of the store. Chennai married consumers’ preferred convenient location of the store. Kirana consumers expect competitive prices and better advertising of the store whereas combination store consumers prefer better service from the store. Married consumers less than 25 years and greater than 55 years of age do not expect much advertising of the store compared to consumers 36 to 45 years old who expect much more advertising of the store. Married male and female consumers did not differ in their expectations on the five store patronage criteria. Married consumers with incomes less than Rs. 10000 expected competitive
prices and this decreased with increase in income. Those with incomes greater than Rs. 30000 expected superior service from the store. Convenient location of the store was more important for consumers of higher income groups compared to lower income groups. Advertising of the store was relatively more important for consumers with incomes greater than Rs. 10001. Prices of goods were relatively more important for smaller purchase volumes and service of the store relatively more important for larger purchase volumes.

5.1.4 PERCEPTION OF CONSUMERS TOWARDS SERVICE QUALITY OF GROCERY RETAILERS

Overall data

The mean scores (Tables 10 to 16) for perceived service quality were subjected to significance testing using hypothesis H011a to H011g between sub-samples i.e. between cities, retail formats, age groups, gender, marital states, incomes and purchase volumes. Coimbatore respondents perceived better reliability, assurance, empathy and overall service quality than Chennai respondents. Kirana consumers perceived better responsiveness, assurance and overall service quality than combination store consumers. Grocery retailers were found more responsive to older consumers than younger consumers. Male respondents were less satisfied with the tangible elements in a grocery store than females. Perceptions of service quality were similar for single and married respondents. Grocery retailers were more responsive to respondents from higher income groups. Higher income groups perceived tangible elements in the grocery store more favourably than lower income respondents. Grocery retailers are the most responsive to respondents whose purchase volumes are less than Rs. 2000.
Chennai respondents (H0_{12a} to H0_{12r})

Empathy of employees irrespective of whether it was a kirana or a combination store was perceived equal by Chennai respondents. On all other dimensions of service quality and overall service quality, kiranas were perceived to be better than combination stores in Chennai. Younger respondents found grocery retailers less responsive than older respondents. They also perceived much lesser overall service quality than older respondents. Chennai female respondents found grocery retailers more responsive. They also perceived better tangibles and overall service quality than their male counterparts. Married respondents perceived better responsiveness, assurance and overall service quality in their grocers. Respondents with incomes between Rs. 10001 to Rs. 20000 found their grocers more reliable whereas respondents with incomes less than Rs. 10000 and between Rs. 20001 and Rs. 30000 found them the least reliable. Grocers were more responsive to respondents with incomes between Rs. 10001 to Rs. 30000 and the least responsive to lower income groups.

Coimbatore respondents (H0_{13a} to H0_{13r})

Combination stores scored high on all dimensions of service quality except tangibles and was perceived to offer better overall service quality than kiranas. Kiranas were perceived to have better tangibles. Age, gender and marital status did not affect perceptions of service quality of Coimbatore respondents across grocery retail outlets. Higher income groups perceived better quality of service than lower income groups. Respondents with larger purchase volumes also perceived better quality of service however it was significant only for the tangibles dimension.

Kirana respondents (H0_{14a} to H0_{14r})

Chennai kiranas were perceived to be more responsive, had better tangibles and overall service quality than Coimbatore kiranas. Older respondents perceived better
responsiveness, tangibles and overall service quality and this decreased with decrease in age. Females perceived better tangibles than males. Married respondents perceived responsiveness and tangibility of kiranas to be superior to single respondents. Respondents with higher incomes have perceived kiranas to be responsive, have better tangibility and overall service quality. Purchase volumes did not affect perception pattern of kirana respondents.

**Combination store respondents (H0_{15a} to H0_{15f})**

Coimbatore respondents have more favourably perceived the service quality of combination stores than Chennai respondents. Age, gender, income and purchase volume did not affect perception of service quality of combination stores. Single respondents felt that tangibles were superior in a combination store than married respondents.

**Male respondents (H0_{16a} to H0_{16f})**

Coimbatore male respondents perceived better reliability, assurance, empathy and overall service quality in their grocery retailers than Chennai respondents. Kirana consumers found their stores to be very responsive to their needs than combination stores. Age and purchase volumes did not affect male perceptions of service quality of a grocery store. Single male respondents perceived superior tangibles at their grocery store than married respondents. Respondents with the lowest and highest incomes perceived greater reliability. Higher income respondents perceived superior tangibles.

**Female respondents (H0_{17a} to H0_{17f})**

Coimbatore female respondents perceived better reliability whereas Chennai females perceived better responsiveness and tangibles in their grocery retailers. Kiranas were perceived to be more responsive, gave better assurance and overall service quality. Responsiveness and overall service quality perceptions increased with increase in age of female respondents. Generally, married female respondents perceived better dimensional
service quality except empathy but they significantly differed from their single counterparts in their evaluation of overall service quality; also higher the income better was their perception of responsiveness and tangibility. Females with large purchase volumes perceived lesser responsiveness on the part of grocery retailers.

**Single respondents (H0₁₈a to H0₁₈d)**

Coimbatore single respondents perceived better dimensions of service quality and overall service quality except for tangibles. Single respondents found tangibles much superior for combination stores than kiranas. Age, gender, income and purchase volumes did not affect perceptions of service quality of single respondents.

**Married respondents (H0₁₉a to H0₁₉d)**

Chennai married respondents perceived better responsiveness and tangibles in their grocery stores while Coimbatore respondents perceived better reliability, assurance and empathy. Kiranas were perceived more responsive, had better assurance and tangibles and overall service quality. Older respondents perceived their grocery retailers to be more responsive. Females perceived better tangibles and overall service quality. Perception of responsiveness and tangibles increased with rising incomes. Perception of responsiveness decreased with increasing purchase volumes.

### 5.1.5 ZONE OF TOLERANCE FOR SERVICE QUALITY OF GROCERY RETAILERS

**Overall data**

The highest expectations were for the Responsiveness dimension for both Desired and adequate levels of Expectations followed by Reliability, Empathy, Assurance and Tangibles. The perception of consumers of the Responsiveness dimension was also the highest among all the dimensions followed by Reliability and Assurance with Empathy.
and Tangibles sharing the lowest score. The largest Zone Of Tolerance is for the Responsiveness dimension followed by Empathy and Tangibles. Reliability and Assurance have the smallest Zone Of Tolerance. The Desired Expectations of service quality for all 5 five dimensions were higher in Chennai than Coimbatore. Desired expectations of service quality were the highest for the Responsiveness dimension followed by Empathy, third place shared by Reliability and Tangibles and the lowest score for Assurance in Chennai. The adequate expectations of Service Quality for all the five dimensions were higher in Coimbatore than Chennai. Adequate Expectations of service quality in Coimbatore were the highest for the Responsiveness dimension followed by Reliability, Assurance Empathy and lastly Tangibles. The perception of consumers of the Responsiveness dimension in Chennai is the highest among all the dimensions followed by Responsiveness dimension in Coimbatore. The perception of consumers of the Reliability, Assurance and Empathy dimensions were higher in Coimbatore than Chennai. The Zone of Tolerance for Chennai consumers was larger than Coimbatore consumers. The desired levels on all variables were similar for both Chennai and Coimbatore but the adequate levels on all variables were higher for Coimbatore consumers than Chennai consumers. The Desired Expectations of service quality for all 5 five dimensions were marginally higher for Kiranas than Combination Stores. Adequate Expectations of Service Quality for all 5 dimensions were significantly higher for Combination Stores than Kiranas. The perception of consumers of the Responsiveness dimension for both Kiranas and Combination Stores were the highest among all the dimensions followed by Assurance for Kiranas with Assurance for Combination Store having the lowest score. Kiranas uniformly exhibited larger Zone Of Tolerance than Combination Stores. The respondents in the age group of 36 – 55 years had the largest Zone of Tolerance for all the dimensions of Service Quality followed by respondents in
the age groups 26 – 35 and greater than 55 years. The younger respondents whose ages were less than 25 years had the smallest Zone of Tolerance for all the dimensions of Service Quality. All the respondents irrespective of age had more than average perceptions scores on all the dimensions of Service Quality. There seems no significant difference in the Zone of Tolerance irrespective of Gender and Marital Status. The perceived values for all dimensions of service quality irrespective of gender and marital status were above average. There seems no significant difference in the Zone of Tolerance for all dimensions of service quality for all income groups. The perceived values for all dimensions of service quality irrespective of income levels were above average. Respondents with monthly purchases of more than Rs. 3,500 per month had the largest Zone of Tolerance for all the dimensions of Service Quality except for the Tangibles dimensions where it shared the largest Zone of Tolerance along with respondents with purchases less than Rs. 800.

**Chennai respondents**

ZOT for Combination stores were smaller than Kiranas in Chennai and reflected the ZOT obtained for the overall data. Like the overall sample, the Chennai respondents had marginally higher Desired Expectations of service quality for Kiranas than Combination stores. Adequate Expectations were significantly higher for Combination stores than Kiranas. Responsiveness perception scored the highest for both Kiranas and Combination stores. Respondents in the age group 36 – 45 yrs had the greatest ZOT followed by 46 – 55 yrs and > than 55 yrs. Respondents < than 25 yrs of age had the smallest ZOT. Females and Married respondents had larger ZOT than Males and Singles in Chennai. ZOT for Chennai respondents with family monthly incomes between Rs. 10000 and Rs. 30000 were the largest and adequate expectations the lowest. Desired Expectations were almost on the same level for all income groups. The largest ZOT was
for respondents with monthly purchase of groceries between Rs. 801 to Rs. 2000 followed by < Rs. 800. The smallest ZOT was for respondents with purchase volumes > than Rs. 3500.

**Coimbatore respondents**

ZOT for kiranas and combination stores in Coimbatore were similar; however, desired and minimum expectations were higher for combination stores. ZOT for ages between 26 to 35 yrs was the smallest followed by 36 to 45 yrs. ZOT was largest for Coimbatore respondents less than 25 years. The desired and minimum expectations were higher for older age groups. Males and Singles had larger ZOT than Females and Married respondents. Females and Married respondents had higher levels of desired and minimum expectations. The largest ZOT was for respondents with incomes less than Rs. 10000. The smallest ZOT was for those in the Rs. 10001 to Rs. 20000 bracket. With increasing incomes, the desired and minimum expectations also increased. ZOT was largest for respondents with purchase volumes less than Rs. 800. ZOT was the smallest for purchase volumes between Rs. 801 and Rs. 3500. Respondents with higher purchase volumes had higher desired and minimum expectations.

**Kirana respondents**

ZOT for Coimbatore were smaller than Chennai with desired expectations almost on the same level for both cities but minimum expectations higher for Coimbatore than Chennai. ZOT was largest for respondents greater than 55 years followed by 36 to 45 years age group. The smallest ZOT was for the under 25 years. Females and married respondents had larger ZOT than males and singles for all the dimensions. ZOT is the largest for respondents with incomes greater than Rs. 30000 followed by the Rs. 20001 to Rs. 30000 income bracket. ZOT for all kirana respondents irrespective of purchase volumes were only marginally different from each other and were similar.
**Combination store respondents**

ZOT for combination stores in both the cities, between age groups, gender, marital states, incomes and purchase volumes were similar.

**Male respondents**

ZOT for males across service quality dimensions for both cities were similar. However Chennai reflected higher values for both desired and minimum expectations than Coimbatore. ZOT for males irrespective of retail formats were similar. Desired and minimum expectations were marginally higher for combination stores. ZOT for males across age groups were similar. Desired and minimum expectations showed a slight tendency to increase with increase in age. ZOT for males irrespective of marital status were similar. ZOT for males with incomes less than Rs. 10000 was the largest. There is a shift upwards in the ZOT with either desired or minimum expectations or both showing slight increase with increase in incomes. ZOT across purchase volumes were similar, however desired and minimum expectations for purchase volumes greater than Rs. 3500 were higher.

**Female respondents**

ZOT for females were larger in Chennai than Coimbatore. ZOT for females in kiranas were larger than combination stores. ZOT for females was the largest for the age group 36 to 45 years followed by 26 to 35 years. ZOT was the smallest for respondents less than 25 years of age. Desired expectations were similar across age groups but minimum expectations were higher for respondents less than 25 years and more than 55 years. ZOT for single females were smaller than married females. Desired expectations were similar for all respondents but minimum expectations were higher for single female. Perceived values were much lower placed on the ZOT. ZOT was the largest for the Rs. 20001 to Rs. 30000 income group followed by the Rs. 10001 to Rs. 20000 income group. The smallest
ZOT was seen for the less than Rs. 10000 income group. Desired expectations were similar across income groups but minimum expectations were higher for less than Rs. 10000 and more than Rs. 30000 income groups. ZOT for females were the largest for purchase volumes between Rs. 801 to Rs. 2000 followed by Rs. 2001 to Rs. 3500. The smallest ZOT was seen for purchase volumes less than Rs. 800. Desired expectations were similar across purchase volumes but minimum expectations were higher for purchase volumes less than Rs. 800 and for more than Rs. 3500.

**Single respondents**

ZOT for singles across both the cities were similar. Minimum and desired expectations were slightly higher for Chennai. ZOT was generally smaller for combination stores. Desired expectations were almost similar and minimum expectations for combination stores were slightly higher than kiranas. ZOT was the largest for the age group 46 to 55 years and the smallest for age greater than 55 years. The 46 to 55 age group had the highest score for desired expectations. ZOT for single respondents were generally similar irrespective of gender. ZOT for singles was the largest for the income group of Rs. 20001 – Rs. 30000 and the smallest for incomes between Rs. 10001-Rs. 20000. The perceived value for ‘greater than Rs. 30000’ income group is generally placed lower than other income groups on the ZOT. ZOT for singles was the smallest for purchase volumes between Rs. 801 to 2000. ZOT for purchase volumes less than Rs. 800 and between Rs. 2001 to Rs. 3500 were similar.

**Married respondents**

ZOT for married Chennai respondents were larger than married Coimbatore respondents. ZOT for married respondents of kiranas were smaller than combination stores. ZOT for married respondents for age groups less than 25 years, 36-45 years and greater than 55 years were similar and larger. ZOT for age groups 26 to 35 years and 46 to 55 years were
similar and smaller. ZOT for married females were greater than males. ZOT for married respondents was the largest for incomes between Rs. 20001 to Rs. 30000 and smallest for incomes less than Rs. 10000. ZOT for married respondents was greatest for purchase volumes of Rs. 2001 to Rs. 3500.

5.2 DISCUSSION

Respondents who were in the age group 36 to 55 years shopped at a kirana which was also reflected in the Chennai sample whereas those younger than 36 years and older than 55 years shopped at a combination store. This could be a reflection of younger and older consumers rating variety and quality of merchandise and service of the store as more important and the 36 to 55 years age group considering location of the store as more important. Kiranas seemed to attract respondents with lesser incomes and purchase volumes and also married respondents. Females preferred a kirana for their monthly grocery shopping as against men; however Coimbatore respondents irrespective of gender seemed to prefer a kirana. This could be due to Coimbatore having very few combination stores. Single respondents preferred a combination store in Chennai whereas Coimbatore single respondents had no such clear preference. This demonstrates that there is an opportunity for both kiranas and combination stores to clearly segment and target their markets especially in Chennai which can be considered a more mature market going by the number of big retail formats.

Findings of the ranking of store patronage criteria reflect the findings of Gagliano & Hathcote (1994) in his study on store patronage criteria in Retail apparel specialty stores. Merchandise was the most important, followed closely by price. Service was the third most important attribute followed by location and advertising. In our study, Service was ranked fourth after location. This may be due to the fact that Gagliano & Hathcote’s
study was in apparel specialty stores which do not come under utilitarian goods but are hedonic purchases and hence location is not as important as services offered by the store. In the grocery sector, the merchandise quality, price of goods and location are qualifying factors for consumers to choose your store and service is a winning factor which will differentiate your grocery store from the competition and becomes a source for competitive advantage. The only exception was respondents from Coimbatore who ranked service of the store more important than location. This may be due to the fact that Coimbatore is a much smaller city than Chennai and travelling one end to another will not take much time and effort. Respondents in Chennai and Coimbatore differed in their perception of store patronage criteria for kiranas and combination stores. This again reiterates the fact that India is a country of regional cultural differences and these differences need to be taken into account when deciding a regional retail strategy. Another surprising finding is that consumers expected kiranas to advertise when compared to combination stores which are usually never part of the kiranas retail strategy. Consumers expect information about promotional offers, new products, etc. There were also differences in perception of store patronage criteria for kiranas and combination stores. Therefore specific retail strategies depending on the retail format need to be followed.

Overall service quality and the five dimensions of service quality – reliability, responsiveness, assurance, empathy and tangibles for grocery retailers irrespective of cities, retail formats, age, gender, marital status, income or purchase volumes were perceived by consumers as above average. Responsiveness dimension which looked at ‘if customers were informed when services will be performed’, ‘prompt service’, ‘willingness to help’ and ‘readiness to respond to customers request’ scored the highest (Appendix C). Analyzing the mean scores for the individual item scales (Appendix C),
there are certain areas of concern. Across the overall sample and sub-samples, ‘dependability in handling customers’ service problems’ of the reliability dimension; ‘employees who deal with customers in a caring fashion’, ‘having the customers’ best interest at heart’ and ‘employees who understand the needs of their customers’ of the empathy dimension; and ‘modern equipment’ of the tangibles dimension have the lowest mean scores. Prompt service and willingness to help got the highest scores and the only exception was Coimbatore where reliability item scales like performing services right the first time and providing services at the promised time got better scores than responsiveness. Coimbatore had generally higher adequate expectations of service quality; however desired expectations were similar. Coimbatore therefore is more intolerant of inferior service quality than Chennai. Similarly combination stores also had higher adequate expectations; thus inferior service quality was not expected of a combination store. Younger consumers were the most intolerant of inferior service quality. Females were more tolerant of inferior service quality than their male counterparts. Single consumers expected better adequate levels of service than their married counterparts. Lesser the income level and purchase volumes, greater the tolerance to inferior service.

Findings of service quality perceptions do not reflect the study of PZB (1994) in which retail chains were studied. The highest mean scores obtained were for the tangibles dimension followed by assurance and reliability where as the present study on grocery retail has highest mean scores for responsiveness followed by the reliability dimension. This could be due to the fact that retail chains in the US are less labour intensive than India and therefore responsiveness is better perceived here than there. Our tangible facility is also poor as far as grocery outlets are concerned whereas retailing as an industry itself is in a very mature stage in the US and therefore better facilities.
Service quality perception of grocery stores irrespective of the retail format was always within the Zone of Tolerance (ZOT). Chennai had a larger ZOT than Coimbatore respondents which means Chennai had a larger tolerance limit than Coimbatore. Younger respondents had a smaller ZOT than older respondents. Females were more tolerant of inferior service than males. They had larger ZOT than male respondents. Single respondents were less tolerant of inferior service. They had smaller ZOT but were easier to delight than married respondents. Respondents with smaller incomes and purchase volumes were more tolerant of inferior service than people with larger incomes and purchase volumes. Findings with regard to ZOT were consistent in that the perceived value was always between the minimum value and desired value throughout this study and thus consumers’ basic minimum expectations were being met, whereas in the PZB (1994) study, for all dimensions except tangible dimensions, the perceived value was below the minimum expectations. This means that consumers in the US were not satisfied with the service quality of the retail store on four of the five dimensions of service quality – reliability, responsiveness, assurance and empathy.

Finally, the modified SERVQUAL+ instrument used to measure service quality was found highly reliable and easy to use in the grocery retail setting.

5.3 RECOMMENDATIONS

In the light of the above research findings, the following suggestions and recommendations have been made.

- Kiranas should focus on the 36 to 55 years age group, married women and those with incomes less than Rs. 30000 per month.
• Price of goods and location of the store should be an integral and key part of the Chennai kirana store’s retail strategy while variety and quality of merchandise and price of goods should be a key part of the Coimbatore kirana store’s retail strategy.

• Coimbatore kiranas need to pay extra special attention to service quality as they are less tolerant of inferior service.

• Kiranas should devise a low cost promotion campaign to inform their target market about promotional offers, new products, etc. The ideal vehicle for promotion would be billboards, handouts and window displays.

• Combination stores should focus on the younger age group (less than 36 years), the older age group (more than 55 years) and people with a monthly income greater than Rs. 30000. Singles, young couples and retired people form part of the target market for combination stores.

• Variety and quality of merchandise and service of the store should form an integral part of the combination store’s overall retail strategy.

• Grocery retailers/employees have to be sensitized about the various components/dimensions of service quality. They also need to be educated of the importance of service quality to help differentiate their store from the other and overcome competition. The government of India apart from policy decisions like FDI in retail also needs to expand the scope of existing government training institutes to include training for retail employees. This could reduce the cost of training and increase the quality of service.

• Grocery retail employees should be trained to handle customers with care and concern and they should inform consumers about delays.
• Except for the responsiveness dimension where consistent high scores were obtained, all other dimensions of service quality and also responsiveness have a huge scope for improvement by grocery retailers.

• Limited data mining and capturing to be done by kiranas at least to understand who the profitable customers are, to understand what consumers are buying, to better manage inventory thus reducing/eliminating expired products, stock outs, excess stock and dead stock.

• Technology like barcode readers to be introduced in kiranas to fasten process delivery. Processes like telephone ordering for regular customers to be introduced in order to reduce waiting time for customers and crowding at the store

• Free home delivery for profitable customers can be introduced.

• Special schemes albeit in a limited way to be introduced for profitable customers

• Quality of merchandise to be maintained, identification and removal of expired products to be done.

• A consistent policy for product returns to be developed and communicated to customers

• Clean store surroundings to be maintained, employees to be neatly dressed in order to improve tangibility.

• Purchases can be centralized by joining with grocers in the locality in order to reduce purchase costs due to bulk orders and also individual transportation costs. Such cost benefits can be passed on to consumers thereby reducing prices of goods for consumers.

• Regular feedback to be obtained from profitable and long term customers in order to improve quality of service and to understand the pulse of the target market.
5.4 LIMITATIONS

This study has measured human perceptions of service quality. As perceptions can change from time to time and with experience, these measurements may not remain the same.

5.5 FUTURE SCOPE OF RESEARCH

This study has looked at two retail formats only – kiranas and combination stores which are at the lower end of the retail format spectrum in terms of space, size, professionalism, visual merchandising, service, etc. In order to understand the retail industry better and to be able to generalise, more retail formats need to be studied.

This study was done in two south Indian cities – Chennai and Coimbatore. More tier I and II cities and towns across India should be studied in order to empirically verify if a pan India retail strategy can be followed.

Five demographic variables and its impact on choice of store and service quality were studied – age, gender, marital status, monthly family income and monthly purchase volumes. This could be extended to two more variables – stage of the family life cycle and number of members in the family. The family life cycle stage and number of members or dependents in the family may affect the choice of retail format.

5.6 CONCLUSION

Groceries are necessary goods that people will buy in spite of a recession or not. However, that does not mean that service is not important in grocery retailing. This study has proved that for people to choose a store, certain qualifying variables are necessary
without which they would never buy at that store. These variables are variety and quality of merchandise, price of goods and location of the store. These are qualifying variables which help bring footfalls into the store, but if there has to repeat customers, then service of the store matters. Therefore, service of the store or service quality plays a vital role in retaining customers and making them loyal customers. Hence, service quality serves as a differentiating variable and helps differentiate one grocery store from the other. Grocery retailers should improve and provide unique service to their customers in order to attract and retain customers on a sustainable basis. Grocery retail is also an industry that needs to pander to local tastes and preferences. Even within a particular city, depending on the target market, there will be differences. For example, during the study one interesting finding was that the Nilgiris store at RS puram, Coimbatore, stocks a lot of Haldirams sweets and savouries (a North Indian brand), but not the store at Vadavalli, Coimbatore. This is because RS Puram is home to a lot of North Indians who prefer Haldirams to the local manufacturers of sweets whereas the store at Vadavalli caters to the native populace and immigrants from Kerala. So the retail strategy of the retail store has to be tailored to meet local preferences and may change depending on which locality it is situated and the target market it caters to. As the market matures, every grocer will be offering similar products and brands at competitive prices; then service quality will be the only differentiator as has happened in other industries. Grocery retailing has come of age in India and improved service quality in grocery retailing will help retain customers and convert them to loyal customers.