

NOT ALL SHOPPERS ARE THE SAME: A DEMOGRAPHIC SENSITIVITY PERSPECTIVE

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ABSTRACT

Shopping malls play a very important role in the lives of urban shoppers. In the last few decades, India has witnessed a rapid increase in the number of malls, thereby intensifying competition. To address this crisis, several researchers have focused on gaining deeper insights into the dimensions of mall service quality. However, the role of demographic heterogeneity in service quality perceptions remains largely underexplored. To address this shortcoming, this study examines the extent to which the demographic variables impact the mall visitors' evaluations of individual service quality dimensions. The findings reveal that variations in service quality perceptions are driven by demographic factors. Accessibility and mall client care emerge as the most sensitive dimensions. The results further suggest that age, income and occupation of the shoppers are influential determinants of service quality dimensions. This study advances the service quality literature by examining the sensitivity of mall service quality dimensions to demographic profiles of mall visitors. The findings highlight the importance of a segmentation strategy based on demographic characteristics and thereafter design targeted services. It also provides actionable insights to the mall managers for improving the shoppers' experiences and thereby enhancing the competitive position of the malls in the retail landscape.

KEYWORDS: *Demographic Variables; Service Quality Perception; Sensitivity; Shopping Malls*

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INTRODUCTION

The Indian retail industry is considered to be one of the fastest-growing industries across the globe. The organized retail segment makes a major contribution to the Gross Domestic Product of India. Various retail formats have been identified by the experts, among which the shopping mall is one. Shopping malls are generally covered commercial spaces sprawling over large areas. They house the brand outlets and also provide shoppers with several other services such as dining, salons, movie theatres, and so on. It is learnt that over the past few decades, there has been a massive growth in the number of shopping malls in India. This has provided shoppers with a wide range of shopping and entertainment options; however, it poses a major threat to the malls, since the visitors shift from one mall to another at the slightest level of dissatisfaction. Therefore, in order to sustain in today's competitive scenario, the shopping malls need to differentiate themselves. It can be accomplished not only through the width and depth of product mix offered but also through the quality of services offered to the visitors. Therefore, service quality has emerged as one of the critical determinants of shoppers' perceptions, loyalty, and overall success of the mall. However, it observed that the tastes, preferences and expectations of the urban shoppers are widely diverse and dynamic.

In this regard, extensive research is conducted in the field of shopping malls to explore the factors which impact the perception of the mall visitors. However, it is not only the service quality dimensions, but also the demographic factors which must be explored to determine their impact on the shoppers' perceptions. It is observed that the role of demographics in determining the visitors' perceptions remains largely underexplored in the existing retail literature. Demographic variable is an attribute of individuals that is used for segmenting the population under consideration. These variables are observable and measurable features which are related to the individual's social, economic and personal profiles. The ultimate goal of a shopping mall is to build long-term behavioral intentions like repeat visits and advocacy. However, the perception of mall visitors is not uniform across the entire population; shoppers belonging to different demographic groups may perceive the service quality differently. Despite the practical significance of these variations, it is observed that only limited research has systematically evaluated the impact of demographic factors on service quality dimensions of malls. This study attempts to explore the role of demographics in shaping Indian shopping mall visitors' perceptions. It integrates demographic analysis with service quality assessment, thereby offering both theoretical and practical contributions in the field of mall management. It extends the service quality literature by exploring the role of demographic variables in shaping shoppers' perceptions. In practical terms, the findings provide the mall managers with actionable insights to optimize allocation of resources and design service strategies specific to target segments of shoppers. This study underlines the importance of demographic-specific strategies in achieving competitive advantage and thereby fostering a differentiated shopping experience.

LITERATURE REVIEW

Key Drivers of Shopping Mall Attractiveness

Pitt M. et. al. (2009) defined shopping mall as a building containing several units of shops, all of which are managed by a single property. Customers visit shopping malls not only for the purpose of shopping, but also to explore the entertainment activities which provide fun and pleasure (Kim et. al., 2011). Farrag et. al. (2010) further confirmed that visitors engage in several activities when they visit the malls, these activities act as pulling factors for the shoppers. Hameli K (2017) conducted a study on the shopping malls and found that aesthetics, entertainment options, variety of goods available, benefits, socialization facilities and ease of shopping are the main factors which attract the visitors to the malls. It was also revealed that environmental, transportation, and location-related factors motivated the visitors to go to malls (Mok et. al., 2021). In due course of time, Pettersen et. al. (2023) attempted to identify the main factors which attracted visitors and found that it was the wide variety of entertainment activities offered at the shopping malls that attracted the shoppers to the malls. Fares O.H. et. al. (2026) examined the mall attractiveness factors and found that shoppers' behavioural intentions, support from customer care, psychological as well as emotional factors, social aspects, merchandise, quality of service, utilitarian value and the ambience act as pull factors for the mall visitors.

Service Quality Dimensions of Shopping Malls

The previous section discusses the factors that attract shoppers to the malls. However, it is necessary to evaluate the shopping mall visitors' behavioural outcomes, which are dependent on how they evaluate the service quality of the malls. In this regard, Falcão L.M.A.A. et. al. (2017) claimed that empathy and reliability underperformed among the various dimensions of SERVQUAL. Ong AKS et. al. (2022) conducted a study to examine the service quality of shopping malls, with the help of the SERVQUAL framework. They learnt that tangibles, empathy and assurance significantly impacted the shoppers' satisfaction levels. Subsequently, Musasa T. et. al. (2023) applied the Retail Service Quality Scale (RSQS) to the

South African shopping centres and found that atmospherics and reliability were the two factors which influenced the shoppers' behaviour. In due course of time, Tukson P.J. et. al. (2023) opined that shopping mall managers should segment the mall activities on the basis of genders and age groups of shoppers in order to satisfy the shoppers' needs.

Demographic Heterogeneity in Shopping Mall Visitors' Perceptions

In contemporary shopping mall setups, it is widely recognized that the service quality dimensions do not impact the shoppers' behaviors in isolation; rather, the demographic profiles of the shoppers play crucial roles. To explore deeper, Hameli K. (2017) found that the consumer visits to shopping malls vary greatly with their shopping habits and demographic characteristics. Obulesu V. et. al. (2022) performed an observational cross-sectional study and found that men and women vary widely in their shopping habits. Women shoppers were found to spend more time in the malls, which positively affected their expenditure. Makhitha K.M. (2023) conducted an investigative study on shopping malls and found that gender, age and shopping frequency impacted the mall attributes. In due course of time, Singh S. et. al. (2025) evaluated the impact of demographic factors on mall visitors' buying behaviour and found that age, gender and income levels impacted the buying behaviour of shoppers. The findings also revealed that the younger shoppers were more stimulated by digital methods of promotion, while the older shoppers focused on the durability and utility of the goods.

Research Gap

Existing literature has explored the role of factors impacting mall attractiveness, service quality dimensions, and the role of demographics in shaping mall visitors' behaviors. However, these studies analyze these aspects in isolation, and there is limited focus on understanding how these factors impact the mall service quality dimensions. In addition, there is a lack of limited frameworks which capture these variations and act as guideline for strategic prioritization for managerial decision making. The present study addresses these gaps by determining the demographic sensitivity across the mall service quality dimensions and thereby developing a structured prioritization framework.

RESEARCH OBJECTIVES

To systematically examine the role of demographic factors in shaping the mall visitors' service quality perceptions, the present attempts to achieve the following objectives:

- To estimate the variations in shopping mall visitors' perceptions across individual service quality dimensions and determine the service quality factor which exhibits the highest level of demographic sensitivity
- To assess the relative influence of demographic variables on shoppers' perceptions
- To develop a strategic prioritization framework for Indian shopping mall service quality dimensions on the basis of their demographic sensitivity

RESEARCH METHODOLOGY

The present study explores the variations in service quality perceptions with reference to the demographic profiles of the mall visitors. Therefore, it adopts a quantitative research design to fulfil the objectives. Primary data is gathered from the popular shopping malls of Kolkata, Delhi NCR, Chennai and Mumbai. A structured questionnaire is developed on the basis of the Retail Service Quality Scale, with the questionnaire items adapted to the Indian shopping mall context. The respondents consist of shopping mall visitors belonging to various demographic backgrounds. Simple random sampling is

adopted for selecting the respondents; their anonymity is assured. Mall intercept surveys are conducted to gather the primary data, since the respondents generally provide the best quality of information in the service environment and immediately after the consumption of the service.

A total of 525 usable responses is generated, which is subjected to further statistical analysis. For analyzing the data, R software is employed. The data is subjected to reliability and validity checks to confirm its suitability for further analysis. Exploratory Factor Analysis and Regression Analysis are conducted to identify the significant underlying dimensions of Indian shopping mall service quality. Mall Client Care, Accessibility, Reachability, Ease of Purchase, Confidence of Employees, Merchandising and On Time Service are identified as significant mall service quality dimensions. The demographic variables considered in the study are Gender, Age, Educational Qualification, Occupation and Family Income per Month (in INR). The dataset is subjected to ANOVA to examine the significant differences in shoppers' perceptions about the service quality dimensions across the various demographic groups. To determine the magnitude of demographic influences, eta squared is computed for each significant relationship. Subsequently, standard deviation is calculated to assess the consistency of mall visitors' perceptions within the demographic groups. This methodological framework provides a strong foundation for examining the variations in service quality perceptions with respect to the shoppers' demographic profiles and subsequently developing shopping mall service strategies suited to the needs of the target customer segments.

RESULTS AND DISCUSSIONS

The findings of the empirical analysis are presented and interpreted in this section.

i) Estimation of the Variations in Shopping Mall Visitors' Perceptions across Individual Service Quality Dimensions and Identification of the Service Quality Factor which Exhibits the Highest Level of Demographic Sensitivity

To achieve this objective, Analysis of Variance (ANOVA) is conducted to assess whether significant differences exist in the mall visitors' perceptions across the various demographic groups and thereby quantify the extent of these variations. The findings of ANOVA, along with effect size estimation, confirm that there is significant variation in the service quality perception of the shopping mall visitors across the demographic groups. It is observed from Table 1 that Accessibility emerges as the most demographically sensitive factor. It shows very high effect sizes with respect to age (Eta_squared = 0.444) and occupation (Eta_squared = 0.340). This highlights strong variation in perception about Accessibility among these groups. This implies that shoppers belonging to different professions and different age groups perceive accessibility differently. On the other hand, Mall Client Care also shows strong demographic sensitivity, specifically with respect to income (Eta_squared = 0.369). This implies that shoppers from different income groups perceive mall client care differently. Furthermore, Ease of Purchase and Merchandising show moderate to high sensitivity. On the other hand, On Time Service exhibits comparatively lower Eta_squared values across the various demographic segments, suggesting that it is perceived in a uniform manner among the mall visitors. Overall, the findings suggest differential sensitivity across service quality dimensions. Among all the dimensions, Accessibility and Mall Client Care are largely influenced by the demographic characteristics. The results suggest that the shopping mall managers must adopt differentiated strategies. It may be said that dimensions like mall client care and accessibility need to be customized based on demographic characteristics. The malls need to improve layouts, parking facilities, ease of movement, and navigation inside the mall based on target customer segments. With reference to mall client care, malls need to design personalized services for the higher income segments, at the same time, explore possibilities to house affordable services for the lower and middle income groups.

Table 1: Demographic Differences in Service Quality Perceptions

Service Quality Dimension	Demographic Variable	p-value	Eta squared
Mall Client Care	Gender	0.0824	0.0058
	Age	0.0000	0.1184
	Qualification	0.0000	0.1448
	Occupation	0.0000	0.1671
	Income	0.0000	0.3692
Accessibility	Gender	0.0334	0.0086
	Age	0.0000	0.4444
	Qualification	0.0000	0.1492
	Occupation	0.0000	0.3401
	Income	0.0006	0.0371
Confidence of Employees	Gender	0.3679	0.0016
	Age	0.0001	0.0504
	Qualification	0.0000	0.0750
	Occupation	0.0000	0.1359
	Income	0.0000	0.1821
Ease of Purchase	Gender	0.0814	0.0058
	Age	0.0000	0.1503
	Qualification	0.0000	0.0670
	Occupation	0.0000	0.2291
	Income	0.0003	0.0396
Reachability	Gender	0.1068	0.0050
	Age	0.0009	0.0392
	Qualification	0.0000	0.1101
	Occupation	0.0000	0.0593
	Income	0.0004	0.0387
Merchandising	Gender	0.0262	0.0094
	Age	0.0000	0.1175
	Qualification	0.0000	0.0579
	Occupation	0.0000	0.1533
	Income	0.0054	0.0278
On Time Service	Gender	0.3206	0.0019
	Age	0.0002	0.0446
	Qualification	0.0618	0.0140
	Occupation	0.0000	0.0539
	Income	0.0000	0.0584

ii) Assessment of the Relative Influence of Demographic Variables on Shoppers’ Perceptions

The next objective is to determine the relative influence of demographic variables on shoppers’ perceptions. The results of ANOVA are further summarized using Eta_squared. The number of significant relations are determined along with computation of average and maximum effect sizes. The results are presented in Table 2. The results suggest that Occupation is the most influential demographic factor, having the highest average eta value. It is followed by Age and Income. All the three demographic factors show significant effects across all the mall service quality dimensions. On the other hand, Qualifications show a comparatively lower effect on service quality dimensions. Gender demonstrates minimal effect, with very few significant relationships, suggesting that the shoppers’ perceptions are mostly consistent across the gender groups. Therefore, it may be said that occupation, age and income play pivotal roles in shaping the mall visitors’ perceptions. This suggests that the malls need to develop strong segmentation strategies while designing targeted service offerings suiting the needs of the different groups of customers.

Table 2: Relative Impact of Demographic Variables on Shoppers' Perceptions

Demographic Variable	Significant Count	Avg Eta	Max Eta
Occupation	7	0.163	0.340
Age	7	0.138	0.444
Income	7	0.108	0.369
Qualification	6	0.0883	0.149
Gender	2	0.00544	0.0094

The Heatmap given in Figure 1 provides a visual representation of the variations in terms of effect sizes for the demographic variables and mall service quality dimensions. It clearly shows that accessibility and mall client care exhibit very strong influence, specifically with respect to age, income and occupation. However, on-time service shows high consistency across the various demographic groups.

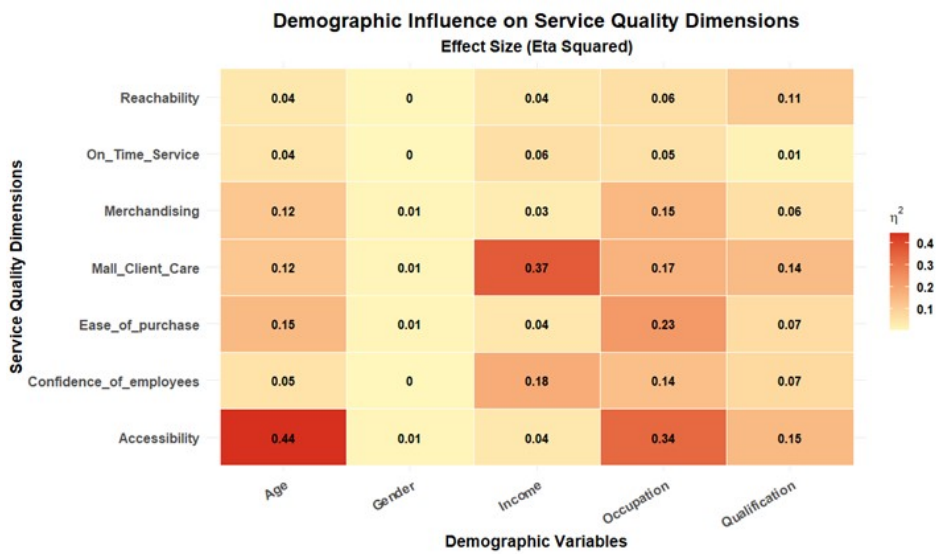


Figure 1: Heatmap Depicting the Influence of Demographic Variables on Shoppers' Service Quality Perceptions.

iii) Developing a Strategic Prioritization Framework for Indian Shopping Mall Service Quality Dimensions on the basis of their Demographic Sensitivity

The earlier analysis helps us to determine the impact of demographic factors on individual mall service quality dimensions. However, to translate the statistical findings into actionable managerial insights, a strategic prioritization framework is developed. This considers the average and maximum demographic sensitivity of each dimension. The matrix is presented in Figure 2.

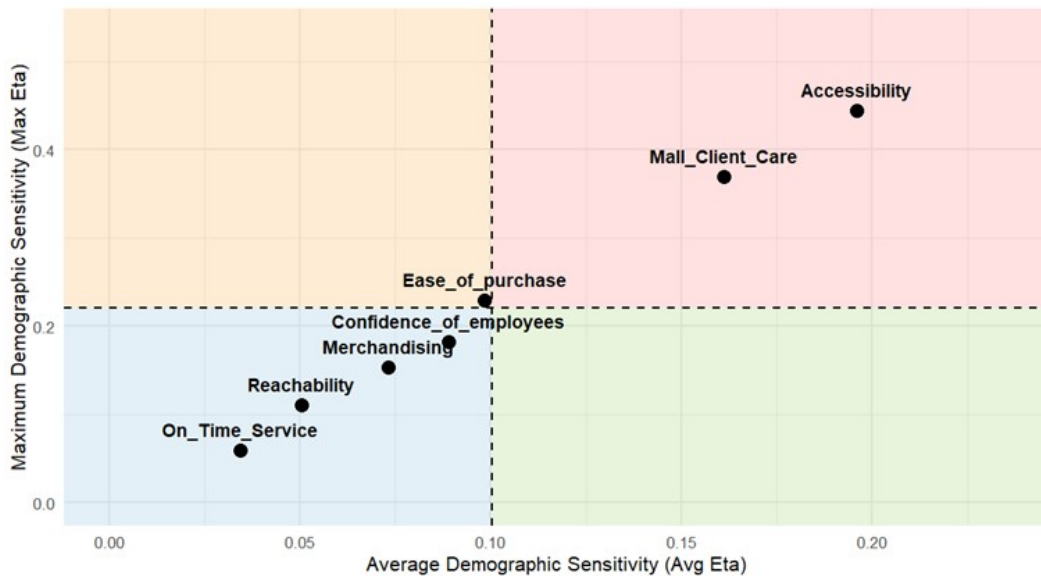


Figure 2: Strategic Priority Matrix for Mall Service Quality Dimensions.

It is observed from Figure 2 that the priority matrix classifies the service quality dimensions into four quadrants on the basis of their average and maximum demographic sensitivity. The horizontal axis shows the impact of demographic variables across dimensions, and the vertical axis shows the highest level of sensitivity for each group. Average Eta implies the overall variations across the shoppers, and maximum Eta shows the highest variation for any one specific customer group. The top right quadrant, having high average sensitivity and high maximum sensitivity, is the strategic priority zone. The quadrant houses the Accessability and Mall Client Care factors. It implies that these factors have strong and consistent demographic influence and require targeted and segment-specific strategies. The top left quadrant is a segment-specific focus zone; however, no dimension shows low overall but high segment-specific variation. The bottom right quadrant implies the uniform improvement zone. However, no dimension shows a consistent moderate influence without high variation. The bottom left quadrant shows the standardization zone consisting of Confidence of Employees, Merchandising, Reachability, and On Time Service. These factors depict low demographic influence. Ease of Purchase lies near the intersection point, suggesting it requires selective attention and not full customization. This matrix depicts high polarized pattern of demographic influence. It indicates concentration of the critical dimensions in the highly sensitive quadrant, while the majority of the dimensions are under standardization.

CONCLUSIONS

Shopping mall plays a very important role in the lives of modern shoppers, because it acts as a one-stop solution for the needs of the shoppers. In the last two decades, India witnessed a significant growth in the number of shopping malls, offering the shoppers with a wide variety of options. However, this has led to an extensive competition among the malls, making it very difficult for them to survive in this competitive scenario. This study attempts to determine the impact of demographic variables on mall visitors' service quality perceptions. The analysis focused on the seven service quality dimensions namely mall client care, accessability, confidence of employees, reachability, merchandising, ease of purchase and on-time service. The demographic variables considered for evaluation are gender, age, occupation, educational qualification and family income per month. This study makes a novel contribution by integrating demographic sensitivity analysis, effect size, and strategic prioritization matrix. This provides a comprehensive view of how the shopping mall visitors belonging to different demographic groups perceive the service quality. It includes a combination of statistical and

visual methods, such as ANOVA, ranking of effect sizes, and Heatmap for providing deeper insights; these aspects are largely underexplored in existing retail service quality literature.

The findings reveal that accessibility and mall client care are the most demographically sensitive dimensions having largest effect sizes. With reference to the demographic variables, age and occupation of the shoppers largely impact the male visitors' perceptions about accessibility. On the other hand, the income of the shoppers strongly impacts the perceptions about mall client care. The other factors demonstrate low to moderate sensitivity, suggesting consistent perceptions across the various demographic groups. Therefore, the demographic variables, age, occupation and income emerge as the strong factors impacting the shoppers' perceptions; however, gender and age group exhibit lower effects. These findings provide actionable insights for the mall managers. The malls need to design the service offerings based on the demographic characteristics of the target segments. It is necessary to focus on Accessibility by way of improving the navigation inside the malls, improving the ease of movement, and designing better parking facilities. Promotions and loyalty programmes may be segregated as per the different income groups. These steps may enhance the shoppers' satisfaction levels and lead to long-term associations.

LIMITATIONS

The study is restricted to four major metro cities of India, which may restrict the generalizability. The future research may consider the Tier II and III cities for gathering deeper knowledge about the shopping mall ecosystem. This study considers demographic variables, which are categorical in nature; however, the psychographic and experiential factors may also be considered in the future. Further, advanced predictive modelling techniques may be implemented to develop suitable frameworks for predicting shopper behavioral outcomes. This study explores the crucial role of demographic variables in shaping mall visitors' perceptions about service quality. The findings provide the mall managers with actionable insights, enabling them to develop targeted service strategies.

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