# A Perceptual Analysis of Shopping Mall Service Quality in India

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*Shopping malls in India are facing huge completion and difficulty in sustaining in the recent times. This study aims towards understanding mall visitors' perception about service quality in India. Primary data is collected from 525 respondents with the help of a structured questionnaire. The data is subjected to statistical analyses using SPSS. It is found that Problem Resolution and Customer Safety impact service quality perception. Age Group, Occupation, Income Group and Educational Qualification also played important roles. This study may enable the mall management to take specific footsteps towards achieving better service quality, leading to customer satisfaction and loyalty.*

**Keywords:** Shopping Malls, Service Quality Perception, Problem Resolution, Customer Safety, Problem Areas

## 1. Introduction

Retail industry in India is considered as one of the fastest growing industries across the globe. In the last three decades, India has witnessed a massive growth in the number of shopping malls. Shopping malls are defined as a conglomeration of a variety of retail companies which are located at a particular place and they are controlled by the mall management team as a unit. In simple words, a shopping mall is often described as an indoor shopping Centre which consists of a complex of shops with attractive architecture. The stores generally house the top and famous merchandisers and there are also the various allied services like movie theatres, food court, etc.; these facilities are also accompanied by parking space for the two wheelers and four wheelers. In today's world, shopping malls have become an integral part of our daily lives. The visitors visit the shopping centers not only for fulfilling their shopping needs but also to take a break from their daily mundane routine and enjoy the cheerful, vibrant environment. Thus, it is necessary for the mall management to make sure that they provide the best quality services to the visitors. In the current scenario, with the exponential increase in the growth of shopping malls, the level of competition amongst the shopping malls has become massive. On the other hand, with the massive growth of e-commerce, people prefer to sit back and get their goods delivered at their doorsteps. Thus, the shopping malls are finding it extremely difficult to sustain in the fiercely competitive scenario. In order to tackle this problem, it is necessary to develop a deeper understanding of the overall service quality of the malls and identify the gaps associated with them. This study takes into consideration the most prominent metro cities of India, Delhi NCR, Kolkata, Mumbai and Chennai. Very few researches have been conducted in the past for evaluating and comparing the service qualities of the shopping malls across the metro cities of India. There is a need for conducting study for the shopping malls and identifying the loopholes and determine their areas of improvement. This study may enable the mall management teams to understand the areas they need to focus on, depending on the location of the mall and demographics of the visitors. This study may act as a stepping stone towards categorising the service requirements of the mall; specific marketing strategies, as opposed to general strategies may ensure customer satisfaction, which may subsequently lead to loyalty of the customers, thus improving the wallet share of the customers.

## 2. Literature Review

### Role of Shopping Malls in Consumers' Life

Muhamed Y. (2017) studied about the shopping malls in Kozhikode city. Primary data was collected with the help of a questionnaire. A sample of 105 respondents were contacted personally for the purpose of data collection. They were selected with the help of convenience sampling. The results revealed that customers considered malls as a "One Stop Shop" for wide range of brands and products. Ambience, infrastructure and traffic flow were considered to be the most important factors by customers. It was suggested that facility management need to integrate people, process, place and technology in the malls. Thus, it is essential for the shopping malls to ensure that good ambience and traffic is maintained.

Zhang et. al. (2011) suggested that several factors related to the mall atmospherics like temperature, fragrance, lighting, ambient melodies, cleanliness impact the mall shopper's loyalty and support behaviour.

### Factors impacting the shopping behaviour of mall visitors

Mittal A. *et. al.* (2015) said that differences in the shopping behaviour of consumers occur among geographical markets (due to difference in cultures, income, demographics etc.) but at a shopping centre level, consumers care for more tangible benefits such as merchandise, brands, variety, social infrastructure (milieu) and convenience.

Kumar A. (2017) conducted a study to determine the attractiveness factors which impacted consumer behaviour while shopping at the malls. The study found that locality and convenience, relaxed shopping, prestige shopping, product knowledge, parity of price and any day visit are the main attitude factors. The researcher also suggested that the visitors considered overall attractiveness of the mall, amenities and atmospherics, personnel, ease of shopping and convenience factors while selecting the shopping centres.

Bloch P. et. al. (1994) conducted an empirical study of consumer activity within multiple mall habitats. Survey methodology was used for the purpose of data collection. Primary data relevant to the study was obtained from 600 consumers at three malls located in suburban areas in the Midwest, Northeast, and South, respectively. The three malls considered in the study were categorised as "super-regionals" and they averaged 168 stores and 1.1 million square feet. Trained personnel from mall research staff were involved in intercepting visitors as they were exiting the malls and asked for their participation in a research project about mall activity. They aimed towards determining the differences in the mall habitat activity patterns and specially focussed on the mall related shopping orientations. They found that tenant mix plays a major role in attracting consumers.

Garai D. (2022) conducted research in Purba and Paschim Bardhaman District to determine the customer behaviour in the shopping malls. He suggested that the malls need to conduct cultural events so as to promote the local culture and ultimately attract more visitors. The researcher also suggested that the malls need to come up with attractive promotional strategies in order to attract consumers, the main reason being many people hesitate to go to the malls because of the high price of the goods.

**Service Quality of Shopping Malls**
Falcão L.M.A.A. et. al. (2017) conducted a study for assessing mall service quality and customer satisfaction using SERVQUAL model. They conducted the study at Brazil. It was found that empathy and reliability had the lowest averages amongst all the five parameters of SERVQUAL (Reliability, Responsiveness, Empathy, Assurance, Tangibles). They also suggested that the CEO needs to note the customer suggestions and complaints.

Diallo M.F. et al. (2018) conducted a cross cultural study for investigating whether mall service quality and its specific dimensions impact customer loyalty towards the shopping malls. They conducted the study in the developing countries of Morocco, Senegal, and Tunisia. Primary data was obtained from a sample of 750 respondents located across the said countries. The study showed that service quality dimensions (mall physical aspects, reliability, problem solving, and personnel attention) significantly impacted customer loyalty. Mall service quality was found to positively drive customer loyalty in Morocco and Senegal. Customer satisfaction was found to have a positive effect on customer loyalty in Senegal and Tunisia. It was concluded that due to differences in cultural contexts, the three developing countries did not exhibit a homogeneous pattern.

Singh Y. et. al. (2016) conducted a study for understanding the shopping behaviour of consumers towards the malls in Delhi NCR. The data was collected from a sample of 292 respondents who were adults. Convenience sampling was used for the said study. They found that availability of brands, quality of merchandise and cost were the most significant factors impacting the buying decision-making process. It was revealed that the in-store advertisements and the signages played a major role in terms of attracting the customers towards purchases, since a good number of customers visit mall for window shopping.

Kalaiselvi M. (2016) evaluated the impact of service quality dimensions on customer satisfaction using Retail Service Quality Scale. The primary data for the study was collected from a sample of 100 shoppers from the city of Trichy. The shoppers were selected by convenience sampling. Out of the main factors considered in the study i.e. physical aspects, reliability, interpersonal relations, problem solving and policy, reliability and personal interactions were found to significantly predict the customer satisfaction; all the five factors displayed positive relationship with customer satisfaction.

## 3.  Objectives of the Study
- To identify the main factors impacting service quality perception of shopping malls in India and determine their impact
- To determine the impact of demographic variables on shopping mall service quality perception
- To establish a prescribed framework for establishing the relationships among the various factors identified

## 4.  Research Methodology
During the initial stages of the study, few experts in the retail field and shopping mall visitors are interviewed to learn about the operations of the shopping malls. Secondary data relevant to this research are collected from the relevant websites, journals as well as published research papers. A structured questionnaire is developed for interviewing the shopping mall visitors. A sample of total 202 mall visitors from Kolkata, 104 from Delhi NCR, 107 from Chennai and 112 from Mumbai is selected by simple random sampling and interviewed face to face. The primary data obtained by interviewing the respondents is analysed using SPSS. RELIABILITY TEST is done to evaluate internal consistency of the dataset. PRINCIPAL COMPONENT ANALYSIS is conducted for reducing the various dimensions and identifying the main factors underlying the service quality. REGRESSION ANALYSIS is done to evaluate the impact of these factors on the service quality. ANOVA is conducted for determining the impact of the demographic variables on the service quality of the shopping malls. After analysing the data, conclusions are drawn about the service quality provided by the malls.

## 5.  Results and Discussion
The reliability of the both the dataset containing the responses from the shoppers in Kolkata, Delhi NCR, Chennai and Mumbai is determined with the help of Cronbach's Alpha and is found to be good. Thus, it may be confirmed that there is no internal

inconsistency and it is suitable for further analysis.

## Factor Analysis

The study is based on the Retail Service Quality Scale (RSQS) developed in 1996 by Dabholkar, Thorpe and Rentz. In order to identify the main dimensions underlying the variables considered in the study, Principal Component Analysis is conducted. The following tables depict the outcome of Principal Component Analysis.

- **KMO and Bartlett's Test**

**Table 1** *Table showing the results of KMO and Bartlett's Test*

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .738 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 7996.091 |
| | Df | 378 |
| | Sig. | .000 |

The KMO and Bartlett's test has been conducted to determine the sampling adequacy for the study. The value for Kaiser-Meyer-Olkin Measure of Sampling Adequacy is found to be .738, which is average and it is confirmed that the sample is suitable for further analysis.

- **Factor Identification**
- **Determination Based on Eigen Values**

In this approach, only those factors with Eigen values greater than 1 are considered. Other factors are not included in this model. Here, from the table TOTAL VARIANCE EXPLAINED, 6 factors have been identified whose Eigen values are more than 1.

*Table 2: Table showing the results of Principal Component Analysis*

| | Total Variance Explained | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 6.598 | 23.563 | 23.563 | 6.598 | 23.563 | 23.563 | 5.029 | 17.960 | 17.960 |
| 2 | 3.052 | 10.901 | 34.464 | 3.052 | 10.901 | 34.464 | 3.019 | 10.783 | 28.743 |
| 3 | 2.133 | 7.619 | 42.082 | 2.133 | 7.619 | 42.082 | 2.398 | 8.565 | 37.307 |
| 4 | 2.029 | 7.246 | 49.328 | 2.029 | 7.246 | 49.328 | 2.367 | 8.454 | 45.761 |
| 5 | 1.499 | 5.355 | 54.683 | 1.499 | 5.355 | 54.683 | 2.157 | 7.704 | 53.465 |
| 6 | 1.310 | 4.680 | 59.363 | 1.310 | 4.680 | 59.363 | 1.651 | 5.897 | 59.363 |
| 7 | 1.255 | 4.482 | 63.845 | | | | | | |
| 8 | 1.149 | 4.102 | 67.947 | | | | | | |
| 9 | 1.051 | 3.752 | 71.699 | | | | | | |
| 10 | .955 | 3.409 | 75.108 | | | | | | |
| 11 | .883 | 3.155 | 78.263 | | | | | | |
| 12 | .789 | 2.817 | 81.081 | | | | | | |
| 13 | .698 | 2.494 | 83.575 | | | | | | |
| 14 | .635 | 2.268 | 85.843 | | | | | | |
| 15 | .611 | 2.181 | 88.023 | | | | | | |
| 16 | .490 | 1.751 | 89.775 | | | | | | |
| 17 | .449 | 1.602 | 91.377 | | | | | | |
| 18 | .364 | 1.301 | 92.677 | | | | | | |
| 19 | .348 | 1.242 | 93.919 | | | | | | |
| 20 | .328 | 1.172 | 95.091 | | | | | | |
| 21 | .301 | 1.075 | 96.166 | | | | | | |
| 22 | .241 | .862 | 97.028 | | | | | | |
| 23 | .206 | .737 | 97.764 | | | | | | |
| 24 | .176 | .627 | 98.391 | | | | | | |
| 25 | .132 | .470 | 98.862 | | | | | | |
| 26 | .121 | .433 | 99.295 | | | | | | |
| 27 | .103 | .367 | 99.662 | | | | | | |
| 28 | .095 | .338 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

- **Determination Based on Percentage of Variance**

The number of factors extracted can also be determined in a way so that the cumulative percentage of variance extracted by the factors reaches a satisfactory level. Here according to the analysis, the cumulative percentage of variance extracted by the 6 factors is 59.363 % (from the table TOTAL VARIANCE EXPLAINED), which is average. In case of the researches conducted in social science, the extracted factors generally explain between 50% - 60% of the total variance.

- **Factor Interpretation**

*Table 3 Table showing the Rotated Component Matrix*

| Rotated Component Matrix[a] | | | | | | |
|---|---|---|---|---|---|---|
| | Component | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| EQUIP_P | | | | | | |
| FACIL_P | | | .719 | | | |
| ATTRACTMAT_P | | | | | | |
| CLEAN_P | | | | | | .723 |
| FIND_P | | .538 | | .566 | | |
| MOVE_P | | | | .581 | | |
| REPAIRS_P | .745 | | | | | |
| PROM_TIME_P | | | | | | |
| RIGHT_P | .511 | | | | | |
| MERCHANDISE_P | | .542 | | | | |
| ERROR_P | | | | | | |
| KNOWLEDGE_P | .509 | | | | | |
| CONFIDENCE_P | | | | .697 | | |
| SAFETRANS_P | | | .727 | | | |
| PROMPT_P | | .748 | | | | |
| TIME_P | | | | | | |
| TIMELYRESP_P | | .657 | | | | |
| INDATTEN_P | .699 | | | | | |
| COURTEOUS_P | | | | | | |
| CALLCOURT_P | | | | | .598 | |
| EXCHANGE_P | .898 | | | | | |
| PROBSOL_P | .592 | | | .555 | | |
| COMPLAINT_P | .763 | | | | | |
| PRODQUAL_P | | | | | | |
| PARKING_P | .775 | | | | | |
| HOURS_P | | | | | .717 | |
| PAYMENT_P | | | | | | .505 |
| LOYALTY_P | | .663 | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | |
| Rotation Method: Varimax with Kaiser Normalization. | | | | | | |
| a. Rotation converged in 9 iterations. | | | | | | |

Factor interpretation is facilitated by identifying the variables that have large load on the same factor. That factor can be interpreted in terms of variables that load high on it. From the Rotated Component Matrix, the main factors identified, are depicted below.

*Table 4 Table Showing the Details of Factors Obtained from Rotated Component Matrix*

| Factor | Highest Loading Variables | Name of the Factor |
|---|---|---|
| 1 | Repairs and alterations done at the promised time, Services are performed right the first time, Knowledge of employees to solve customer's queries, Individualised attention to customers, Willingness to handle returns and exchanges, Sincerity of interest in resolving customer problems, Capacity of employees in handling customer complaints directly and immediately | Problem Resolution |
| 2 | Availability of desired merchandise, Promptness of service by employees, Employees are never too busy to respond to customer's requests | Timeliness |
| 3 | Visual attractiveness of physical facilities, Safety in transactions | Customer Safety |
| 4 | Ease of finding the stores, Ease of moving around in the mall, Behaviour of employees instil confidence | Customer Convenience |
| 5 | Courteousness of employees on call/email, Convenience of operating hours | Ease of access |
| 6 | Cleanliness and convenience of physical facilities, Acceptance of major modes of payment | Facilities |
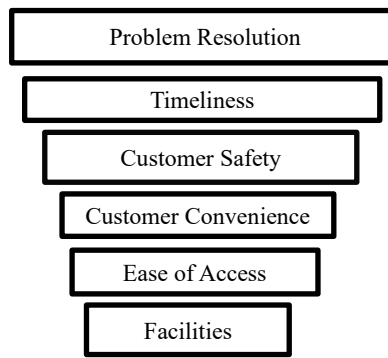
*Figure 1 Diagrammatic representation of factors identified through Factor Analysis*

## Regression Analysis

*Table 5 Table Showing the Model Summary*

| Model Summary | | | |
|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .776[a] | .603 | .591 | .36348 |
| a. Predictors: (Constant), Timeliness, Facilities, Ease Access, Cust Safety, Cust Conv, Prob Res | | | |

The Model Summary shows that the value of R, the multiple correlation coefficient. It is evident from the above table, that the value of "R" is 0.776which indicates a satisfactory level of prediction. The R square value is 0.603, which is acceptable in case of social science research.

The dependent variable considered in the study is Service Quality Perception about the shopping malls. The predictors considered for the regression analysis are Problem Resolution, Timeliness, Customer Safety, Customer Convenience, Ease of Access, Facilities as identified from the Principal Component Analysis.

*Table 6 Table showing the results of Regression Analysis*

| Coefficients[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 1.048 | .466 | | 2.252 | .025 | | |
| Prob Res | .610 | .060 | .677 | 10.133 | .000 | .447 | 2.237 |
| Cust Safety | .158 | .069 | .114 | 2.292 | .023 | .810 | 1.235 |
| 1 Cust Conv | .041 | .049 | .054 | .850 | .396 | .491 | 2.038 |
| Ease Access | .054 | .056 | .047 | .965 | .336 | .834 | 1.200 |
| Facilities | -.078 | .085 | -.043 | -.918 | .360 | .922 | 1.084 |
| Timeliness | .011 | .085 | .009 | .124 | .901 | .390 | 2.565 |
| a. Dependent Variable: OVERALL_SERVQUAL | | | | | | | |

The above table depicts only the statistically significant factors predicting the service quality perception. In case of the shopping malls located in India, the statistically significant factors identified are Problem Resolution and safety of Customers which impact the service quality perception. The VIF statistics also confirms that there is no multi-collinearity amongst the variables under consideration.

The equation for the regression output in case of shopping malls located in Kolkata is given below:

*Service Quality Perception about the Shopping Malls= 1.048 + .610 x Problem Resolution + .158 x Customer Safety*
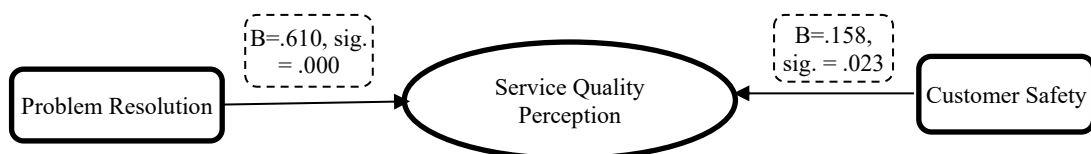


*Figure 2 Diagrammatic Representation of the Results of Regression Analysis*

The ANOVA is conducted for testing the following set of hypotheses. It has enabled us to determine the relationship between the demographic variables and the dependent variable under consideration.

**H₀** = There is no significant difference in overall perception about service quality of shopping mall with respect to the demographic variables describing the respondents.

$H_1$ = There is a significant difference in overall perception about service quality of shopping mall with respect to the demographic variables describing the respondents.

The demographic variables taken into consideration are gender, age group, educational qualification, occupation and income group of the respondents and the dependent variable is service quality perception about the shopping malls in Kolkata.

The results obtained from ANOVA are mentioned in a consolidated manner in the table given below:

*Table 7 Table Showing the Results Obtained from ANOVA*

| Demographic Variable | F. Value | Sig. | Observation |
|---|---|---|---|
| Gender | - | - | No impact |
| Age Group | 2.247 | .049 | Perception about service quality of shopping malls is high among age groups of 46 – 55 years, average among age group of 18- 25, 26 – 35, 36 – 45 years and 55 – 65 years and low in case of senior citizens aged above 65 years |
| Educational Qualification | 7.6 | .000 | Perception about service quality of shopping malls is high in case of 'Others' category, on the lower side among undergraduates, graduates and post graduates |
| Occupation | 18.902 | .000 | Perception is satisfactory amongst all categories of respondents expect in case of Entrepreneurs |
| Income group | 25.978 | .000 | Perception is satisfactory among income groups of INR75,000 – 1 lac, 1 – 1.5 lacs and above 1.5 lacs, but low among income groups of less than 50,000 per month and 50,001 – 75,000. |

It is found that there is no significant impact of gender on the service quality perception of the respondents. In case of age group, a significant relationship is established and it is found that the perception about service quality of shopping malls is high among age group of 46 – 55 years, average among age groups of 18- 25, 26 – 35, 36 – 45 years and 55 – 65 years and low in case of senior citizens aged above 65 years. Educational qualification is found to have a significant impact on the service quality perception of the respondents. Perception about service quality of shopping malls is high in case of 'Others' category, on the lower side among undergraduates, graduates and post graduates. Occupation is found to be significantly related to service quality perception of the respondents. From the mean curve, it is found that only the entrepreneur segment is dissatisfied with the service quality offered by the shopping malls. Income is also found to be a significant predictor of service quality perception. Service quality perception is satisfactory among income groups of INR 75,000 – 1 lac, 1 – 1.5 lacs and above 1.5 lacs, but low among income groups of less than 50,000 per month and 50,001 – 75,000.
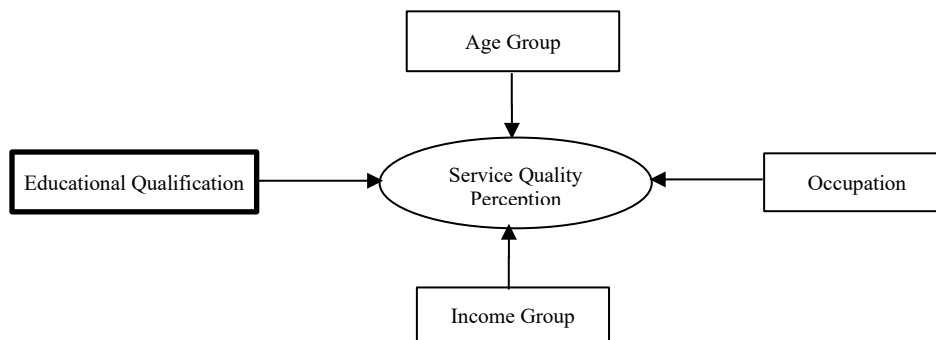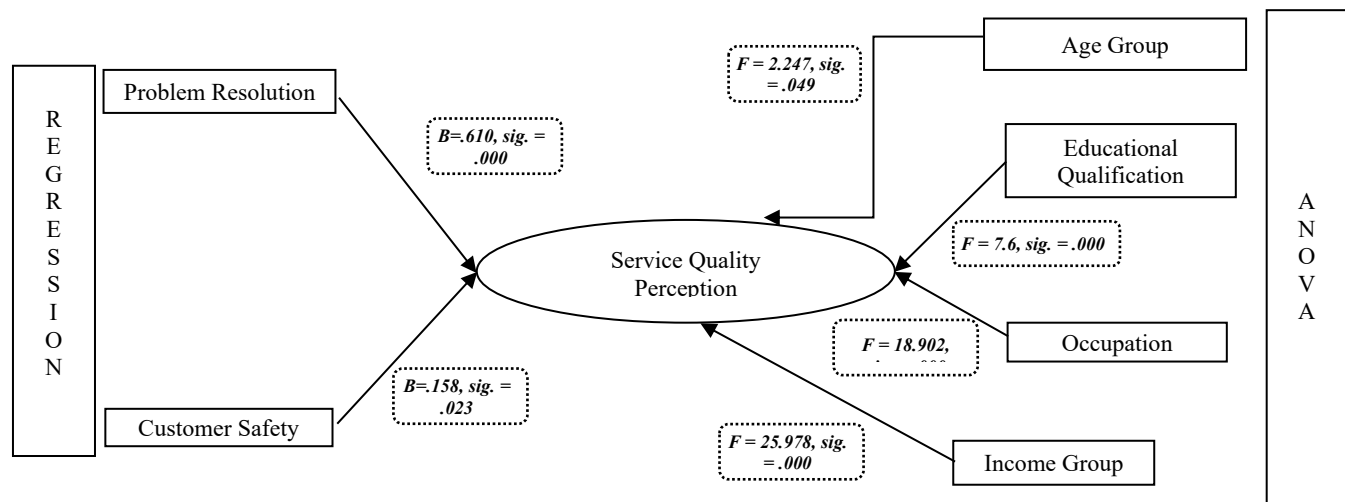


*Figure 3 Diagrammatic Representation of the Results of ANOVA*

**Conceptual Model**

# 6. Findings Conclusions and Limitations

**Key Findings**

1. Factor analysis results in the extraction of 6 factors are extracted which explain 59.363% of the cumulative variance. The main factors identified in case of the malls located in Kolkata are Problem Resolution, Timeliness, Customer Safety, Customer Convenience, Ease of Access, Facilities
2. Regression Analysis reveals that Problem Resolution and Customer Safety are the main factors which significantly impact the service quality perception of the shoppers.
3. ANOVA reveals that there is a significant difference in the service quality perception of the mall visitors with respect to age group, educational qualification, occupation and income group.

# 7. Conclusions

This study is conducted in the four metro cities of India namely Kolkata, Delhi NCR, Chennai and Mumbai. The main objective of this study is to identify the factors impacting the service quality perception of the shopping mall visitors in the metro cities of India. In order to obtain the primary data for the study a structured questionnaire is developed using the Retail Service Quality Scale. A sample of total 202 mall visitors from Kolkata, 104 from Delhi NCR, 107 from Chennai and 112 from Mumbai is selected by simple random sampling and interviewed face to face to learn about their expectations and perceptions about the mall service qualities. The datasets obtained are checked and are found suitable for further analysis. It is figured out that perception about service quality of shopping malls is high among age groups of 46 – 55 years, average among age group of 18-25, 26 – 35, 36 – 45 years and 55 – 65 years and low in case of senior citizens aged above 65 years. The mall management teams need to figure out ways of making the shopping experience delightful for them. Many have complained about difficulty in locating the stores and finding it difficult to move due to overcrowding in the lifts and escalators. Many respondents have also informed about the unavailability of wheelchairs in the malls. The senior citizens have also complained about the difficulties they face while standing in long queues for billing purpose. Perception is on the lower side among undergraduates, graduates and post graduates. The entrepreneurs were found to be dissatisfied and suggested that there were no places to conduct their business meetings or the video conferences; hence they would expect the malls to come up with a solution for this problem. This ancillary service may help to increase the footfall of customers in the mall and entice them to explore the stores and entertainment options, ultimately leading to the increase in top line. Visitors falling in the brackets of monthly incomes less than 50,000 per month and 50,001 – 75,000 were not satisfied, hence, the malls need to make the experiences more economical and affordable, so that the customers from various categories are able to enjoy the shopping experience. In terms of the service quality perception, Problem Resolution and Customer Safety are the main factors which significantly impact the service quality perception of the shoppers. Problem resolution implies the various aspects of repairs and alterations done at the promised time, services being performed right the first time, level of knowledge of employees to solve customer's queries, individualised attention to customers, willingness to handle returns and exchanges, sincerity of interest in resolving customer problems, capacity of employees in handling customer complaints directly and immediately. Customer safety implies the safety in terms of transactions and other utilities of the malls. It is necessary for the mall management to take care of these factors. Specific strategies as opposed to generic strategies are the key to success in terms of improving the service quality perception. Better perception about the mall service quality implies higher customer satisfaction; ultimately leading to capturing greater wallet share of the mall visitors.

# 8. Limitations

Due to time constraint, the study was restricted to the four cities of India. If it would have been extended to all the cities (Tier I, Tier II and Tier III), it would have provided a deeper understanding of the subject and provided a more holistic view of the shopping mall service quality scenario.

# 9. Scope for Future Work

The research may be extended to all the cities (Tier I, Tier II and Tier III) of India; this will provide a deeper understanding of the subject. Also, the study may be extended to the international boundaries; this will help to develop a benchmark about the consumers' tastes and preferences.

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