

When Satisfaction Takes Flight: Unraveling the Impact of Passenger Satisfaction on Passenger Loyalty with the moderating role of Price Sensitivity in Airline Industry

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Keywords: Passenger Satisfaction, Airline Service Quality, Price Sensitivity, Safety Regulations, Empathy, Passenger loyalty

Keywords: **History**
Article
 Date of Submission: 27-08-2023
 Date of Acceptance: 27-09-2023
 Date of Publication: 30-09-2023

DOI **No:**
<https://doi.org/10.56976/rjsi.v5i3.138>

The airline industry is highly competitive, and airlines need to provide high-quality services to attract and retain customers. This study examines how airline service quality, safety regulations, airline safety and empathy affect consumer satisfaction and how price sensitivity moderates this effect. Airlines must deliver high-quality services to attract and keep customers in a competitive industry. Moreover, how price sensitivity moderates the relationship between service quality and passenger satisfaction. The results indicate that airline service quality, safety requirements, safety, and empathy affect customer satisfaction. Airline service quality, safety regulations, empathy are the most essential factors affecting passenger satisfaction. Price sensitivity moderates the relationship between passenger satisfaction and passenger loyalty, price-sensitive passengers more likely to switch airlines if they are dissatisfied. The study emphasizes the necessity of high-quality services to improve passenger satisfaction for airlines. To satisfy customers, airlines must prioritize safety, Empathy, ticket pricing, and service quality. Airlines must also recognize price sensitivity's moderating influence and develop strategies to serve price-sensitive passengers. This study adds to the literature by examining how airline service quality, safety regulations, empathy, and price sensitivity affect passenger satisfaction. In a competitive industry, airlines must focus on different service aspects to improve passenger satisfaction and passenger loyalty.

1. Introduction

The airline industry plays a pivotal role in facilitating international travel and fostering global communication, effectively bridging the gap between individuals and organizations across diverse geographical locations (Morrison, 2022). The growth and profitability of the organization have been primarily influenced by a steadfast dedication to maintaining service quality and ensuring customer satisfaction (Siqueira et al., 2023). Nevertheless, the intricate correlation between passenger pleasure and airline service quality, particularly within the framework of price sensitivity, remains a multifaceted domain that warrants further investigation (Elgarhy et al., 2023).

The airline industry is characterized by intense competition, as airlines consistently endeavor to distinguish themselves through the provision of high-quality services to their clients. At the core of this endeavor lies the notion of passenger satisfaction, which assumes a crucial role in influencing passengers' evaluations of the quality of airline services (Hon & Chiayu, 2005). Passenger satisfaction is contingent upon a multitude of aspects, encompassing in-flight experiences, punctuality, quality of customer service, and cost. Nevertheless, the difficult and underexplored topic of the interplay between passenger pleasure and airline service quality, specifically in respect to the moderating influence of price sensitivity, persists (Shen & Yahya, 2021). The examination of the impact of passenger satisfaction on airline service quality, and the potential variations in this impact based on passengers' price sensitivity, is a significant and urgent matter within the airline business (Khudhair et al., 2021).

The existing body of literature on service quality and customer satisfaction in the airline industry has extensively explored many aspects of this relationship. However, a significant gap in the study pertains to the limited investigation of the moderating influence of price sensitivity on airline service quality (Ding et al., 2020; Gao et al., 2021). The impact of price sensitivity on consumer behaviour has great importance, as customers' evaluation of value and subsequent levels of satisfaction are frequently influenced by their responsiveness to fluctuations in price (Shen et al., 2021).

The influence of passengers' price sensitivity on their evaluations of service quality and subsequent satisfaction with the airline has been noted by (Pengurusan et al. 2022). The

aforementioned sensitivity might be notably heightened within the aviation sector, which is distinguished by intense competition and narrow profit margins. Gaining a comprehensive understanding of the correlation between price sensitivity, service quality, and customer satisfaction is of utmost importance for airlines, as it equips them with valuable insights that are essential for making strategic decisions and optimizing operational processes (Shen & Yahya, 2021).

In an industry characterized by intense competition, such as the airline sector, it is crucial to comprehend the intricate connections among passenger pleasure, service quality, and price sensitivity (Hassan & Salem, 2021). Airlines endeavor to improve service quality in order to promote passenger pleasure, while also being mindful of their pricing tactics to retain passengers who are sensitive to price. Given current industry economic challenges and rising gasoline costs, this issue is more important. This study's ability to improve plans, resources, and service delivery could significantly benefit the airline industry (Khudhair et al., 2021). This possibility allows airlines to better understand consumer satisfaction variables and establish effective management strategies. Understanding when price spikes start to hurt consumer satisfaction can help airlines set more effective prices.

In a competitive business like aviation, understanding the complex relationships between passenger satisfaction, service quality, and price sensitivity is vital (Park & Hyun, 2021). Airlines try to increase service quality and remain price-sensitive to keep passengers happy. Given current industry economic challenges and rising gasoline costs, this issue is more important (Shen & Yahya, 2021). This study has the potential to make a substantial contribution to the airline sector through its ability to enhance plans, optimize resources, and enhance service performance. This opportunity provides airlines with the ability to enhance their comprehension of the various factors that influence customer satisfaction and develop efficient strategies for their management (Khudhair et al., 2021). For instance, gaining insight into the point at which price increments start to have an adverse influence on customer satisfaction can enable airlines to adopt more efficient pricing policies.

This study addresses a notable research gap within the academic literature by establishing a connection between three key variables: service quality, passenger satisfaction, and price

sensitivity. Therefore, it possesses the potential to establish a significant groundwork for forthcoming investigations in these domains, engendering discourse and expediting further progress in the realm of knowledge.

The airline industry connects people and businesses worldwide. Service quality and customer satisfaction have driven its growth and success (Khudhair et al., 2019). The complex relationship between passenger satisfaction and airline service quality, especially in the setting of price sensitivity, warrants further investigation. Despite extensive study on service quality and customer satisfaction, the moderating influence of price sensitivity in airline service quality has not been studied. Price sensitivity affects consumer behavior because it mediates consumers' value perception and satisfaction (Khudhair et al., 2021).

2. Literature Review

2.1 Theoretical Background

Two theories have been used in this paper in order to explain its theoretical background, which are as follows, composite loyalty theory & cost-benefit theory.

2.1.1 The Composite Loyalty Theory

Customer loyalty theories like the composite loyalty theory stress behavioral and attitudinal loyalty in long-term customer's interactions. Behavioral loyalty comprises recurrent purchases and brand referrals, whereas attitudinal loyalty shows customers' favorable, preferential views of the brand or organization (Day, 1969; Jacoby, 1971; Jacoby & Chesnut, 1978; Jacoby & Kyner, 1973). Using respondents' ratings for a series of statements that indicate different dimensions of loyalty, a loyalty index is calculated. Customers are categorized as loyal, satisfied, neutral, or unhappy based on their aggregate ratings using this score (Copeland, 1923; Tucker, 1964). The composite approach to loyalty measures customer satisfaction, intentions, and repeat purchases. Behavioral loyalty may inspire attitudinal loyalty, although customers may repurchase for reasons including habit, convenience, or lack of other options. The composite loyalty theory emphasizes the importance of behavioral and attitudinal loyalty in measuring and comprehending customer loyalty and gives a framework for segmenting customers by composite loyalty scores (Andreassen & Lindestad, 1998; Zeithaml et al., 1996).

2.1.2 The Cost and Benefit Theory:

Cost-benefit theory estimates a decision's cost and benefits to determine its advantages and disadvantages. The idea entails defining and measuring all the costs and benefits of a choice or project, giving a financial value to each, and then comparing the overall costs to the total benefits

to evaluate economic viability (Lam et al., 2004; Russo et al., 2016).. Tax, environmental, and government choices are often evaluated using cost-benefit analysis. Analysis predicts whether a policy's benefits outweigh its costs compared to other options, enabling data-driven decision-making (Russo et al., 2016). The analysis also demands extensive research on all costs, even unforeseen ones, and expense types and characteristics. However, the cost-benefit analysis requires estimations and forecasts that may be inaccurate or prejudiced. The cost-benefit theory evaluates a decision's expenses and benefits to determine its pros and disadvantages (Dick & Basu, 1994; Heide & Weiss, 1995). To assess if a decision or project is economically viable, the idea entails identifying and quantifying all the costs and benefits, giving a dollar value to each, and then comparing the overall costs to the total benefits.

2.2 Hypothesis Development:

2.2.1 Airline Service Quality and Passenger satisfaction

Service quality and passenger satisfaction are hot topics in the airline industry. The association has been shown to affect passenger loyalty and satisfaction in several studies. A Uganda airline study indicated that pre-, in-, and post-flight services significantly affected passenger happiness. Passenger satisfaction was also a key mediating component for passenger loyalty. The study suggests airline management adopt measures to enhance service quality based on client demographics, including occupation, age, gender, and education level (Namukasa et al 2013). Another study examined airline service quality dynamics and satisfaction. It showed that airline attribute quality affects positive and negative satisfaction differently. The research suggests that airline management might use the findings to create customer-centric marketing strategies (Park et al., 2020). Research suggests that improved service quality can boost client loyalty, highlighting the importance of consumer satisfaction (Hapsari et al., 2017). The relationship between airline service quality and passenger pleasure is complicated. The quality of many service qualities substantially impacts passenger pleasure and loyalty, underscoring the need of understanding and enhancing service quality to improve the passenger experience (Hassan & Salem, 2021).

H1: Airline service quality has positive impact on passenger satisfaction.

2.2.2 Safety Regulations and Passenger satisfaction

The purpose of safety regulations is to guarantee and prevent injury to passengers. Passengers are more likely to feel comfortable and secure when security regulations are implemented effectively, which may boost customer satisfaction (Su et al., 2021). Aviation is typically seen as a safe industry. However, there are differences in airline safety outcomes. Passengers prioritize safety while choosing an airline (Atalik and Ozel 2007; Gilbert and Wong 2003).

Effective safety regulations can give passengers peace of mind. When passengers know that they are protected by strict safety standards, they are more likely to feel relaxed and enjoy their journey (Woo, 2019; Jiang & Zhang, 2016). Safety regulations can help to reduce stress and anxiety. Passengers who are worried about their safety are more likely to experience stress and anxiety, which can detract from their overall satisfaction (Shi et al., 2018). Safety regulations can help to build trust between airlines and passengers. When passengers believe that airlines are committed to their safety, they are more likely to trust them and feel comfortable flying with them (Cronin et al., 2000; Rajaguru, 2016).

H2: Safety regulations have positive impact on passenger satisfaction.

2.2.3 Empathy and Passenger Satisfaction

Empathy is classified into two types: (a) cognitive empathy, which is the process of understanding other people's behavior and adopting their roles, and (b) emotional empathy, which is the process of feeling other people's emotions vicariously (Park and Hyun., 2021). Empathy improves one's knowledge of others and is required for the formation of positive interpersonal interactions (Park and Hyun., 2021), hence it is a vital component of relationships among airline cabin crew members. Empathy can be elicited in a variety of workplace encounters, such as when a coworker communicates feelings about a difficult problem, while caring for a coworker, or acting compassionately (Park and Hyun., 2021). Colleagues responding to each other's difficulties displays group empathy (Park and Hyun., 2021). Empathy, as a key component of relationship-building, improves intimacy among coworkers (Park and Hyun., 2021). Furthermore, empathy for coworkers enhances the constructive transformation of negative emotional experiences within a group (Park and Hyun., 2021). Empathy also boosts group participation, pleasant feelings, and attitudes while decreasing personal distress (Park and Hyun., 2021). Many studies have found that empathy towards colleagues has a major impact on organizational success, whereas empathy from leaders has a favorable impact on subordinates' performance and failure tolerance. It also increases teamwork and job satisfaction (Park and Hyun., 2021). Furthermore, multiple studies have found a link between the leader's empathic skills and the member's job satisfaction (Park and Hyun., 2021). Few researches, however, have focused on airline cabin crew employees' perceptions and experiences with empathy from their coworkers. To fill this void, this study conducts a thorough examination of cabin crew members' experiences with empathy within and outside of their in-groups in order to comprehend its impact on numerous performance indicators and the overall group atmosphere.

H3: Empathy has positive impact on passenger satisfaction.

2.2.3 Airline Safety and Passenger Satisfaction

Airline safety and passenger pleasure are well-studied. Passengers and airlines value airline safety, which impacts service quality and satisfaction. Safety has improved aviation customer satisfaction. Rhoades & Waguespack Jr (2012) found that safer airlines have higher passenger satisfaction. These variables are strongly correlated. Passengers choose airlines that prioritize safety and take strict efforts to ensure it (Rhoades & Waguespack Jr., 2012; Fornell et al., 1996). Parasuraman, Zeithaml & Berry. (2005) found that airline service quality is influenced by safety and security. Safety affects passengers' flight experience and satisfaction, as they noted. Safety improves passenger satisfaction and saves lives (Parasuraman, Zeithaml & Berry, 2005; Kandampully et al., 2015). Clear safety communication also improves passenger satisfaction. Chew and Jahari (2014) noted that clear communication regarding safety protocols can reduce passenger anxiety and promote safety, resulting in higher passenger satisfaction.

H4: Airline safety has positive impact on passenger satisfaction

2.2.4 Passenger Satisfaction and Passenger Loyalty

Satisfied customers become brand ambassadors, always speaking positively about the product or service and promoting positive word of mouth to others (Wan & Schell, 2013). Furthermore, Hon & Chiayu, (2005); Iqbal et al. (2023) discovered that higher levels of customer satisfaction lead to higher levels of customer loyalty. According to Omoregie et al. (2019), determining client loyalty needs a detailed assessment of consumer satisfaction. Client satisfaction is the most crucial component in the client-supplier relationship. Furthermore, a satisfied customer is more likely to utilize or acquire than an unsatisfied traveler who has a strong relationship with the supplier. And maintaining a relationship with clients is advantageous for every firm (Picon et al., 2014). And every consumer wants not only a reasonable price but also improved quality for that price, with value-added services suited to their own requirements and preferences. Because of the competition and complexity of Pakistan's B2B Packaged Food Retail Setting, it is worthwhile to explore the influence of customer satisfaction on customer loyalty (Iqbal et al., 2023).

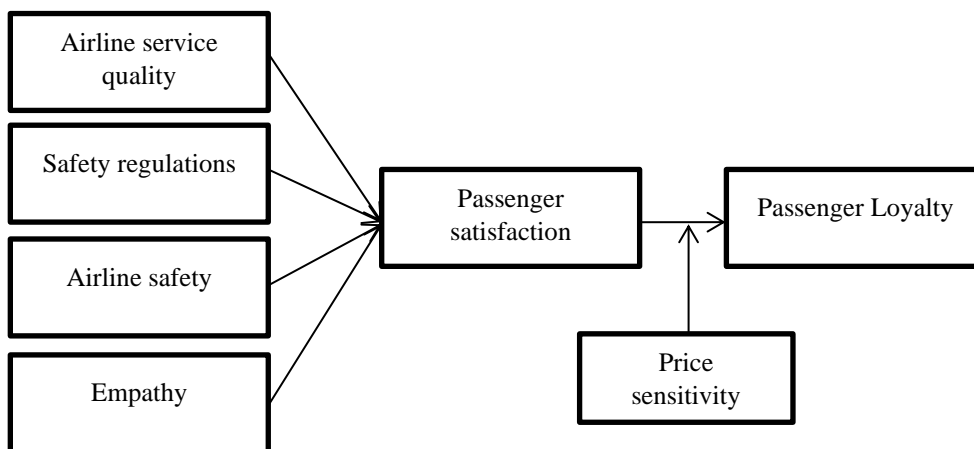
H5: Passenger satisfaction has positive passenger loyalty

2.2.5 Price sensitivity as a moderator

Previous research on the relationship between airline service quality and passenger satisfaction and loyalty does not consider the impact of airline passengers' perceptions of safety. In example, despite the fact that few studies have shown the value of including passengers' perceptions of safety when making airline decisions, there has been little formal discussion about the benefits of include it in assessing airline service quality (Koo et al., 2015). Airlines have examined passenger satisfaction and loyalty. Passenger satisfaction increases loyalty and repeat business (Fornell, 1992; Keiningham et al., 2007) Price sensitivity has been overlooked in this relationship. Passengers' price sensitivity affects their buying decisions. Price-sensitive passenger's value cost over service quality and convenience. Thus, price sensitivity moderates passenger satisfaction-loyalty. Price-sensitive consumers show weaker brand loyalty than non-price-sensitive consumers (Bloemer et al., 1998). This shows that price-sensitive passengers may be less swayed by satisfaction and more likely to transfer airlines for a superior price-value proposition. Surveys on passenger satisfaction, loyalty, and price sensitivity could evaluate this notion. Regression analysis or structural equation modeling (SEM) might then be employed to examine the moderating effect of price sensitivity on satisfaction and loyalty (Homburg et al., 2009).

H6: Price sensitivity positively moderates the relationship between passenger satisfaction and passenger loyalty

Figure No 1: Conceptual Framework



3. Research methodology

The study employed quantitative research design. The study examined the service quality of airlines operates in Pakistan such as Pakistan international, Emirates, Qatar, Itihad. Passengers who have traveled with specific Pakistani airlines at least once in the previous 12 months made up the demographic of interest. To guarantee the study's objectivity and accuracy, these airlines were chosen. These airlines formed a relatively homogeneous group when compared to other areas of the nation, which aided in the development of an integrated air transportation market (Namukasa, 2013). An international airport in Pakistan, such as Islamabad International Airport or Karachi International Airport, where international flights are handled, was chosen as the research location.

The sampling method used to gather the data was convenience sampling. Randomly chosen passengers who were waiting for planes at various times during the day, every day of the week, within a predetermined timeframe, were interviewed. Five sections of a standardized questionnaire with a defined framework were used to obtain the data. The initial part of the survey was dedicated to collecting respondents' demographic data. The purpose of the second, third, and fourth sections was to gauge how satisfied customers were with the level of services offered by the chosen airlines (Namukasa, 2013). Investigating how passenger loyalty is impacted by passenger satisfaction was the goal of the final portion. The researchers may use suitable guidelines or earlier work done specifically for Pakistan to calculate the sample size.

To choose a statistically representative sample size based on the number of passengers who have traveled with the chosen airlines in Pakistan, for instance, they could look at the work of Krejcie and Morgan (1970). To get accurate results, it's crucial to make sure the sample size is enough. The precise sample size will depend on a number of variables, including the study's aims and the resources that are available. The sample size of the current study was 285 passengers. Both primary and secondary sources were used in the data collection processes. The quality of pre-flight services, in-flight services, post-flight services, and the effect of passenger pleasure on passenger loyalty were the five components of the structured questionnaires used to collect primary data. Respondents offered their answers on a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"), to questions that were given as statements. Questionnaires might be given out to travelers who had flown at least one overseas flight in the previous 12 months with the chosen airlines in the departure halls of Pakistan's chosen international airports.

Table No 1: Respondents' Profile

Demographic items	Frequency	Percentile
Gender		

Male	240	56.20%
Female	187	43.79%
Education level		
Matriculation	20	4.68%
Intermediate	90	21.07%
Bachelors	160	37.47%
Masters	152	35.59%
PhD	05	1.17%
Age		
21-30 years	190	44.49%
31-40 years	96	22.48%
41-50 years	80	18.73%
51-60 years	36	8.43%
Above 60 years	25	5.85%
Income		
50,000-75000	45	10.53%
75,001-100,000	52	12.17%
10,001-125,000	98	22.95%
125,001-150,000	106	24.82%
Above 150,000	126	29.50%

4. Results and Data Analysis

Smart PLS assessed structural and measurement models. Individual item and scale dependability were verified and examined to validate model measurement quality. The construct was measured using convergent and discriminant validity. Smart PLS's "convergent and discriminant validity" was used again in the study. Measurement model determines construct reliability and validity. First, evaluate scale reliability, convergent validity, and discriminant validity.

4.1 Measurement Model

Table No 2: Validity and Reliability analysis

Constructs	Items	Loading	Cronbach's alpha	CR	AVE
Airline Service quality	ASQ1	0.733	0.781	0.852	0.591
	ASQ2	0.723			
	ASQ3	0.798			
	ASQ4	0.816			
Safety Regulations	SR1	0.772	0.802	0.868	0.569
	SR 2	0.763			
	SR3	0.751			
	SR4	0.762			
	SR5	0.723			
Airline Safety	AS1	0.709	0.821	0.886	0.610
	AS 2	0.826			
	AS 3	0.841			
	AS 4	0.794			
	AS 5	0.725			
Empathy	E1	0.781	0.914	0.959	0.701
	E2	0.860			
	E3	0.780			
	E4	0.740			
Passenger Satisfaction	PS1	0.858	0.906	0.942	0.730
	PS 2	0.892			
	PS 3	0.952			
	PS 4	0.835			
	PS 5	0.734			
Price Sensitivity	PS1	0.713	0.841	0.907	0.620
	PS2	0.788			
	PS3	0.844			
	PS4	0.844			
	PS5	0.809			
	PS6	0.716			
Passenger Loyalty	PL1	0.722	0.719	0.830	0.551
	PL2	0.769			
	PL3	0.759			
	PL4	0.718			
	PL5	0.782			

Note: CR = Composite Reliability; AVE = Average Variance Extracted.

The above table shows that, questionnaire designed to measure airline service dimensions

is analyzed for construct validity and reliability. Airlines Service Quality (ASQ), Safety Regulations (SR), Airline Safety (AS), Empathy (E), Passenger Satisfaction, Price Sensitivity, and Loyalty are the constructions. Moderate to high factor loadings indicate a good link between observable variables and latent components. Cronbach's alpha and composite reliability show good internal consistency across constructs, indicating that items within each dimension measure the intended concepts. Average variation Extracted (AVE) levels, which quantify the variation collected by constructs, are generally acceptable; however constructions with AVE values below 0.5 require careful examination. This analysis supports the questionnaire's validity and reliability, showing that it measures airline service dimensions.

Table No 3: Discriminant Validity

Constructs	PL	PS	P S	E	AS	SR	ASQ
PL	0.834						
PS	0.052	0.873					
PS	0.601	0.044	0.919				
EMP	0.633	0.056	0.73	0.861			
AS	0.656	0.030	0.586	0.675	0.917		
SR	0.683	0.017	0.501	0.537	0.572	0.846	
ASQ	0.719	0.055	0.668	0.726	0.702	0.640	0.852

Table No 4: Heterotrait-Monotrait Ratio (HTMT)

Constructs	P L	PS	PS	E	AS	SR	ASQ
PL							
PS	0.06						
PS	0.72	0.055					
EMP	0.753	0.074	0.895				
AS	0.789	0.036	0.721	0.825			
SR	0.786	0.043	0.591	0.635	0.678		



ASQ	0.820	0.064	0.776	0.842	0.814	0.719
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To assess each construct's internal consistency, "Cronbach's alpha, composite reliability, and individual factor loadings" were examined. The table shows that all variable factor loadings are significant (Tabachnik & Fidell, 2007; Zia et al., 2022) and between 0.55 and 0.7. Table shows construct reliability results. (Zia et al., 2022; Hair, 2011). According Hair et al. (2011), the values of composite reliability are significant for the purposes of the constructs that include Passenger Loyalty (PL), Price Sensitivity (PS), Passenger Satisfaction (PS), Empathy (E), Airline Safety (AS), and Safety. Regulations (SR), and Airline Service Quality (ASQ). As a result of the fact that all of the values for Composite Reliability (PL = 0.901, PS = 0.905, PS = 0.916, E=0.895, AS=0.913, SR=0.913, ASQ=0.93) and Cronbach's values (PL = 0.854, PS = 0.845, PS = 0.816, E=0.824, AS=0.81, SR=0.866, ASQ=0.906) are higher than the required value of 0. According to Campbell and Fiske (1959), the concept of discriminant validity refers to the extent to which evaluations of certain traits are independent of one another. In order to investigate it, methods such as cross loadings analysis, AVE analysis, and the correlation between hetero-traits and mono-traits are utilized.

4.2 Analysis of Discriminant Validity

According to Fornell and Larcker (1981), a research model has discriminant validity if the square root of the AVE for each concept is greater than the correlation between constructs. In another interpretation, the correlation matrix diagonal. The square root of AVE in Table 4.5 shows that the correlation matrix for each construct, including, is less than its square root. This meets the first discriminant validity constraint that the correlation matrix be less than the square root of AVE of each construct. In conclusion, Table 3's heterotrait-monotrait correlation ratios show that all values are discriminant validity requirements. None of the results above the 0.9 criteria (Gold et al., 2001; Teo et al., 2008). As a result, tables 3, 4, and 5 show that brand loyalty, consumer satisfaction, perceived risk, perceived cost, and perceived value all have valid discriminant qualities.

Table 5: Hypothesis Results



H#	Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decision
1	ASQ -> PS	0.342	0.342	0.087	3.956	0.002	Accepted
2	SR -> PS	0.164	0.164	0.069	2.394	0.017	Accepted
3	AR -> PS	0.357	0.063	0.076	2.804	0.005	Accepted
4	EMP -> PS	0.275	0.035	0.041	3.009	0.003	Accepted
5	PS -> PL	0.655	0.654	0.044	14.819	0.005	Accepted
6	PS x PS -> PL	0.295	0.295	0.084	3.497	0.001	Accepted

4.3 Hypothesis testing

Hypothesis testing on research constructs is shown in Table 5. The hypotheses are linked to construct relationship, and the outcomes show their strength and relevance. Original Sample (O) values are structural model path coefficients. The Sample Mean (M) and Standard Deviation (STDEV) reveal data centrality and variability. T Statistics (|O/STDEV|) determine path importance, with higher values increasing significance. The statistical significance of each hypothesis is determined by P Values, usually 0.05. The "Decision" column lists significance-based hypothesis acceptance or rejection. This analysis accepts all assumptions, indicating that Airline Service Quality (ASQ), Safety Regulations (SR), Empathy (EMP), Passenger Satisfaction (PS), and Passenger Loyalty (PL) are statistically significant. Strong T Statistics and low P Values for each hypothesis confirm the conceptual model's hypothesized relationships, demonstrating the findings' robustness.

5. Conclusion and discussion

This study examined how airline service quality, safety laws, airline safety, and empathy affect passenger pleasure and loyalty, as well as the moderating role of price sensitivity. This study illuminates airline passenger satisfaction and loyalty elements. The study found that airline safety, service excellence, and empathy improve passenger satisfaction. High-quality services, strict safety rules, passenger safety, and empathy improve passenger satisfaction. Previous study has shown that these elements shape passenger experiences and perceptions. The study also found that price sensitivity moderates passenger pleasure and loyalty. It suggests that price sensitivity affects

passenger pleasure and loyalty. Specifically, passengers with lesser price sensitivity are more satisfied and loyal. Price sensitivity is important when analyzing airline passenger satisfaction and loyalty. These findings affect airlines and industry professionals. For passenger satisfaction, airlines should prioritize service excellence, safety rules, airline safety, and empathy. Airlines can boost consumer satisfaction by investing in these areas. Understanding price sensitivity's moderating impact can help airlines customize loyalty programs and pricing tactics to different passenger segments, improving customer loyalty. This study has limitations. The study's sample size and context may restrict its generalizability. To broaden application, future research should replicate these findings with bigger and more diverse groups. To further understand airline passenger satisfaction and loyalty, other variables and factors should be examined. This study shows that airline service quality, safety requirements, empathy, and safety improve customer satisfaction. Price sensitivity moderate's passenger satisfaction and loyalty. By addressing these aspects, airlines can improve their plans and practices to better fulfill passenger wants and expectations, increasing customer satisfaction and loyalty in the highly competitive airline sector.

5.1 Practical Implications

This study has important implications for airlines and industry practitioners striving to improve passenger satisfaction and loyalty. Airline service quality, safety requirements, empathy, and price sensitivity all be used to improve customer experiences and build loyalty. The study has practical implications: **Improve Service Quality:** Airlines should prioritize service quality at all touch points. This includes efficient, personalized customer service, comfortable seating, on-time departures and arrivals, and a pleasant travel experience. Airlines may improve customer satisfaction and repeat business by providing high-quality services. **Passenger safety is paramount.** To build trust, airlines should exceed safety standards. Safety protocols, regular inspections, and the latest safety technologies can improve customer satisfaction and develop a reputation as a reliable and safe airline. **Prioritize Airline Safety:** Airlines should emphasize passenger safety in addition to following legislation. Transparent safety communication, regular safety drills, and explicit emergency instructions are examples. Airlines may reduce worries and boost satisfaction by emphasizing safety.

Passenger satisfaction depends on empathy. Airlines should teach its employees to care about passengers. Effective communication, active listening, and rapid settlement of issues and

complaints can achieve this. Airlines can leave a great impression by empathizing with passengers. Recognizing price sensitivity's moderating function, airlines should tailor loyalty programs to different customer segments based on price sensitivity. To meet passenger needs, this could include flexible pricing, personalized rewards, or unique benefits. Airlines can improve customer retention by customizing loyalty programs. Continuous Research and Improvement: Airlines should monitor passenger satisfaction and do research to improve. Surveys, feedback, and social media monitoring can do this. Airlines may identify pain spots and improve passenger satisfaction by aggressively collecting and implementing customer input. Collaboration and Industry Standards: Airlines can work with industry groups and regulators to set and maintain service quality, safety, and empathy standards. Airlines may raise passenger satisfaction and loyalty by participating in industry initiatives, sharing best practices, and standardizing processes. This study emphasizes the relevance of airline service quality, safety rules, empathy, and price sensitivity. These tactics can help airlines improve passenger experiences, customer satisfaction, and loyalty in a competitive industry.

5.2 Limitations and Research Futures

The study's sample size and context may restrict its generalizability. To apply these findings across airline settings and passenger demographics, future research should use bigger and more diverse samples. The study measured service quality, safety regulations, aircraft safety, empathy, price sensitivity, passenger satisfaction, and loyalty. These instruments may be validated; however alternate measures or multiple-item scales may provide a better grasp of the topics under research. The study examined variable correlations but did not establish causality or directionality. To understand the causal mechanisms and temporal dynamics of service quality, safety regulations, airline safety, empathy, customer pleasure, and loyalty, future study should use longitudinal or experimental approaches. The study used self-reported measures, which can be biased by social desirability or recollection bias. Future study could include objective metrics or observations to supplement self-reported data, improving variable assessment. The study did not expressly evaluate how airline reputation, marketing, and competition affect passenger satisfaction and loyalty. To further understand passenger behavior and decision-making, future research could examine how these external factors affect the variables.

Further research could examine mediating elements that explain the correlations between service quality, safety regulations, airline safety, empathy, passenger satisfaction, and loyalty. Trust, perceived value, and brand image could mediate the relationship between these variables and illuminate the mechanisms. The airline industry is global, so future research could examine how service quality, safety regulations, airline safety, empathy, and price sensitivity affect

passenger satisfaction and loyalty. Understanding how these elements vary across cultures should help airlines in diverse markets develop more focused strategies? Technological Advances: As airline technology advances rapidly, future research could examine how emerging technologies like artificial intelligence, virtual reality, and biometrics affect passenger pleasure and loyalty. Understanding how these technological improvements affect passenger experiences and perceptions will help airlines innovate. Future research could examine long-term loyalty and repeat buying behavior. Investigating long-term loyalty determinants might help comprehend consumer retention and loyalty programs. Comparing airlines or airline alliances can reveal how service quality, safety standards, empathy, and price sensitivity affect passenger satisfaction and loyalty. Airlines with different market positions, pricing strategies, and service offers could give industry standards and best practices. Scholars and practitioners can improve airline strategies and practices by addressing these limitations and pursuing future research directions on the relationships between service quality, safety regulations, airline safety, empathy, price sensitivity, passenger satisfaction, and loyalty.

References

- Andreassen, T. W., & Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal of service Industry management*, 9(1), 7-23.
- Atalık, Ö., & Özel, E. (2007). Passenger Expectations and Factors Affecting Their Choice of Low-Cost Carriers: Pegasus Airlines. *Proceedings of the Northeast Business & Economics Association*.
- Bloemer, J., de Ruyter, K. and Peeters, P. (1998) Investigating Drivers of Bank Loyalty: The Complex Relationship between Image, Service Quality and Satisfaction. *International Journal of Bank Marketing*, 16, 276-286.
<https://doi.org/10.1108/02652329810245984>
- Chew, J., & Jahari, S. A. (2014). Airline passenger perceptions of service quality: the influence of airline type. *Journal of Air Transportation*, 12(1), 24-39.
- Copeland, M. T. (1923). Relation of consumer's buying habits to marketing methods. *Harvard Business Review*, 1, 282-289.
- Cox, T., Houdmont, J., Griffiths, A., 2006. Rail passenger crowding, stress, health and safety in Britain. *Transport. Res. Part A* 40, 244–258.

- Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-218.
- Day, G. S. (1969). A two-dimensional concept of brand loyalty. *Journal of Advertising Research*, 9, 29-35.
- Delbosc, A., Currie, G., 2012. Modelling the causes and impacts of personal safety perceptions on public transport ridership. *Transport Pol.* 24, 302–309.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: toward an integrated conceptual framework. *Journal of the academy of marketing science*, 22, 99-113.
- Ding, K., Choo, W. C., Ng, K. Y., & Ng, S. I. (2020). Employing structural topic modelling to explore perceived service quality attributes in Airbnb accommodation. *International Journal of Hospitality Management*, 91, 102676.
- Doganis, R. (2006), *The Airline Business*, 2nd ed., Routledge, Abingdon.
- Elgarhy, S. D. (2023). Effects of service quality, loyalty programs, pricing strategies, and customer engagement on firms' performance in Egyptian travel agencies: Mediating effects of customer retention. *Journal of Quality Assurance in Hospitality & Tourism*, 24(6), 753-781.
- Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56,6-21. <https://doi.org/10.2307/1252129>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: *Algebra and statistics*. 22, 99-113.
- Fornell, C., Johnson, M.D., Anderson, E.W., Jaesung, C. and Bryant, B.E. (1996). The American Customer Satisfaction Index: Nature, Purpose and Findings. *Journal of Marketing*, 60, 7-18.
- Gao, K., Yang, Y., & Qu, X. (2021). Examining nonlinear and interaction effects of multiple determinants on airline travel satisfaction. *Transportation Research Part D: Transport and Environment*, 97, 102957.
- Gilbert, D., Wong, R.K., 2003. Passenger expectations and airline services: a Hong Kong based study. *Tourism Manag.* 24 (5), 519–532.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.



- Humphrey, A., Raburu, P. A., & Mwebi, B. (2020). Relationship between Attitude and Choice of Mathematics Related Courses among Female Students in Technical Training Institutes in Western Region of Kenya. *International Journal of Research*, 22, 99-113
<https://www.semanticscholar.org/paper/Relationship-between-Attitude-and-Choice-of-Related-Humphrey-Raburu/fe98cb6acace148b3eac79d7a7604b718de6fd6c>
- Hapsari, R., Clemes, M. D., & Dean, D. (2017). The impact of service quality, customer engagement and selected marketing constructs on airline passenger loyalty. *International Journal of Quality and Service Sciences*, 9(1), 21-40.
- Hassan, T. H., & Salem, A. E. (2021). Impact of Service Quality of Low-Cost Carriers on Airline Image and Consumers' Satisfaction and Loyalty during the COVID-19 Outbreak. *International Journal of Environmental Research and Public Health*, 19(1), 83-99.
<https://doi.org/10.3390/ijerph19010083>
- Heide, J. B., & Weiss, A. M. (1995). Vendor consideration and switching behavior for buyers in high-technology markets. *Journal of marketing*, 59(3), 30-43.
- Homburg, C., Wieseke, J., & Hoyer, W. D. (2009). Social identity and the service-profit chain. *Journal of Marketing*, 73(2), 38-54.
- Hon, C., & Chiayu, T. (2005). Exploring Store Image, Customer Satisfaction And Customer Loyalty Relationship: Evidence From Taiwanese Hypermarket Industry.
<https://www.semanticscholar.org/paper/EXPLORING-STORE-IMAGE%2C-CUSTOMER-SATISFACTION-AND-Hon-Chiayu/0472e77a33fec7bf727818523d9a8e0a0c039d68>
- Hussain, R., Al Nasser, A., Hussain, Y.K., 2015. Service quality and customer satisfaction of a UAE-based airline: an empirical investigation. *J. Air Transport. Manag.* 42, 167–175.
- Iqbal, A., Anwar, A., Sufyan, M., Salam, A., & Arsalan, M. (2023). Unveiling The Impact Of Brand Commitment As A Moderator In The Relationship Between Brand Trust And Brand Loyalty: Insights from Pakistan's Mobile Phone Industry. *Journal of Positive School Psychology*, 737-757.
- Iqbal, A., Hasan, M. A., Bukhari, S. F., & Ramish, M. S. (2023). Determinants of Customer Satisfaction: The Moderating Role of Switching Cost towards Customer Loyalty in B2B Packaged Food Retail Setting. *Journal of Education and Social Studies*, 4(1), 1-15.
- Iqbal, A., Shaikh, A., Saleem, S. T., Farooqi, R., & Usman, M. (2023). Unpacking The Moderating Role Of Customer Satisfaction In The Relationship Between Perceived Value And

Brand Loyalty: Insights from Pakistan's Hotel Industry. *Journal of Positive School Psychology*, 1433-1448.

Jacoby, J. (1971). Brand loyalty: A conceptual definition [Summary]. Proceedings of the 89th Annual Convention of the American Psychological Association, 6, 655-656.

Jacoby, J., & Chesnut, R. W. (1978). Brand loyalty measurement and management. *New York: Wiley*.

Jacoby, J., & Kyner, D. B. (1973). Brand loyalty vs repeat purchasing behavior. *Journal of Marketing Research*, 10, 1-9.

Jiang, H., & Zhang, Y. (2016). An investigation of service quality, customer satisfaction and loyalty in China's airline market. *Journal of air transport management*, 57, 80-88.

Kandampully, J., Zhang, T., & Bilgihan, A. (2015). Customer loyalty: a review and future directions with a special focus on the hospitality industry. *International Journal of Contemporary Hospitality Management*, 27(3), 379-414. <https://doi.org/10.1108/IJCHM-08-2013-0369>

Keiningham, T. L., Cooil, B., Aksoy, L., Andreassen, T. W., & Weiner, J. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. *Managing Service Quality: An International Journal*, 17(4), 361–384. <https://doi.org/10.1108/09604520710760526>

Khudhair, H. Y., Jusoh, A., Mardani, A., & Nor, K. M. (2019). A conceptual model of customer satisfaction: Moderating effects of price sensitivity and quality seekers in the airline industry. *Contemporary Economics*, 13(3), 283.

Khudhair, H. Y., Jusoh, A., Mardani, A., Nor, K., & Štreimikienė, D. (2019). Review of Scoping Studies on Service Quality, Customer Satisfaction and Customer Loyalty in the Airline Industry. *Econometrics: Econometric & Statistical Methods - Special Topics eJournal*. <https://www.semanticscholar.org/paper/Review-of-Scoping-Studies-on-Service-Quality%2C-and-Khudhair-Jusoh/acf04dcf4c251a882b65a471381f34eaf25a7939>

Khudhair, H. Y., Jusoh, A., Nor, K. M., & Mardani, A. (2021). Price sensitivity as a moderating factor between the effects of airline service quality and passenger satisfaction on passenger loyalty in the airline industry. *International Journal of Business Continuity and Risk Management*, 11(2-3), 114-125.

Koo, T.T., Caponecchia, C., Williamson, A., 2015. Measuring the effect of aviation safety risk reduction on flight choice in young travellers. *Saf. Sci.* 73, 1–7.

Kusumawardani, A. M., & Aruan, D. T. H. (2019). Comparing the effects of service quality and value-for-money on customer satisfaction, airline image and behavioural intention between full-

service and low-cost airlines: evidence from Indonesia. *International Journal of Tourism Policy*, 9(1), 27-49.

Rajaguru, R. (2016). Role of value for money and service quality on behavioural intention: A study of full service and low cost airlines. *Journal of Air Transport Management*, 53, 114-122.

Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B. (2004). Customer value, satisfaction, loyalty, and switching costs: an illustration from a business-to-business service context. *Journal of the academy of marketing science*, 32(3), 293-311.

Morrison, A. M. (2022). *Hospitality and travel marketing*. Taylor & Francis.

Munusamy, J., Chelliah, S. and Pandian, S. (2011), "Customer satisfaction delivery in airline industry in Malaysia: a case of low cost carrier", *Australian Journal of Basic and Applied Sciences*, 5 (11), 718-723.

Namukasa, J. (2013). The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry. *The TQM Journal*, 25(5), 520–532.
<https://doi.org/10.1108/TQM-11-2012-0092>

Ng, S.I., Sambasivan, M. and Zubaidah, S. (2011), "Antecedents and outcomes of flight attendants' job satisfaction", *Journal of Air Transport Management*, 17, 309-313.

Omoregie, O. K., Addae, J. A., Coffie, S., Ampong, G. O. A., & Ofori, K. S. (2019). Factors influencing consumer loyalty: evidence from the Ghanaian retail banking industry. *International Journal of Bank Marketing*, 22(2), 520–532.

Park, S., Lee, J. S., & Nicolau, J. L. (2020). Understanding the dynamics of the quality of airline service attributes: Satisfiers and dissatisfiers. *Tourism Management*, 81, 104163.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (2005). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50.

Park, J., & Hyun, S. S. (2021). Influence of Airline Cabin Crew Members' Rapport-Building Behaviors and Empathy toward Colleagues on Team Performance, Organizational Atmosphere, and Irregularity. *International Journal of Environmental Research and Public Health*, 18(12), 6417. <https://doi.org/10.3390/ijerph18126417>

Pengurusan, J. F., Dhabi, A., & Dhabi, Z. C. A. (2022). Impact Of Airline Service Quality On Passenger Satisfaction And Loyalty: Moderating Influence Of Price Sensitivity And Quality Seekers. *Transformations in Business & Economics*, 21(3), 57-69.

- Pick, D., & Eisend, M. (2014). Buyers' perceived switching costs and switching: a meta-analytic assessment of their antecedents. *Journal of the Academy of Marketing Science*, 42, 186-204.
- Picon, A., Castro, I., & Roldán, J. L. (2014). The relationship between satisfaction and loyalty: A mediator analysis. *Journal of business research*, 67(5), 746-751.
- Rhoades, D. L., & Waguespack Jr, B. (2012). The Relation between Airline Service Quality and Airline Safety: A Study of U.S. Air Carriers. *International Journal of Aviation, Aeronautics, and Aerospace*, 2(3), 55-69.
- Ringle, C.M., Sarstedt, M., Zimmermann, L., 2011. Customer satisfaction with commercial airlines: the role of perceived safety and purpose of travel. *J. Market. Theor. Pract.* 19 (4), 459–472.
- Russo, I., Confente, I., Gligor, D. M., & Autry, C. W. (2016). To be or not to be (loyal): is there a recipe for customer loyalty in the B2B context?. *Journal of business research*, 69(2), 888-896.
- Shen, C., & Yahya, Y. (2021). The impact of service quality and price on passengers' loyalty towards low-cost airlines: The Southeast Asia perspective. *Journal of Air Transport Management*, 91, 101966.
- Shi, X., Ye, Z., Shiwakoti, N., Grembek, O., 2018. A state-of-the-art review on empirical data collection for external governed pedestrians complex movement. *J. Adv. Transport*. 2018.
- Shiwakoti, N., Stasinopoulos, P., Vincec, P., Qian, W., Hafsar, R., 2019. Exploring how perceptible differences impact the current public transport usage and support for future public transport extension and usage: a case study of Melbourne's tramline extension. *Transport Pol.* 84, 12–23.
- Siqueira, J. R., Bendixen, M., Reinoso-Carvalho, F., & Campo, R. (2023). Key drivers of brand trust in a Latin American airline: the impact of Colombia's Avianca customer experience. *Journal of Marketing Analytics*, 1-16.
- Su, D. N., Nguyen-Phuoc, D. Q., & Johnson, L. W. (2021). Effects of perceived safety, involvement and perceived service quality on loyalty intention among ride-sourcing passengers. *Transportation*, 48(1), 369-393.
- Tabachnik, B. G., & Fidell, S. L. (2007). Discriminant analysis. *Using multivariate statistics*, 6, 377-438.



Tucker, W. T. (1964). The development of brand loyalty. *Journal of Marketing Research*, 1(3), 32-35.

Wan, H. H. & Schell, R. (2013). Reassessing Corporate Image – An Examination of How Image Bridges Symbolic Relationships with Behavioural Relationships. *Journal of Public Relations Research*, 19(1), 25-45.

Woo, M., 2019. Assessing customer citizenship behaviors in the airline industry: investigation of service quality and value. *J. Air Transport. Manag.* 76, 40–47.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of marketing*, 60(2), 31-46.

Zia, M. Q., Naveed, M., Bashir, M. A., & Iqbal, A. (2022). The influence of servant leadership on employees' outcomes via job embeddedness in hospitality industry. *Journal of Hospitality and Tourism Insights*, 5(3), 612-628