

Service Quality and Passenger Satisfaction: An Empirical Study of Airline Customers

OPEN ACCESS

Volume: 13

Special Issue: 1

Month: February

Year: 2026

P-ISSN: 2321-788X

E-ISSN: 2582-0397

Citation:

Alshazim, K, et al.
“Service Quality and Passenger Satisfaction: An Empirical Study of Airline Customers.”
Shanlax International Journal of Arts, Science and Humanities, vol. 13, no. S1, 2026, pp. 240–43.

DOI:

<https://doi.org/10.34293/sijash.v13iS1-Feb.10089>

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Abstract

The airline industry has become highly competitive, making service quality a key determinant of passenger satisfaction and loyalty. This study examines the relationship between service quality dimensions and passenger satisfaction in the airline sector. Primary data were collected from 400 airline passengers using a structured questionnaire with a five-point Likert scale. The study analyses factors such as punctuality, in-flight services, staff behavior, safety, comfort, and pricing. Statistical tools including percentage analysis, mean score, and ranking methods were used for data analysis. The findings reveal that on-time performance, safety assurance, and staff responsiveness are the most influential factors affecting passenger satisfaction. The study concludes that improving service reliability and customer-oriented practices can enhance passenger satisfaction and strengthen airline competitiveness.

Keywords: Service Quality, Passenger Satisfaction, Airline Industry, Customer Experience, Loyalty, Reliability

Introduction

The airline industry plays a vital role in global transportation and economic development. With increasing passenger expectations and intense competition, airlines must focus on delivering superior service quality to retain customers. Passenger satisfaction depends not only on safe transportation but also on various service elements such as punctuality, comfort, staff behavior, baggage handling, and in-flight services. Understanding passenger perceptions helps airlines improve service delivery and build long-term customer relationships.

Need of the Study

The rapid growth of air travel has increased customer expectations regarding service quality and overall travel experience. Passenger dissatisfaction due to delays, poor service, or inadequate facilities can negatively impact airline reputation and customer loyalty. Therefore,

it is essential to identify the key service quality factors influencing passenger satisfaction to help airlines enhance service performance and maintain a competitive advantage.

Statement of The Problem

Despite technological advancements and improved infrastructure, passengers often experience issues such as flight delays, poor customer service, baggage problems, and inadequate comfort. These factors affect overall satisfaction and future travel intentions. Hence, the study aims to analyse the impact of service quality dimensions on passenger satisfaction in the airline industry.

Objectives of the Study

- To know the demographic profile of airline passengers.
- To identify key service quality factors influencing passenger satisfaction.
- To suggest measures to improve service quality in the airline industry.

Research Methodology

The study adopted a descriptive research design to examine the factors influencing passenger satisfaction in the airline industry. Both primary and secondary data were used for the analysis. Primary data were collected through a structured questionnaire administered to airline passengers, while secondary data were gathered from journals, websites, and airline reports. The population for the study consisted of airline passengers, and a sample of 200 respondents was selected using the convenience sampling technique. The data collection instrument was based on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The independent variables considered in the study included punctuality, staff behavior, in-flight services, comfort, safety, and ticket pricing, while passenger satisfaction was treated as the dependent variable. For data analysis, statistical tools such as percentage analysis, mean score analysis, ranking method, and chi-square test were used to examine demographic associations and interpret the results.

Review of Literature

Alaa S. Jameel (2025) investigated service quality dimensions at Iraqi Airways and found that tangible aspects such as aircraft and terminal facilities, safety measures, staff services, and airline image significantly influence passenger satisfaction, highlighting the need for differentiated service quality approaches in airline operations.

Zixuan Li (2025) applied machine learning models to airline passenger survey data and identified in-flight entertainment, seat comfort, and cabin service as the most influential determinants of customer satisfaction, suggesting that airlines should prioritize enhancements in these areas to improve overall passenger experience.

Vinoj Wilfred et al. (2024) examined airline service quality and price sensitivity in the Indian airline sector, confirming that multiple service quality dimension's reliability, responsiveness, tangibles, and assurance positively impact passenger satisfaction, reinforcing the importance of a multi-dimensional approach to service quality evaluation.

Anita Dyah Nur'aini et al. (2024) explored how service quality, passenger satisfaction, perceived value, and airline brand love influence word-of-mouth behavior among domestic airline users in Indonesia, underlining that higher service quality not only enhances satisfaction but also promotes positive behavioral outcomes such as recommendations and loyalty.

Results and Discussion

Table No. 1 Travel Purpose

Purpose	Percentage
Personal/Leisure	48
Business	32
Education	12
Others	8

Source: Primary Data

The table indicates that 48% of the respondents travel for personal or leisure purposes, making it the most common reason for air travel. This suggests that tourism, vacations, and family visits constitute a major segment of airline passengers. Business travel accounts for 32%, showing that a significant proportion of passengers rely on air transport for professional and work-related activities.

Meanwhile, 12% of respondents travel for educational purposes such as higher studies, training, or academic programs, and the remaining 8% travel for other reasons. Overall, the findings highlight that leisure travellers form the largest customer segment, emphasizing the need for airlines to focus on comfort, service quality, and customer experience to meet their expectations.

Table No. 2 Mean Score Analysis of Service Quality Factors

Service Factors	Mean Score	Rank
Flight safety and security	4.52	1
On-time performance	4.40	2
Staff behavior and responsiveness	4.18	3
Comfort and seating	3.95	4
In-flight services	3.80	5
Baggage handling	3.65	6
Ticket pricing	3.42	7

Source: Primary Data

The mean score analysis indicates that flight safety and security (4.52) is the most important factor influencing passenger satisfaction, ranking first. This shows that passengers prioritize safety above all other service aspects when choosing an airline. On-time performance (4.40) is ranked second, highlighting the importance of punctuality and reliability in airline operations. Staff behavior and responsiveness (4.18) hold the third position, suggesting that courteous and supportive service significantly enhances the travel experience. Factors such as comfort and seating (3.95) and in-flight services (3.80) received moderate importance, indicating that while passengers value comfort and amenities, they are secondary to operational reliability.

Lower-ranked factors include baggage handling (3.65) and ticket pricing (3.42), which implies that passengers are relatively more concerned about service quality and safety than cost considerations. Overall, the findings suggest that operational efficiency and service reliability play a crucial role in improving passenger satisfaction.

Conclusion

The study reveals that service quality significantly influences passenger satisfaction in the airline industry. Reliability factors such as safety and punctuality are the primary determinants of customer satisfaction. Staff behavior and service responsiveness also play a crucial role in enhancing the travel experience.

Recommendations

- Airlines should ensure strict adherence to flight schedules to minimize delays.
- Customer service training should be provided to improve staff responsiveness and behavior.
- Airlines should enhance comfort and in-flight service quality.
- Transparent and competitive pricing strategies should be adopted.
- Efficient baggage handling systems should be implemented.

Improving these aspects will enhance passenger satisfaction, encourage repeat travel, and strengthen customer loyalty.

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