



DEMOGRAPHIC DIFFERENCES IN CONSUMER BEHAVIOUR IN ORGANISED RETAILING – A CASE STUDY

Sunitha V. and Y. Srinivasulu

Department of International Business, School of Management Studies, Pondicherry
University, Kalapet, Puducherry – 605014, India

Abstract

This study examines whether consumer behaviour is influenced by different demographic groups in organised retailing. It analyses 516 valid responses from consumers in selected South Indian locations, mostly from Pondicherry. Six dimensions are considered: Customer Perception, Service Interaction, Shopping Attitude, Customer Satisfaction, Purchase Intention and Purchase Behaviour. Descriptive statistics and one-way analysis of variance (ANOVA) are used to analyse the data. Education as a separate category has shown statistically significant differences across all six dimensions. Age is associated with differences in Customer Perception, Service Interaction, Shopping Attitude and Customer Satisfaction, but not Purchase Intention or Purchase Behaviour. Occupation shows a similar pattern. Gender and monthly income do not show statistically significant differences across the six dimensions at the .05 level. Shopping Attitude has the highest mean, while Purchase Behaviour has the lowest. The findings suggest that demographic differences are outcome-specific rather than uniform across consumer responses. Retailers should therefore align segmentation decisions with the particular customer outcome they seek to improve.

Index Terms— organised retailing; consumer behaviour; demographic differences; customer perception; shopping attitude; customer satisfaction; purchase intention; ANOVA

1. Introduction

Organised retailing provides consumers with structured store environments, product assortments, service encounters and purchasing opportunities. As retail formats and customer expectations diversify, understanding consumer responses has become important for market segmentation, service design and customer relationship management. Retailers need to know not only whether customers evaluate a store positively, but also whether perceptions, attitudes, satisfaction, purchase intention and reported purchase behaviour vary among customer groups.

Consumer behaviour is multidimensional. Customer Perception concerns consumers' evaluations of the retail offering; Service Interaction concerns experiences involving retail personnel or service processes; Shopping Attitude captures an overall evaluative orientation toward shopping; Customer Satisfaction reflects an assessment of the shopping experience; Purchase Intention concerns stated willingness or likelihood to buy; and Purchase Behaviour concerns reported purchasing actions. These dimensions are related but are not interchangeable. A demographic group may differ in satisfaction without differing in purchase intention, for example.

Research on Indian retailing has considered demographic differences in several contexts. Deshpande (2016) examined customer-experience quality by age, gender, education and family income among Indian retail-store customers. Kuruvilla et al. (2009) examined gender differences in mall-shopping behaviour among consumers in seven Indian cities. Das (2014) investigated factors associated with Indian shoppers' attitudes toward retailers and purchase intention. These studies establish the relevance of investigating retail consumer responses empirically, while showing that conclusions depend on the outcomes and context examined.

The present study examines six consumer-behaviour dimensions across age, education, gender, monthly income and occupation using 516 valid responses from selected South Indian locations, mostly from Pondicherry. The study does not assume that all demographic variables impact all aspects of consumer behaviour, but rather it evaluates whether there are any statistically significant differences or not between the 6 dimensions studied.

2. Research problem and gap

Retailers commonly use demographic characteristics to segment customers, but the usefulness of a demographic variable depends on whether it is associated with the particular consumer outcome being considered. If a characteristic is significant for

perceptions or satisfaction but not for purchase intention or behaviour, a broad claim that it generally influences consumer behaviour would be too strong.

Prior research has examined demographic differences in retail experience and shopping behaviour. This study adds a comparative analysis of six distinct consumer-behaviour dimensions across five demographic characteristics in one sample. Its contribution lies in identifying the pattern of significant and non-significant group differences. The study tests whether the 6 different dimensions are interrelated or not, and whether group membership and mean scores are related; it does not establish causal effects.

3. Objectives and research questions

- To describe the levels of Customer Perception, Service Interaction, Shopping Attitude, Customer Satisfaction, Purchase Intention and Purchase Behaviour.
- To examine whether the six dimensions differ across gender, age, education, occupation and monthly-income groups.
- To identify demographic characteristics associated with differences across several dimensions and those without significant differences in the reported tests.
- To derive implications for evidence-based customer segmentation in organised retailing.

Research questions: (1) Do the six consumer-behaviour dimensions differ significantly across selected demographic groups? (2) Which demographic characteristics show consistent differences across several dimensions, and which do not show statistically significant differences?

4. Review of literature

4.1 Consumer behaviour in retail settings

Consumer behaviour in retail settings includes evaluations of the retailer, service interactions, attitudes toward the shopping experience, satisfaction, intentions and purchase actions. These outcomes can influence one another, but each represents a distinct aspect of the customer response. Das (2014) examined factors affecting Indian shoppers' attitudes toward retailers and the relationship between attitude and purchase intention, illustrating the value of distinguishing evaluative outcomes from purchase intentions.

4.2 Demographic differences in retail experience

Demographic variables are frequently examined to determine whether consumer groups differ in their evaluations and shopping responses. Deshwal (2016) analysed age, gender, education and family income in relation to customer-experience quality among Indian retail-store customers. The study found that some demographic categories differed on some experience dimensions, supporting an outcome-specific view of demographic effects.

Kuruvilla et al. (2009) examined gender differences in mall-shopping behaviour among 2,721 consumers across seven Indian cities. Their study is relevant because it tests gender-based assumptions empirically in the Indian context. However, findings for one retail setting or set of shopping outcomes should not automatically be generalised to every consumer-behaviour dimension.

4.3 Rationale for the present study

Age may be associated with differences in shopping needs, store-format familiarity and service expectations. Education may be related to how consumers seek and interpret product or service information. Occupation may correspond with differences in daily routines, time constraints and shopping opportunities. Income may affect purchasing capacity, although it need not translate into different evaluations of every retail experience. These are plausible explanations for potential group differences, not effects that can be assumed in advance.

The significance of each variable should therefore be assessed separately for each outcome. A significant omnibus ANOVA indicates that at least one group mean differs, but it does not identify which groups differ. Statistical significance also does not, by itself, establish practical importance. This study interprets results conservatively and restricts conclusions to the reported findings.

5. Methodology

5.1 Research design and sample

The study uses a quantitative, cross-sectional survey design. The analysis is based on 516 valid responses from consumers of organised retail stores in selected South Indian locations, including Chennai, Bengaluru, Thiruvananthapuram, Hyderabad but mostly from Puducherry. The sampling approach is convenience sampling. Consequently, the results describe the analysed sample and should not be treated as statistically representative of all organised-retail consumers in India.

5.2 Measures

Six constructs were analysed: Customer Perception (CP), Service Interaction (SI), Shopping Attitude (SA), Customer Satisfaction (CS), Purchase Intention (PI) and Purchase Behaviour (PB). Items were measured on a five-point Likert-type scale, with higher scores indicating stronger agreement with the statements. Construct-level scores were used for descriptive and group-comparison analyses.

Table 1. Demographic Profile of Respondents (N = 516)

Demographic variable	Category	Frequency	Percentage
Gender	Male	279	54.1
Gender	Female	229	44.4
Gender	Prefer not to say	8	1.6
Age	15–30 years	290	56.2
Age	31–45 years	102	19.8
Age	46–60 years	82	15.9
Age	Above 60 years	42	8.1
Education	Schooling	63	12.2
Education	Graduation	129	25.0

Education	Post-graduation	216	41.9
Education	PhD	17	3.3
Education	Research Scholar	66	12.8
Education	Others	25	4.8
Occupation	Student	184	35.7
Occupation	Private employee	101	19.6
Occupation	Government employee	64	12.4
Occupation	Self-employed	129	25.0
Occupation	Research scholar	17	3.3
Occupation	Other	21	4.1
Monthly income	Below ₹25,000	198	38.4
Monthly income	₹25,001–₹50,000	129	25.0
Monthly income	₹50,001–₹75,000	63	12.2
Monthly income	₹75,001–₹1,00,000	54	10.5
Monthly income	Above ₹1,00,000	72	14.0

Note. Percentages may not sum to exactly 100.0 because of rounding.

The largest age group was 15–30 years (56.2%); post-graduates formed the largest education category (41.9%), and students were the largest occupation group (35.7%). The largest monthly-income category was below ₹25,000 (38.4%). Male respondents accounted for 54.1% of the sample. This table describes the sample used in the demographic comparisons.

5.3 Statistical analysis

Frequency and percentage summaries were used to describe respondents; means and standard deviations summarised the six constructs. Internal consistency was assessed using Cronbach's alpha, and skewness and kurtosis were reviewed as distributional indicators. One-way ANOVA was used to test differences in mean construct scores across categories of each demographic variable. Statistical significance was assessed at .05. The results below report the available F-statistics and p-values; unreported degrees of freedom, effect sizes, assumption tests and pairwise comparisons are not inferred.

5.4 Reliability and descriptive statistics

Construct	Cronbach's alpha	Mean	SD
Customer Perception (CP)	0.885	3.7593	0.80366
Service Interaction (SI)	0.918	3.5883	0.84761
Shopping Attitude (SA)	0.919	3.8052	0.86046
Purchase Intention (PI)	0.890	3.5806	0.83836
Purchase Behaviour (PB)	0.746	3.2970	0.86720
Customer Satisfaction (CS)	0.892	3.7151	0.90165

Cronbach's alpha ranged from 0.746 to 0.919, indicating acceptable to strong internal consistency across the reported scales. Purchase Behaviour had the lowest alpha of the six constructs. Reported skewness ranged from –0.719 to –0.285 and kurtosis from –0.351 to 0.774. These indicators are descriptive and do not replace a full assessment of ANOVA assumptions.

6. Results

6.1 Construct means

Shopping Attitude had the highest mean ($M = 3.8052$), followed by Customer Perception ($M = 3.7593$) and Customer Satisfaction ($M = 3.7151$). Service Interaction ($M = 3.5883$) and Purchase Intention ($M = 3.5806$) had similar means. Purchase Behaviour had the lowest mean ($M = 3.2970$). Thus, favourable evaluations and attitudes should not automatically be interpreted as equivalent to reported purchase behaviour.

6.2 Gender

Construct	F	p	Decision
Customer Perception	1.297	.274	Not significant
Service Interaction	2.515	.082	Not significant
Shopping Attitude	0.627	.535	Not significant
Purchase Intention	0.819	.441	Not significant
Purchase Behaviour	1.485	.227	Not significant
Customer Satisfaction	0.933	.394	Not significant

None of the six gender comparisons was statistically significant at .05. In this sample, the results do not provide evidence of gender-based mean differences in the six measured dimensions. This finding is specific to the present sample and measures.

6.3 Age

Construct	F	p	Decision
Customer Perception	11.542	< .001	Significant
Service Interaction	5.827	.001	Significant
Shopping Attitude	9.188	< .001	Significant
Purchase Intention	2.569	.054	Not significant
Purchase Behaviour	0.114	.952	Not significant
Customer Satisfaction	10.791	< .001	Significant

Age was significantly associated with Customer Perception, Service Interaction, Shopping Attitude and Customer Satisfaction. The comparisons for Purchase Intention ($p = .054$) and Purchase Behaviour ($p = .952$) were not significant at .05. Age-group differences were therefore more evident in evaluative dimensions than in the two purchase-related dimensions. Without verified pairwise comparisons, the direction and location of these differences cannot be specified.

6.4 Education

Construct	F	p	Decision
Customer Perception	8.578	< .001	Significant
Service Interaction	7.042	< .001	Significant
Shopping Attitude	8.828	< .001	Significant
Purchase Intention	6.168	< .001	Significant
Purchase Behaviour	4.336	.001	Significant
Customer Satisfaction	10.827	< .001	Significant

Education showed statistically significant differences across all six constructs. It was the most consistent demographic variable in the reported analysis. The omnibus tests indicate that at least one education group mean differed for each outcome; they do not identify which groups scored higher or lower.

6.5 Occupation

Construct	F	p	Decision
Customer Perception	7.077	< .001	Significant
Service Interaction	3.167	.008	Significant
Shopping Attitude	5.328	< .001	Significant
Purchase Intention	1.199	.308	Not significant
Purchase Behaviour	1.890	.094	Not significant
Customer Satisfaction	3.624	.003	Significant

Occupation was significantly associated with Customer Perception, Service Interaction, Shopping Attitude and Customer Satisfaction. Purchase Intention ($p = .308$) and Purchase Behaviour ($p = .094$) did not reach significance at .05. As with age, occupation-related differences appeared more consistently in evaluations of the retail experience than in purchase-related outcomes.

6.6 Monthly income

Construct	F	p	Decision
Customer Perception	1.594	.175	Not significant
Service Interaction	0.122	.974	Not significant
Shopping Attitude	0.600	.663	Not significant
Purchase Intention	0.744	.562	Not significant
Purchase Behaviour	2.237	.064	Not significant
Customer Satisfaction	1.160	.327	Not significant

None of the monthly-income comparisons was statistically significant at .05. Purchase Behaviour had the smallest p-value ($p = .064$), but this result remains non-significant under the selected threshold.

6.7 Summary of findings

Demographic variable	CP	SI	SA	PI	PB	CS
Gender	NS	NS	NS	NS	NS	NS
Age	S	S	S	NS	NS	S
Education	S	S	S	S	S	S
Occupation	S	S	S	NS	NS	S
Monthly income	NS	NS	NS	NS	NS	NS

Note. S = significant at $p < .05$; NS = not significant at $p < .05$. These are omnibus ANOVA decisions and do not identify specific category pairs.

7. Discussion

The results of this study show that there are three patterns that emerge. First, education was the only demographic variable associated with significant differences across all six dimensions. This suggests that education may be a useful segmentation descriptor in this sample, but the analysis does not establish a causal effect or identify the direction of group differences. The result is broadly consistent with the rationale for investigating demographic variation in retail experience, as in (Deshwal, 2016)

Second, age and occupation were associated with differences in Customer Perception, Service Interaction, Shopping Attitude and Customer Satisfaction, but not Purchase Intention or Purchase Behaviour. Differences in the evaluation of a retail experience need not be mirrored by differences in intended or reported purchasing. Retailers should distinguish customer-experience management from conversion and purchasing outcomes when assessing segment performance.

Third, gender and monthly income did not show significant differences across the six dimensions. The gender finding differs from the gender differences in certain mall-shopping behaviours reported by (Kuruvilla et al., 2009) but the studies consider different outcomes and contexts. The results need not be contradictory: demographic associations can depend on the construct, sample and retail setting. Likewise, non-significant income comparisons do not prove that income is irrelevant to retail decisions.

Shopping Attitude had the highest construct mean, whereas Purchase Behaviour had the lowest. Since these are distinct constructs, the difference should not be interpreted as a direct conversion gap. It nevertheless highlights the value of measuring attitudes and purchasing behaviour separately.

8. Managerial implications

- Use outcome-specific segmentation: select demographic variables according to whether the objective is to improve perception, service interaction, attitude, satisfaction, purchase intention or purchase behaviour.

- Avoid unsupported demographic stereotypes: gender and monthly income did not separate respondents significantly on the six outcomes in the reported tests.
- Investigate customer-experience differences: age and occupation were associated with perception, service interaction, attitude and satisfaction; follow-up customer research can identify the needs behind these patterns.
- Measure intentions and behaviour separately: the dimensions showed different demographic patterns and should be tracked as distinct outcomes.
- Validate proposed segments locally: the convenience sample from selected South Indian locations does not support unrestricted generalisation to all Indian retail consumers.

9. Limitations and future research

The study has limitations. Convenience sampling and the selected South Indian locations limit generalisability. The cross-sectional design identifies group differences but cannot establish causation. The available omnibus ANOVA results do not identify the specific category pairs that differ, so this paper does not state which age, education or occupation groups scored higher. Effect sizes and detailed assumption-test outputs are not reported, limiting assessment of the practical magnitude and robustness of the differences. Future studies could use probability-based or stratified sampling, report effect sizes and confidence intervals, and apply appropriate post hoc comparisons after significant omnibus tests. Further research could test whether these patterns vary by retail format, region or product category.

10. Conclusion

This study examined six consumer-behaviour dimensions across gender, age, education, occupation and monthly income among 516 organised retail consumers. Education showed significant differences across all six dimensions. Age and occupation were associated with differences in Customer Perception, Service Interaction, Shopping Attitude and Customer Satisfaction, but not Purchase Intention or Purchase Behaviour. Gender and monthly income showed no statistically significant differences across the six outcomes in the reported tests. Shopping Attitude had the highest mean, while Purchase Behaviour had the lowest.

The findings support a differentiated rather than uniform view of demographic segmentation. The relevance of a demographic characteristic depends on the consumer outcome being considered. Retailers should assess customer experience, satisfaction, intention and behaviour separately and validate segmentation decisions with local evidence. The findings should be interpreted as sample-based associations, not causal effects or nationally representative estimates.

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