

A Study on Service Quality and Customer Satisfaction in Domestic Aviation Sector with Reference to Air India Limited, Mumbai

C. Murugesan¹, Dr. R. Perumalsamy²

¹Ph.D. Research Scholar, Sri Subash College of Arts and Science, Pollachi, Tamil Nadu, India

²Principal, Sri Subash College of Arts and Science, Pollachi, Tamil Nadu, India.

Abstract: *Air Transport is the most recent mode of transport. It is the gift of the twentieth century to the world. The two world wars gave a great impetus to the development of air transport in almost all the countries of the world. Aviation creates large number of jobs, every million passenger transported fashion thousand jobs directly at the airports and a further enlargement in the national economy. However the outrageous rates have made it the mode of travel of the rich or of the business community for whom time is more affluent than air travel. The success of an any airways fully depends on quality of service delivery and customer satisfaction. The main objective of the present study is to find out the customer satisfaction in airways in various objects like, quality, service, fare etc.*

Keywords: Airline Booking, Service, Quality, Passengers Satisfaction, Tangibility, Reliability, Assurance, Responsiveness and Empathy

1. Introduction

SERVQUAL was presented as a multidimensional construct and in their original formulation, Parasuraman *et al.* (1985) indicated ten components of SERVQUAL, namely reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles. In 1988, (see Parasuraman *et al.*, 1988), these components were conceptualized into five dimensions; reliability, assurance, tangibles, empathy, and responsiveness. They developed 22-item instruments to measure customer expectations and perceptions (E and P) of the five dimensions of SERVQUAL. Four or five items were used to measure each dimension. The instruments were administered twice in different forms, first to measure expectations, and second to measure perceptions. Customer satisfaction can be conceptualized as either transaction-specific satisfaction or cumulative satisfaction. Transaction-specific satisfaction is a customer's evaluation of her or his experience and reactions to a specific company encounter. Cumulative satisfaction refers to customers overall evaluation of patronage experience from inception to date.

In the airline industry context the problem is whether management can perceive correctly what passengers want and expect. Moreover, expectations serve as standards or reference points for customers. In evaluating service quality, passengers compare what they perceive they get in a service encounter with their expectations of that encounter. Assessing passenger expectations is not a static exercise as passengers are becoming increasingly sensitive to quality. There are many breakdowns of services in airlines industry. They can be divided into four main areas which are passenger services, baggage or cargo services, engineering services and catering services. Even there are many passenger carriers in India such as AirAsia India, GoAir, IndiGO, Jet Airways and Spice Jet, Air India gains the maximum credibility among passengers and therefore the research is to investigate the passenger perception of the Air

India (AI) domestic carriers service quality and its influence on customers satisfaction.

2. Review of Literature

Arash Shahin (2007) evaluated the concept of service quality and the model of service quality gaps. The author studied the SERVQUAL approach and its role in the analysis of the customer expectations and perceptions with support example. An outcome of the study outlined the fact that although SERVQUAL could close one of the important service quality gap associated with external customer services, it could be extended to close other major gaps and therefore, it could be developed in order to be applied for internal customers. Thus, it is necessary to consider a service provider as a major element to measure service quality in airline services.

Girish Prayag (2007) assessed the service quality of small airlines at Air Mauritius, by using the SERVQUAL model and determined the relative importance attributed to service quality dimensions by international tourists. Around 140 samples were collected from international airline passengers who are travelling essentially for a leisure trip. The paper found that service quality structural dimensions are context- and culture specific. Four factors are perceived as influencing perceptions of service. Service efficiency and affect is being the most important, while service personalization, reliability and tangibles are the least important. Empathy as a service dimension is valued more than assurance. Customer satisfaction and willingness to recommend the airline is primarily dependent on service efficiency and affect. The starting-point for service improvements at Air Mauritius is better management of service reliability. The company is able to create high perceptions of service using tangible cues. The generation of a vision of excellence supported by contact employees "empowerment should improve perceptions of service. There is potentially a link between expectations of service

levels at destination and tourists" expectations from the flag carrier. The smaller airline companies have to resort to strategic alliances and service differentiation to survive in this globally integrated industry. The paper fulfilled the gap in the existing literature on service quality management in small airlines.

3. Statement of the Study

Service quality is a evaluation of Expectation (E) about a service with the Performance (P) $SQ=P-E$. An establishment with high service quality will fulfill its customer needs at the same time remains reasonably economical and competitive. Airline Transport firms are admitting that service quality can operate as an intentional measure to increase the "Value" of the "total transport service offering" in the eyes of customers, to differentiate the service offering from that of their competitors and to promote customer satisfaction. Very few studies are conducted concerning to service quality and customer satisfaction in developing countries. The researcher attempts to examine the importance of service quality expected and perceived by the domestic passenger of Air India Limited in Mumbai and their level of satisfaction based on the serviced provided by Air India.

The higher expectations of the passengers and tough competition from the private sector Airline companies who also exhibit themselves with novel marketing techniques and strategies have significantly influenced the customers which forced the Public Sector Airlines to perform well and avoid set backs in the Airline Transport Business. Therefore the present study is conducted to understand whether the performance and expectation gap is bridged with the specific dimensions such as Tangibility, Reliability, Responsiveness, Empathy and Assurance and whether the satisfaction level is achieved by the domestic passengers of Air India Limited in Mumbai.

4. Objectives of the Study

- 1) To examine gap between expectation and perception on service quality leading to Satisfaction.
- 2) To evaluate the influence of demographic variables on satisfaction towards service quality.

5. Hypotheses

- 1) There is a significant relationship between demographics of the respondents and their level of satisfaction towards service quality
- 2) There is a significant relationship between Service Quality dimensions and Satisfaction

6. Methodology

The research is descriptive in nature. For the present study, the data were collected by distributing the questionnaires directly to the AIL domestic passengers who agreed to fill-in the questionnaire. 2250 questionnaires were distributed considering minimum three domestic journey by the passengers of Air India Ltd. Although, questionnaires were distributed only to those passengers who agreed to

participate, only 765 questionnaires from the distributed 2250 were returned which comprises 34% of the response rate. After carefully scrutinizing the data 630 were retained for analysis. Relevant statistical tools used are Percentage Analysis, Gap Analysis and Chi-Square Test.

7. Demographic Variables

The demographic variables of the Air India Ltd passengers considered to determine the Perception and Expectation of Service Quality leading to Satisfaction classified by their age, gender, marital status, educational qualification, occupation, monthly family income which are the independent demographic variables for the study.

Table 1: Demographic Variables of the Respondents

Sl. No.	Demographic Variables	630 Respondents	(100 %)
1.	Age		
	30 and below	205	32.5
	31 to 50	343	54.4
	51 and above	82	13.0
2.	Gender		
	Male	538	85.4
	Female	92	14.6
3.	Marital Status		
	Married	429	68.1
	Unmarried	201	31.9
4.	Educational Qualification		
	Formal Education (H.Sc.-UG)	100	15.9
	PG / M.Phil.	286	45.4
	Professionals	160	25.4
	Others	84	13.3
5.	Occupation		
	Private Sector	441	70.0
	Government Sector	63	10.0
	Business	126	20.0
6.	Monthly Family Income		
	Below Rs.500,000	299	47.5
	Rs.5,00,001 to 10,00,000	194	30.8
	Above Rs.10,00,001	137	21.7

Source: Computed from Primary Data

Table-1 shows that more than half (54.4%) of the respondents are in the age between 31 and 50 years, while 32.5% of the respondents belong to the age below 30 years and the remaining 13% of the respondents are in the age group above 51 years. It is clear that majority (85.4%) of the respondents are male and 14.6% of the respondents are female. It is understood that most (68.1%) of the respondents are married and 31.9% of the respondents are unmarried. It is clear that less than half (45.4%) of the respondents having qualified with formal education (H.Sc./UG), while 45.4% of the respondents qualified with Post Graduation / M.Phil., 25.4% of the respondents are professionally qualified and the remaining 13.3% of the respondents are having other qualifications. It is understood that majority (70%) of the respondents are working in private sector, while 20% of the respondents are engaged in Business and the remaining 10% of the respondents are working in Government sector. It is evident that less than half (47.5%) of the respondents are having income below Rs.5,00,000, while 30.8% of the respondents are having

monthly family income between Rs.5,00,000 and Rs.10,00,000 and the remaining 21.7% of the respondents are having monthly family income above Rs.10,00,000.

8. Gap Analysis

$$\text{Service Quality (SQ)} = \text{Customer's Perception (P)} - \text{Customer's Expectations (E)}$$

Management of service quality largely focuses on managing the gaps between expectations and perceptions of customers [9]. The goal of the firm is to minimize the gap between (P) and (E). Rowley [10] pointed out that previous researchers such as Lehtinen and Lehtinen [11] and Gronroos [12] also applied gap principles similar to that proposed by Parasuraman et al. [1].

GAP ANALYSIS

Based on *t*-test results, the comparison between expectations and perceptions rated by the Air India Limited domestic commuters on all five service quality dimensions (tangibility, reliability, assurance responsiveness and empathy) indicated a significant gap ($p < 0.01$) for three categories.

Table 2: Comparison of Expectations and Perceptions on Service Quality

Quality Dimensions	Expectation		Perception		Gap (P-E)
	Mean	SD	Mean	SD	Mean
Tangibility	16.85	4.39	18.50	4.82	-1.65
Reliability	23.24	3.90	22.60	4.56	0.64
Assurance	17.98	4.65	17.91	4.40	0.06
Responsiveness	16.95	3.78	17.18	4.82	-0.23
Empathy	14.05	3.70	15.19	2.91	-1.13

Source: Computed from Primary Data

As shown in the Table 2 the highest difference in the mean was observed between expectation and perception of service quality was from Tangibility with the mean difference of -1.65 followed by Empathy perspective with the mean difference of -1.13. While there is a marginal impact with respect to Responsiveness perspective with the mean difference of -0.23. On the other hand, the least mean differences were observed positive with respect to Reliability perspective (0.64) and Assurance Perspective (0.06). Therefore, to prove the statistical significance considering the satisfaction factor with the service gap attributes regression analysis is conducted hereunder.

9. Multiple Regression

To examine the relationship between the service quality attributes and satisfaction among passengers of Air India Ltd. in Mumbai, it was explained with the predictor variables (Tangibility, Reliability, Assurance, Responsiveness, and Empathy) that have significant effect on the dependent factor (Satisfaction towards Service Quality) and this is explained through Multiple Regression. It is clear from the Table that the co-efficient of multiple

A gap is the difference, imbalance or disparity which is determined to exist between customers' perception of firm performance and their prior expectation.. Service quality (SQ) perceived by customers is therefore as a result of a comparison of customers' expectation (E) of services that the organization should offer versus their perception of the performance (P) delivered by the service organization.

regression based on the predictor variables in which the correlation was found to be 0.418 which reveals moderate level of correlation between the **service quality attributes and satisfaction of AIL passengers in Mumbai** and the R^2 shows 17.4 percent of variation explained by the independent variables to that of the dependent variable. When this R^2 was tested for its significance by using ANOVA, F value (26.365) was found to be highly significant at 1 percent level.

It is evident that out of five service quality attribute which are the predictors measured to find the level of satisfaction among AIL passengers in Mumbai which showed that there is a significant relationship only with three service quality dimensions (Reliability, Assurance and Responsiveness) and there is no significant relationship with the quality dimensions (Tangibility and Empathy).

Table: Coefficient of determinants showing relationship between Service Quality Attributes and their relationship with Satisfaction of AIL Passengers

Attributes	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	32.411	.302		107.314	.000
Tangibility	.012	.047	.010	0.260	.795
Reliability	.405	.059	.294	6.821	.000
Assurance	.115	.044	.096	2.625	.009
Responsiveness	.223	.062	.155	3.602	.000
Empathy	.013	.059	.008	0.216	.829

Dependent Factor: Satisfaction

The statistical significance is explained based on the results of the Beta Coefficient and Critical Values viz. Reliability ($t=6.821$, Sig.0.000), followed by Assurance ($t=2.625$, Sig.0.009) and finally Responsiveness ($t=3.602$, Sig.0.000) which are found to be significant at 5% levels. Whereas there is no statistical significance with respect to Tangibility with the $t=0.260$, Sig.0.795 and Empathy ($t=-0.216$, Sig.0.829) which are found to be insignificant at 5% level.

10. Chi-Square Test

An association between demographic characteristics of the respondents and their Satisfaction towards Service Quality in their domestic travel with Air India Limited, chi-square test was used to test the hypothesis and the results are presented in the Table.

Table 4: Demographics of the respondents and satisfaction towards Service Quality

Demographic	Calculated χ^2 Value	D.F	Table Value	P-Value	Remarks
Age	28.095	4	9.488	0.000	Significant
Gender	1.372	2	5.991	0.504	Not Significant
Marital Status	41.564	2	5.991	0.000	Significant
Educational Qualification	37.665	6	12.592	0.000	Significant
Occupational Role	63.507	4	9.488	0.000	Significant
Monthly Income	32.689	4	9.488	0.000	Significant

Source: Computed from Primary Data

It is clear that the calculated Chi-Square value (28.095, Sig.0.000) is more than the table value (9.488) which reveals that “age of the respondents” and “Level of Satisfaction towards Service Quality” are having significant relationship. Therefore, the null hypothesis is rejected. It is understood that the calculated Chi-Square value (1.372, Sig.0.504) is less than the table value (5.991) which reveals that “gender of the respondents” and “Level of Satisfaction towards Service Quality” are having insignificant relationship. Therefore, the null hypothesis is accepted. It is evident that the calculated Chi-Square value (41.564, Sig.0.000) is more than the table value (5.991) which revealed that “marital status of the respondents” and “Level of Satisfaction towards Service Quality” are having significant relationship. Therefore, the null hypothesis is rejected. It is clear that the calculated Chi-Square value (37.665, Sig.0.000) is more than the table value (12.592) which revealed that “Educational Qualification of the respondents” and “Level of Satisfaction towards Service Quality” are having significant relationship. Therefore, the null hypothesis is rejected. It is inferred that the calculated Chi-Square value (63.507, Sig.0.000) is more than the table value (9.488) which revealed that “Occupational Role of the respondents” and “Level of Satisfaction towards Service Quality” are having significant relationship. Therefore, the null hypothesis is rejected. It is clear that the calculated Chi-Square value (34.423, Sig.0.000) is more than the table value (9.488) which revealed that “Monthly Family Income of the respondents” and “Level of Satisfaction towards Service Quality” are having significant relationship. Therefore, the null hypothesis is rejected.

11. Summary of the Results

- It is clear that maximum respondents are in the age between 31 and 50 years, while majority of the respondents are male and most of the respondents are married. It is also clear that less than half (45.4%) of the respondents having qualified with formal education (H.Sc./UG), majority (70%) of the respondents are working in private sector and finally, it is understood that less than half (47.5%) of the respondents are having income below Rs.5,00,000.
- It is observed that the highest difference in the mean was observed between expectation and perception of service quality was from Tangibility with the mean difference of -1.65 followed by Empathy perspective with the mean difference of -1.13. While there is a marginal impact with respect to Responsiveness perspective with the mean difference of -0.23. On the other hand, the least mean differences were observed positive with respect to Reliability perspective (0.64) and Assurance Perspective (0.06). Therefore, to prove the statistical significance

considering the satisfaction factor with the service gap attributes regression analysis is conducted hereunder.

- It is evident that the association between specific quality dimensions such as Reliability, Assurance and Responsiveness having significant association with Satisfaction among AIL domestic passengers whereas, there is no significant relationship between Tangibility and Satisfaction as well as Empathy and Satisfaction that needed improvement.
- It is summarized that the demographic characteristics of the respondents and their Satisfaction towards Service Quality in their domestic travel with Air India Limited the probabilities predicted using Chi-Square test revealed the results that out of six demographic variables such as Age, Gender, Marital Status, Educational Qualification, Occupational Status and Monthly Income shows that five variables except gender were found to be significantly related with the level of satisfaction towards service quality.

12. Suggestions and Recommendations

It is observed that out of the five service quality dimensions three dimensions were found to have significant impact viz. Reliability, Assurance and Responsiveness which are justifying the perception and expectation levels of the domestic passengers of Air India Ltd., however there is a wide gap observed with respect to Tangibility and Empathy which needs significant improvement by Air India Ltd. by improving the physical aspects like appearance and attitude of the employees, to enhance the cleanliness, to make better the check-in and boarding and luggage handling mechanism and also by providing quality in-flight cuisine. It is also recommended to improve the hospitality by giving due care and concern for frequent flyers.

It is observed that there is a positive significant impact in the satisfaction level on service quality among domestic passengers of Air India Limited, irrespective of the age, gender, education, occupation and income which shows optimistic outcome of the study. However, based on the Service Quality Perception and Expectation aspects, however, it is recommended that significant improvement needed from Air India Limited to achieve greater heights in the years to come.

13. Conclusion

Quality is generally regarded as being a key factor in the creation of worth and in influencing customer satisfaction. SERVQUAL was presented as a multidimensional construct and in their original formulation, Parasuraman *et al.* (1985) indicated ten components of SERVQUAL, namely

reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles. Customer satisfaction is a personal feeling of either pleasure or disappointment resulting from the evaluation of services provided by an organization to an individual in relation to expectations. The present study is conducted to understand the performance and expectation gap from which it is observed from the results wide gap existing in the Service Quality aspects such as Tangibility and Empathy which needs immediate attention by the management of Air India Ltd. while the level of satisfaction by the customers irrespective of their demographic characteristics revealed significant statistical results, however, it is recommended that significant improvement needed from Air India Limited to achieve greater heights in the years to come.

References

- [1] Parasuraman V.A., Zeithaml A., Berry L.. A Conceptual Model of Service Quality and Its Implications for the Future Research. *Journal of Marketing*. 1985. Vol. 49, pp.41-50.
- [2] Zeithaml V.A., Parasuraman A., Berry L.L.. Delivering quality service: Balancing customer perceptions and expectations. *The Free Press*. New York, 1990.:
- [3] Kotler P., Armstrong G.. Principles of Marketing, 11th Ed., New Jersey, *Pearson Prentice Hall* 2006.
- [4] Girish Prayag and Kiran Dookhony – Ramphul, “Clustering Passengers Expectations and Perceptions of Service Quality in Air Mauritius. *Paper presented at the BAI International Conference*, Singapore, 2006, 12-14, pp. 1-22.
- [5] Arash Shahin “SERVQUAL and Model of Service Quality Gaps. A Framework for Determining and Prioritizing Critical Factors in Delivering Quality Services,” 4th *International Conference on Quality Management*, University of Isfahan, Iran, 2007, Vol.2.No.7, pp. 3297-3304.