DOI: 10.52131/pjhss.2023.1104.0682

Pakistan Journal of Humanities and Social Sciences

Volume 11, Number 04, 2023, Pages 4170–4183
Journal Homepage:
https://journals.internationalrasd.org/index.php/pjhss

Impact of Airline Service Quality and Safety Perception on Airline Brand Loyalty: Mediating Role of Passenger Expectation

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ARTICLE INFO

Article History:
Received: October 18, 2023
Revised: December 05, 2023
Accepted: December 06, 2023
Available Online: December 07, 2023

Keywords:
Brand Loyalty
Passenger Expectation
Airline Services Quality
Safety Perception

Funding:
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

This research aims to examine the influence of airline service quality and safety perception on brand loyalty. Furthermore, passenger anticipation employed as mediating variable for in-depth research. In order to achieve the goal of this research, data were gathered from a sample of 384 customers who use airline services. The convenient sampling approach was employed for data collection. The findings from the structural equation modelling revealed that brand loyalty has a considerable impact on the evaluation of airline services quality and safety perception. Additionally, the study identified the important mediating function of passenger expectation. This research assists the authorities and managers in the airline sector in formulating effective and efficient strategies to meet customer demand and cultivate brand loyalty.

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1. Introduction

In contrast to other sectors that have facilitated the worldwide expansion of enterprises, the aviation industry is now marked by stringent regulations that limit airlines' flexibility and their ability to enter global markets. In contrast to other sectors, which have facilitated the expansion of businesses on a worldwide scale. Due to this situation, airlines have faced obstacles in becoming fully globalized entities (Hanlon, 2007), since their efforts to engage in mergers and acquisitions across international borders have been hindered. Airlines have created worldwide alliances to overcome the limitations imposed on them due to nationality requirements. This allows them to enjoy the advantages of delivering a wider range of services and greater scale. (Doganis, 2005) states that there are now three dominant coalitions that have control over the competitive landscape. These alliances are often referred to as Star Alliance, One world, and Sky Team. Furthermore, airlines are compelled to confront a subpar overall profitability (Hanlon, 2007). (Ostrowski, O'Brien, & Gordon, 1993) argue that airlines are under growing pressure to provide high-quality services in order to differentiate themselves in the market. The term "moment of truth" pertains to the many interactions' airline customers may have with front-line workers and flight attendants in customer service. Customers might encounter these critical times in many ways. (Grönroos, 2001) states that customers may gauge the quality of airline service by comparing their experiences to their expectations across many quality categories. Thus, passengers may determine if an airline fulfils its reputation. Consequently, it is necessary to investigate the impact of airline service quality on passenger pleasure and loyalty, given the importance of customer contentment in the corporate realm (Dawood, ur Rehman, Majeed, & Idress, 2023; Ilyas, Banaras, Javaid, & Rahman, 2023; Li et al., 2021; Mohsin, Kamran, Nawaz, Hussain, & Dahri, 2021).

The airline industry is now experiencing significant volatility in regard to market size, prompting several airlines to devise novel tactics to enhance their competitiveness. Pakistan has a total of 126 airports, all of which are supervised by the Airport Authority of Pakistan and are under the governance of the Pakistani government. Pakistan has established a target to expand the number of operational airports by the year 2040 (Husnain, 2021). The passenger count in Pakistan had a year-on-year growth of 16.52 percent, resulting in a total of 308.75 million travelers. The domestic passenger count has risen by 18.28 percent, reaching a current total of 243 million. During the Financial Year 2018, the airport had high levels of activity in terms of both passenger traffic and cargo volume. It is projected that this figure will increase to 293.28 million in the Financial Year 2020, which is approximately comparable to 76 million. In the fiscal year of 2018, the amount of freight traffic inside the country was measured to be 1,213.06 million tons, while the amount of freight traffic between countries was measured to be 2,143.97 million tons (Shahzadi, Ali, Ghafoor, & Rahman, 2023; Ullah, ur Rahman, & Rehman, 2023). The in-flight experience remains distinct for the customer, and if the passenger is dissatisfied with the quality of service, they will reassess their decision to purchase future flights and will probably switch to another airline. (Archana & Subha, 2012) argue that delivering exceptional customer service is a very valued asset for airlines in the current fiercely competitive economic environment. Recent attention has been directed on studying the correlation between superior service standards and customer satisfaction in the airline business. The provision of high-quality services is crucial for the survival and competitiveness of airlines (Archana & Subha, 2012; Zhao et al., 2023). Several studies investigating the impact of airline service quality on customer satisfaction have been conducted in various nations. For example, research was conducted by (Archana & Subha, 2012) in India, (Huang, Sherman, & Lempicki, 2009) in Taiwan, (Munusamy & Natarajan, 2011) in Malaysia, (Sonjaya & Ramdan, 2023) in India, and (Mohsan, Nawaz, Khan, Shaukat, & Aslam, 2011), (Qadri et al.), in Pakistan. Nevertheless, no research has been conducted in the aviation business of Uganda, making it a compelling reason to do this study.

2. Literature Review

2.1. Expectation Confirmation Theory

As per the expectations-confirmation theory, post-purchase satisfaction is influenced by two factors: the individual's initial expectations and their impression of how those expectations were fulfilled. The effect is influenced by either a positive or negative discrepancy between the individual's expectations and their actual performance. Following a purchase, individuals tend to experience more satisfaction if the goods surpass their expectations, a phenomenon referred to as positive disconfirmation.(Oliver, 1980; Spreng, MacKenzie, & Olshavsky, 1996) have suggested that a consumer's happiness with a product may be anticipated by evaluating whether the product fulfils or surpasses their expectations. The problem becomes evident when using expected expectations as the benchmark for perceived performance. In this particular situation, Santos and Boote (2003) argue that the realization of negative expectations is unlikely to lead to emotions of satisfaction. To solve this problem, researchers say to look at other things, like tastes, values, fairness, or past experiences with similar products and brands (Chaudhary, Nasir, ur Rahman, & Sheikh, 2023; Khan & Saif-ur-Rehman; Shahid, Gurmani, Rehman, & Saif, 2023; Shahzadi, Sheikh, Sadiq, & Rahman, 2023; Sun et al., 2021; Usman, Rahman, Shafique, Sadiq, & Idrees, 2023).

Aims, principles, equality, and past experiences with things and companies are some of the extra evaluation factors. It is also suggested that you look at the work that Spreng et al. A way of thinking called "Expectation Confirmation Theory" tries to explain how much pleasure people feel after accepting or buying a product. Disconfirmation, observed success, and believing standards are some of the things that it looks at as important factors. This idea is what the "Expectation Confirmation Theory" is based on. Between the years 1977 and 1980, Oliver did two tests that laid the groundwork for this idea. According to (Oliver, 1980), the creator of the ECT framework, customers have a substantial influence on the techniques used to encourage repeat purchases. Before making a purchase, buyers often establish their initial expectations for a particular service or product by drawing upon their existing knowledge and past experiences. These expectations may also be influenced by their interactions with other customers via other communication channels. Consumers may promptly acquire product knowledge and information due to the widespread availability and easy access to the media. One may acquire this knowledge and information via advertising, media narratives, details on product packaging, and media interviews. Furthermore, when clients see a product as

advantageous, they are more inclined to embrace it, purchase it, and use it. After a designated duration of use, an assessment may be carried out to evaluate its overall performance. Furthermore, buyers evaluate the perceived effectiveness of the product or service by appraising 45 original expectations. In this situation, a positive disconfirmation is expected if the actual performance is seen to be greater than the initial projection. Thus, a negative confirmation arises when the initial anticipation is lower than the actual performance witnessed. This occurrence may arise when there is a substantial disparity between the two. A "simple confirmation" occurs when the initial expectations and the observed performance perfectly align with one other. Furthermore, the level of satisfaction experienced by the consumer is influenced by the fulfilment of their expectations, as shown by research conducted by (Henseler et al., 2014; Ilyas et al., 2023). Positive disconfirmation, when performance exceeds expectations, elicits a sense of satisfaction that is intensified by the customer's attitude. This is also true when the confirmation is unambiguous (performance matches the predicted outcome). Conversely, when performance falls short of expectations, a negative disconfirmation occurs, resulting in a decline in the favorable attitude towards the service or product being evaluated, eventually leading to a sense of dissatisfaction. Finally, consumers who are satisfied with the product are more likely to have the desire to repurchase it (Awan, Rahman, Ali, & Zafar, 2023; Tabassum, Rahman, Zafar, & Ghaffar, 2023). However, customers who are dissatisfied with the product tend to discontinue its use and seek for other products.

2.2. Empirical Review

2.2.1. Airline Service Quality and Passenger Expectation

While the term "service quality" is often used in the service business, it is also relevant to the products sector. However, the concept of "service quality" and the related research originated in the goods sector. The most major contribution was provided by Zeithaml, as stated by Parasuraman et al. in 1985. They proposed modifying the assessment of service quality to include both goods and services. They specifically defined service quality as a comprehensive evaluation or viewpoint on the excellence of the service. Zeithaml, Berry, and Parasuraman conducted research in 1988 where they introduced a technique called SERVQUAL to assess customer perceptions of service quality. In 1984, Gronroos established a Nordic framework for assessing the quality of service. This paradigm operates on the assumption that service providers provide not just one, but two separate categories of quality: technical excellence and operational efficiency. Technical quality, referred to as the tangible outcome received by the consumer (Shahzadi, Ali, et al., 2023), is distinct from functional quality, which pertains to the manner in which the client experiences the services. Technical quality pertains to the method by which services are delivered to clients. Reichheld & Sasser (1990) proposed that firms may effectively cater to consumers without resorting to abandonment, therefore reducing client rejection and ultimately enhancing corporate performance.

A study revealed that possessing a more extensive understanding of the quality of customer services, including endorsements and positive reputation, yields more behavioral benefits for the whole business. (Fatima, Jamshed, Tariq, & Rahman, 2023; Spreng et al., 1996) proposed an integrated model that posits service quality as a kind of behavior. This model assumes that service quality is a kind of behavior. Consequently, the satisfaction of consumers and their dissatisfaction with the previous viewpoint both influence the perception of the service's quality. (Patterson & Spreng, 1997) distinguished several aspects of service quality as outstanding, while others were categorized as subpar. According to him, the interaction between consumers significantly influences customer loyalty. (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018) found that customer behavior acts as a mediator in the connection between service quality and a company's financial performance. Enhancing the quality of service may extend the positive behavioral intentions of contented consumers. The calculations generated by Brady and Cronin Jr (2001) were based on the evaluation of many criteria, such as workplace quality, contacts with service employers, and outcomes. Suura. M. (2003) was the first to establish that service quality should not be seen as a discrepancy between perceived service quality and anticipated expectation, but rather as a factor that might influence customer perceptions. An assessment of services may be seen as a comprehensive analysis of the overall quality of the service. (Jarvis, MacKenzie, & Podsakoff, 2003) posited that effective service recovery by businesses is vital for attaining elevated levels of customer satisfaction and retention. The exceptional quality of the service was attributed to

a multiplicative strategic quality. As per the definition given by (Mukhtar et al., 2023; Parasuraman, Zeithaml, & Berry, 1985), service quality refers to the holistic evaluation of a product or service, which takes into account the rationale, assessment characteristics, beliefs, and attitudes of the evaluators.

2.2.2. Safety Perception and Passenger Expectation

This component of the program involves actively gathering data and then taking preventive measures related to cabin design and operation, equipment, procedures, crew training, human performance, and passenger management (Naseem, Sheikh, & Malik, 2011). In the aftermath of the events that occurred on September 11, 2001, the current safety and security procedures were reevaluated and strengthened. Furthermore, novel preventive measures and security procedures have been devised and implemented. The primary responsibilities of flight attendants for in-flight security are verifying the absence of unidentified or hazardous items aboard the aircraft and preventing any acts that might disrupt the normal operation of the plane (Osman, CF, & Galang, 2011). In order to enhance their market share and maximize their earnings, airlines have made a pledge to elevate the standard of customer service they provide. The evaluation of a service's quality encompasses not only its observable attributes, but also its intangible attributes, such as the extent of safety and comfort it provides (Nawaz, Rahman, Zafar, & Ghaffar, 2023; Tsaur, Chang, & Yen, 2002). As per the study conducted by Damo et al. in 2013, a flight attendant has the responsibility of supervising in-flight safety and ensuring the prevention of any accidents to passengers or crew members. Based on airline surveys, the safety record of airlines is considered the most crucial factor (Oyewole, Sankaran, & Choudhury, 2007). Based on the research conducted by Gilbert and Wong in 2003, passengers constantly consider "assurance" to be the most important aspect of a service. Research indicates that passengers' express concerns about both their own safety and the safety of others. Furthermore, it is proposed that passenger safety education should include additional instructions on the proper use of different forms of emergency apparatus. The consumer's impression of their personal safety is a crucial determinant in understanding the degree of overall customer satisfaction.

2.2.3. Passenger Expectation and Airline Brand Loyalty

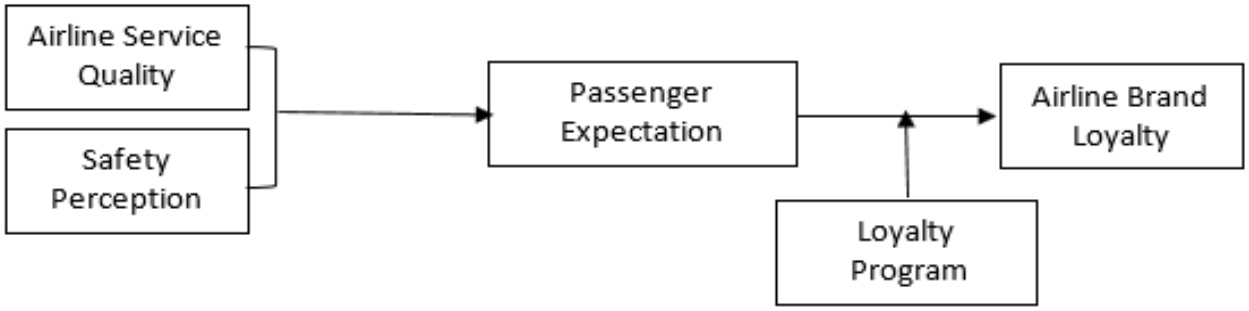
Oliver defines brand loyalty as a strong and unwavering commitment to consistently repurchase or patronize a preferred product or service in the future. This leads to repeated purchases of the same brand or set of brands, even in the face of situational influences and marketing efforts that could potentially encourage switching behavior (Oliver, 1980). As per the research conducted by Churchill Jr & Surprenant in 1982, behavioral brand loyalty, also referred to as purchase loyalty, is when a consumer repeatedly buys the same brand. On the other hand, attitudinal brand loyalty is when a consumer has a certain level of commitment to a brand based on a specific value associated with it. (Oliver, 1980) proposed that brand loyalty may be understood via the pattern of cognition, emotion, and conation. According to this theory, there are four distinct stages of brand loyalty that increase in intensity. This signifies a genuine and determined desire to acquire a product or service, also referred to as a "positive intention." This aspiration may result in unfulfilled endeavors. Action loyalty, the last stage of customer loyalty, is characterized by the conversion of customers' intentions into tangible actions. Consumers at this stage are encountering action inertia and possess a profound desire to make a purchase, despite the obstacles they confront. Action loyalty is considered the highest kind of loyalty; yet, it may be difficult to monitor and evaluate. Most researchers choose to utilize the conative or behavioral-intention measure as a compromise. There are now two dominant perspectives on how to categorize client loyalty to brands in today's market. Attitudinal loyalty, in simple terms, refers to the constant expression of positive preference for a brand. It represents the emotional connection that consumers have with different brands. Conversely, behavioral loyalty refers to determining a customer's loyalty level by observing their repeated purchasing behavior. The way of evaluating loyalty described here is the conventional approach.

2.2.4. Moderating Role of Loyalty Program

Conversely, the rewarded behavior mechanism offers enduring outcomes, as customers enhance their buying behavior after the receipt of tangible rewards. The long-term consequences arise from the mechanism's practice of compensating consumers for their good behavior. American Airlines pioneered the implementation of a comprehensive customer loyalty program, known as frequent traveler programs, in the 1980s. Subsequently, several

airlines have imitated this action. As per Schwandt (2000), it is logical for members to amass the majority of their points in loyalty programs since these programs allow members to exchange their points for tangible rewards without requiring any extra effort from the customers. Therefore, loyalty programs are a very effective mechanism for enhancing consumers' perception of the costs associated with switching, therefore promoting the continued patronage of current customers. It is noteworthy that individuals who are part of loyalty programs tend to remain loyal even if they are unsatisfied, rather than switching. Their rationale is that the financial incentives serve as impediments to accepting a rival proposal. White & Yu (2005) identified a very high level of insincere loyalty among those who participate in frequent flyer programs. Consumers who are not members of loyalty programs may be less likely to make a future purchase if they are disappointed. However, according to (Taylor & Neslin, 2005), if a customer's loyalty is primarily based on the ability to get physical rewards, removing those visible benefits would likely lead to the termination of the relationship. A satisfied customer base is typically essential for a business to thrive. However, the importance of customer satisfaction may diminish when other factors, such as loyalty programs, have a greater influence on customer loyalty (Parasuraman et al., 1985; Sekaran & Bougie, 2016; Thusyanthy & Senthilnathan, 2011).

Figure 1: Research Model



3. Methodology

3.1. Target Population and Data Collection Procedure

The target demographic of this research consists of frequent airline passengers who fly 2 to 4 times per year. Following the guidelines published by (Hair, Anderson, Babin, & Black, 2010), we used the G*Power program version 3.1 to determine a minimum sample size of 138, taking into consideration the predictors. Consequently, an effect size of 0.15 was established, accompanied with a power of 0.95. The study parameters suggest that the sample size exceeds the minimum requirement by a significant margin (Hair et al., 2010). Another approach suggested determining the appropriate sample size for testing a model by multiplying each item by a factor of five. Hair et al. conducted a study in 1998 and another one in 2011 (Hair et al., 2010). Krejcie and Morgan (1970) assert that a minimum sample size of 384 is required for the proper execution of a regression analysis. The researchers used the Morgan criteria to establish the optimal sample size for this investigation, taking into account a confidence level of 95% and a significance level of 5%. The researchers have a specific interest in interviewing chief executive officers and management of recently established enterprises. To collect the information, the questionnaire was presented with the help of data collectors (Hair et al., 2010). The given model was used in Smart PLS to estimate and analyze SEM. The objective of the proposed research is to collect data from airline customers, namely those who have purchased tickets via ticket producers in Pakistan. The sampling method used is a non-sampling technique where the researcher selects sample components based on their own opinion. Researchers often presume that by exercising sound judgement, they can assemble a representative cohort and economies on time and resources. Cases are selected based on an expert's assessment or with a particular objective in mind. Intentional sampling is often used when studying a complex population.

The PLS route model, as outlined by (Hair Jr et al., 2014), consists of two primary steps: model assessment and hypothesis testing. The relationship between the concept and its indicators is elucidated using the construct measurement model (rectangles). The structural model illustrates the relationships (route) that exist between constructs (circle or ovals). Within the structural model, PLS-SEM only permits recursive interactions, meaning that causal

loops are not permitted. Consequently, the latent constructions can only be traversed in one way along the topological routes. The conceptual framework has two distinct types of constructs: accidental and domestic. Exogenous variables are latent variables that have only outgoing arrows and no structural pathways leading towards them. Meanwhile, the word "endogenous" in a structural model refers to a dependent variable that represents latent target components via interactions with other constructs (Hair Jr et al., 2014).

3.2. Instruments

Table 1: Variable Description

Sr.	Variable Names	Items	Sources
Dependent Variables			
1.	Brand Loyalty	3	(Hartmann, 2000)
Independent Variable			
2.	Safety perception	6	(Hamid, Baharun, & Hashim, 2006; Husnain, 2022)
3.	Airline Services Quality	3	
Mediation			
4.	Passenger Expectation	3	(Mason & Simmons, 2012)
Moderating Variable			
5.	Loyalty Program	4	(Sharp & Sharp, 1997)

3.3. Respondents' Profiles

The demographic characteristics of the individuals who are using airline services.

Table 2: Demographic Analysis

Demographic Variables	Frequency	Percentage
Gender		
Male	330	86.6%
Female	51	13.4%
Age Group		
Up to 25	134	35.2%
26–45	198	52.0%
46–55	30	7.9%
56+	19	5.0%
Education		
Bachelors	273	71.7%
Masters	98	25.7%
M Phil	10	2.6%
Nature of Business		
Services	147	38.6%
Manufacturer	234	61.4%
Business span		
Less than 2 Year	175	45.9%
2 to 4 Year	135	35.4%
4 and above	71	18.6%

3.4. Model Fit

Figure 2

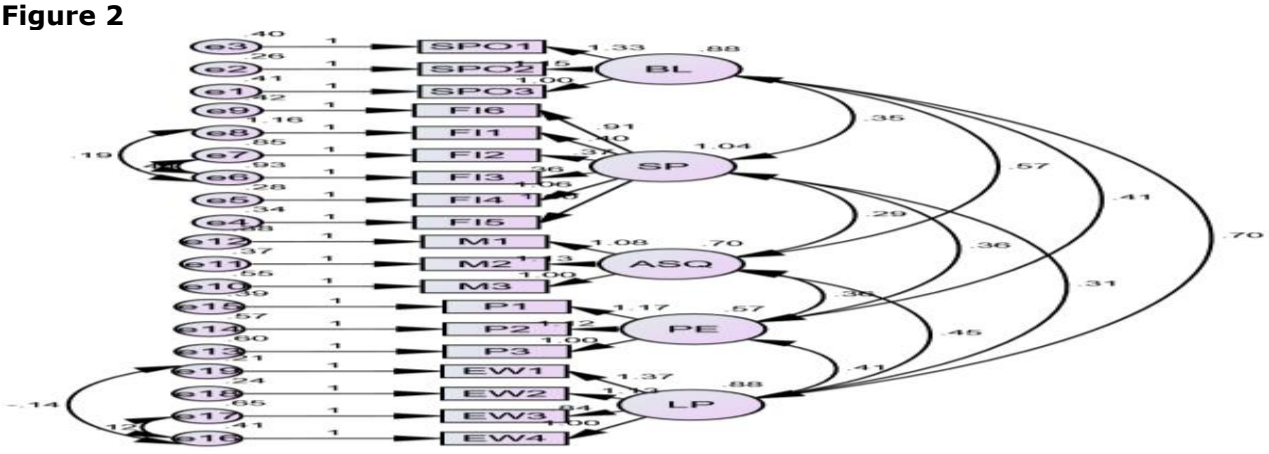


Table 3 presents the demographic characteristics of customers using airline services. Amidst the whole of the writers Among the responses, 330 individuals (86.6%) identified as male, whereas 51 individuals (13.4%) identified as female. Regarding age distribution, 134

respondents (35.2%) were aged up to 25 years, 198 (52.0%) were within the age range of 26 to 45 years, 30 (7.9%) were between 46 and 55 years old, and 19 (5%) were 56 years old or above. In terms of credentials, 71.7% of the 273 respondents had a bachelor's degree, 25.7% (98 respondents) had a master's degree, and 2.6% (10 respondents) earned a M Phil degree. Furthermore, out of the total respondents, 147 individuals (38.5%) belonged to the services sector, while 234 individuals (61.6%) were affiliated with the industrial industries.

Table 3: Model Fit

Measure	Estimate	Interpretation
CMIN/DF	3.949	Acceptable
CFI	0.949	Acceptable
RMSEA	0.061	Acceptable
PClose	0.09	Acceptable

Table 3 shows the measure of model fit, indicating that the model in figure 1 is appropriate for testing the hypothesis. All results below the threshold are considered acceptable for further study.

3.5. Measurement Model Evaluation

The dependability of individual items or constructs is assessed in PLS by analyzing the loadings of items on their corresponding latent structures (Hulland, 1999). As the loadings increase, there is a higher amount of shared variation between the construct and measurement rather than error variance. However, when the loadings are lower, the power of the model explanation decreases, which reduces the accuracy of the parameter estimates that connect the constructs (Hulland, 1999).

Table 4: Convergent Validity

Variable	Items	Loading	CR	AVE
Brand Loyalty	BL1	0.725	0.899	0.533
	BL2	0.718		
	BL3	0.814		
Safety Perception	SP1	0.72	0.902	0.507
	SP2	0.766		
	SP3	0.809		
	SP4	0.726		
	SP5	0.74		
	SP6	0.676		
Airline Services Quality	ASQ1	0.821	0.86	0.515
	ASQ2	0.839		
	ASQ3	0.838		
Passenger Expectation	PE1	0.749	0.918	0.504
	PE2	0.738		
	PE3	0.765		
Loyalty Program	LP1	0.869	0.912	0.674
	LP2	0.831		
	LP3	0.853		
	LP4	0.703		
	LP5	0.843		
	LP6	0.804		
	LP7	0.844		
	LP8	0.631		
	LP9	0.769		
	LP10	0.763		
	LP11	0.739		

The indicators within the reflective measurement framework are intimately interconnected and may be used interchangeably. Therefore, it is crucial to do a thorough assessment of their trustworthiness and accuracy, along with a full report. Hence, the researcher thoroughly examined and confirmed the dependability and accuracy of the measurement model. The assessment of reliability was conducted using the coefficient alpha, while both convergent and discriminant validity were examined. Reliability was assessed using Cronbach's alpha (CR), convergent validity was evaluated using metrics such as average variance extracted (AVE), and discriminant validity was determined by examining the HTMT

ratio of correlations. Prior to examining the connections inside the structural model, a thorough procedure was followed to meet the necessary requirements for dependability and validity.

3.6. Composite Reliability

To evaluate the internal consistency of the concept, the coefficient of reliability (CR) was computed. The loadings of all items within reflective structures were examined to determine whether they surpassed the recommended cutoff value of 0.5, as proposed by (Hair Jr et al., 2014). The components were loaded into their respective construction pieces, as shown in Table 4.3.1. All of the item loadings exceeded the acceptable level of 0.5. The loadings ranged from 0.509 to 0.951, suggesting that the constructs accounted for more than half of the variance in the independent variables. The variable under observation exhibited a spectrum of values. Individual items with lateral loads below 0.5 were systematically removed to increase the internal dependability of the structure to a high level. If the reflecting scale maintains the necessary degree of internal consistency, removing some elements from the scale may or may not affect the connections between the ideas of the construct. The causality is attributed to the concept, implying that the items are a reflection of the consequences. The items exhibit a robust correlation since they are both impacted by the same underlying principle (Hair Jr et al., 2014). Upon removing the items from the scale, this research determined that the internal consistency of all the constructs fell within an acceptable range. There were 10 latent components that showed CR values ranging from 0.735 to 0.921, which above the specified cutoff value of 0.7. The reference is from (Hair et al., 2010). Consequently, all structures exhibited a notable degree of internal coherence.

3.7. Convergent Validity

The AVE was used to ascertain the convergent validity. Table 4 presents the results of the convergent validity analysis, indicating that the AVE values for all latent constructs above the acceptable threshold of 0.5. The AVE values ranged from 0.504 to 0.701. If the average variance extracted (AVE) value surpassed 0.5, it signified that the latent concept explained more than 50% of the variation in its indicators. Table 4 succinctly presents the results derived from the measurement model.

3.8. Discriminant Validity

Henseler et al., (2014) came up with a new way to check discriminant validity in structural equation modelling (SEM) that is based on variance. A lot of people agree that cross-loadings and the Fornell-Larcker criterion are the best ways to check if variance-based structural equation models are discriminant valid. On the other hand, Henseler et al. said that these approaches don't always find situations where discriminant validity isn't present. Firstly, this can be measured through HTMT Ratio and its value must be below 0.85 as suggested by several researchers. The second way to test is to see which is more likely: the null hypothesis (H0: HTMT < 1) or the alternative hypothesis (H1)? If the importance level is one, it means that there is no joint confidence. As part of this study, the first criteria method was used to test the discriminating validity of the HTMT ratio.

Table 5: HTMT Ratio

	Brand Loyalty	Safety Perception	Service Quality	Passenger Expectation
Brand Loyalty				
Safety Perception	0.467			
Service Quality	0.138	0.309		
Passenger Expectation	0.473	0.423	0.176	
Loyalty Program	0.435	0.405	0.448	0.612

3.9. The Approach to Direct Relationships

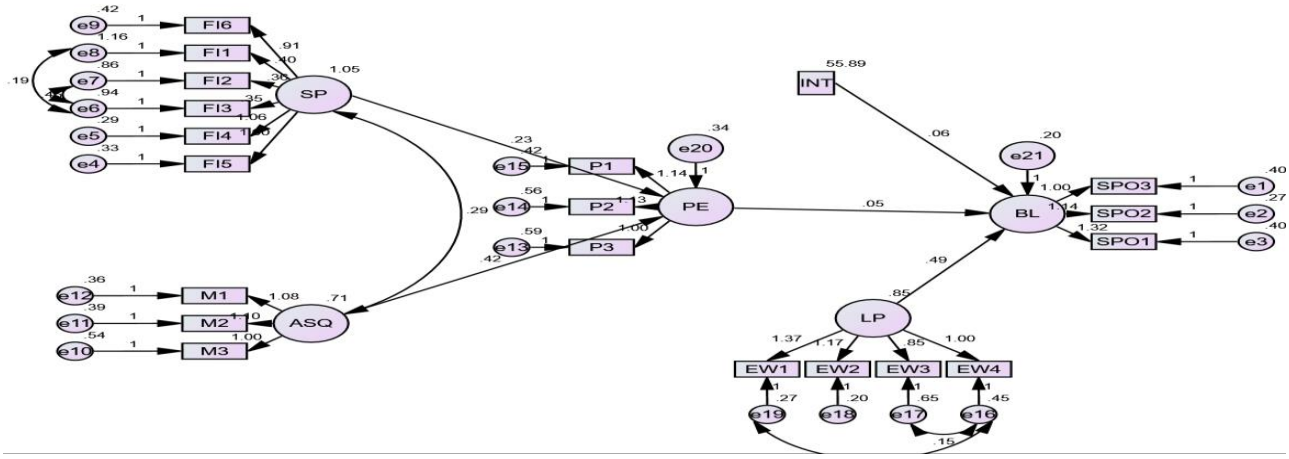
According to (Hair Jr et al., 2014), findings that are not significant or show signals in the opposite direction of the hypothesis do not support previous hypotheses. On the other hand, significant routes provide empirical evidence for the stated causal connection. Prior to assessing the mediating effect, the t-value was computed by bootstrapping with a resample of 500 to determine the significance of the direct connections. Illustrates the process by which the route coefficients were derived. Here are the comprehensive results.

Table 6: Path Analysis

H		Beta	S D	T Stat	P Values	LL 5%	UL 95%	Decisions
H1	SQ → PE	0.678	0.043	15.71	0**	0.612	0.747	Supported
H2	SP → PE	0.113	0.033	3.11	0**	0.06	0.158	Supported
H3	PE → BL	0.164	0.045	3.536	0**	0.088	0.239	Supported
H4	LP*PE → BL	-0.039	0.085	0.455	0.321	-0.173	0.095	Not Supported

Note: *p < 0.05 (t > 1.645); **p < 0.01 (t > 2.33)

Figure 3



The table 4 displays the findings of the direct link between the variables. It indicates that both service quality (beta=0.678, p>0.05) and safety perception (beta=0.113, p>0.05) have a positive and statistically significant influence on passenger expectation. In addition, the variable of passenger anticipation (with a beta coefficient of 0.164 and a p-value more than 0.05) has a positive influence on brand loyalty. Regarding the moderating function, there is a negligible correlation between passenger expectations and brand loyalty.

Table 7: Mediation Analysis

H		Beta	SD	T Stat	P Values	LL 5%	UL 95%	Decision
H5	SQ→PE→BL	0.047	0.056	0.838	0.201	-0.042	0.137	Not Supported
H6	SP→PE→BL	-0.036	0.016	2.245	0.013	-0.065	-0.015	Supported

Note: SE – Standard Error; LL – Lower Limit; UL – Upper Limit

In the above Table 5, indicated the mediating analysis and results indicated that there is significant role of passenger expectation between safety perception and brand loyalty, moreover there is significant mediating role of passenger expectation between services quality and brand loyalty.

4. Conclusion

The primary objective of this research is to evaluate the role that passenger expectations play in mediating the relationship between the quality of airline services, the perception of safety, and passengers' loyalty to brands. As a result, all of the null hypotheses that are associated with direct relationships are rejected at a rate of five percent. Furthermore, with regard to the mediating function, there is a strong mediating role of passenger expectation between safety perception and brand loyalty, as well as between airline quality services and brand loyalty. This study's link was supported by the existing body of research on brand loyalty, as stated in the previous sentence. Because every research has certain limitations, this study also has some limitations, such as the fact that the reason Air's customers purchase tickets is not because of the quality of the service or the perceived value of the airline, but rather because their expectations of doing business with the airline are satisfied. Although some of the findings in this study are in agreement with the findings from the prior research, there are other outcomes that do not align with the findings from the previous research. As an example, our findings are in agreement with the literature, which pertains to both the LCCs and the full-service sector, to confirm that expectations have a direct impact on satisfaction and to draw the conclusion that customer satisfaction has a significant influence on the intention to make a purchase. On the other hand, when we

compare our findings to those of past research, we find that the influences of perceived value and service quality on customer satisfaction and intention to buy are different from those of the previous research that was conducted on the full-service sector. In addition, our findings indicate that the positive association between customer anticipation and purchase intention might be totally mediated by the level of satisfaction experienced by the consumer. The route in which customer satisfaction acts as a mediating variable in the link between customer expectation and purchase intention might thus be used to explain the purchase intention of air passengers to be described via the pathway. When comparing the performance of the service that was received to the performance that was anticipated of the service, customers of VietJet Air would be more likely to buy the airline's service in the future if they believe that their expectations with regard to the service are satisfied. This study offers essential support and direction to the management of VietJet Air by enabling them to be more knowledgeable about air passengers in Vietnam while they are evaluating their strategic marketing goals. The findings of this research are based on the findings of the previous research. As a result, managers of both low-cost carriers and full-service carriers need to work towards improving the expectations and happiness of their consumers in order to increase the likelihood that they would make a purchase. It is possible to put in less work and utilize less resources in order to enhance the perceived value and service quality of LCCS. In the case of LLC consumers, these two characteristics do not have any connection to customer happiness or the desire to make a transaction.

Table 8

Hypothesis	Decisions
To investigate the impact of airline services quality and passenger expectation	Supported
To investigate the impact of safety perception and passenger expectation	Supported
To investigate the impact of passenger expectation and airline brand loyalty	Supported
To Investigate the mediating role of passenger expectation between airline service quality and airline brand loyalty	Supported
To Investigate the mediating role of passenger expectation between safety perception and airline brand loyalty.	Not Supported
To Investigate the moderating role of loyalty programs between passenger expectation and airline brand loyalty.	Not Supported

4.1. Theoretical Implication

The theoretical implications of the connection between airline brand loyalty, which serves as the dependent variable, and safety perception, which serves as the independent variable, have significant repercussions for a variety of aspects of airline management, consumer behavior, and aviation safety. In relation to this specific correlation, the independent variable is the sense of safety, while the dependent variable is loyalty to a specific airline brand. Initiating a more comprehensive understanding of the process by which passenger loyalty is established involves researching the perception of safety as a factor influencing brand loyalty. This shows that things other than traditional marketing tactics, like price and reward programs, can make a big difference in making passengers loyal. Second, this organization stresses how important security is as a way for planes to gain a competitive edge. If customers have good experiences with an airline that puts passenger safety first, not just to follow the rules but also to get an edge over the competition, those customers may be more loyal to that airline in the future. Another important thing that this link shows is how important faith is in the relationship between a company and its customers. Research shows that a strong link exists between how safe people think a company is and how much they trust it, which in turn leads to more loyal customers. This information also shows how important it is to keep working to build trust in the airline business. Figuring out the connection between trust and how safe people think they are can help airlines make better models of how customers make decisions, which can change passengers' choices and preferences. Also, airlines that put money into safety measures and tell people about them clearly may see their profits go up, which is good for both their general business strategy and how they use their resources. Concerning handling crises, airlines that have a strong base of good safety views are better able to keep customers loyal during safety-related crises. To make this happen, though, there needs to be a wide range of programs that rebuild customer trust and make them feel safer. In conclusion, when making rules and laws for the airline industry, officials and lawmakers can think about how people's perceptions of safety change over time and how loyal they are to a certain brand. Building a culture of safety within airlines may have wider social benefits by making customers more loyal in a world that is becoming more competitive

and more concerned with safety. This is because of the relationship between safety and passenger loyalty. The implications of these theoretical frameworks, in general, offer light on the complex dynamics that exist between safety, trust, customer behavior, and the management approaches used by airlines. As a consequence of this, the aviation industry could need to rethink its strategy to dealing with safety and maintaining consumer loyalty.

4.2. Practical Implication

Because of the practical consequences of the relationship between airline brand loyalty (which serves as the dependent variable in this research) and safety perception (which serves as the independent variable), aviation professionals and airlines may benefit from this particular study. First and foremost, airlines need to understand that investments in safety, which go above what is necessary by rules, have the potential to serve as a helpful marketing tool. This is something that they need to accept. Because of this, it is necessary to provide resources for the improvement of safety measures, the training of people, and the maintenance of aircraft. This, in turn, may have a positive impact on the passengers' perception of the degree of safety, which, in turn, may lead to a rise in brand loyalty. First and foremost, it is of the highest need to ensure that safety measures are effectively communicated, which takes me to my second point. In order for airlines to reassure their consumers about their dedication to safety, it is vital for them to employ a number of communication channels. The provision of passengers with a safety message that is not only understandable but also open and honest via the use of in-flight announcements, safety briefings, and marketing materials is included in this. With regard to the third point, airlines need to have comprehensive strategies for crisis management far in advance of any possible issues. The strategies should not only focus on addressing critical safety concerns, but they should also prioritize recovering the trust of passengers and increasing their perception of safety via communication that is both timely and transparent. In the fourth place, it is of the utmost importance to make investments in ongoing safety training for employees and to build a culture inside the company that places an emphasis on safety. staff who have received sufficient training and are dedicated to safety will automatically have a more favorable perception of the degree of safety offered by staff, which will ultimately lead to improved brand loyalty on the part of passengers. In addition, airlines have the capacity to contribute to the education of passengers on aviation safety by providing information on safety processes and data by providing passengers with access to this information. The development of passengers who are aware and have positive attitudes towards safety will be significantly aided by this. It is possible that the constant collecting and analysis of passenger feedback about problems of safety might be of assistance in pinpointing the areas in which improvements to strategy are required. It is also possible that the pursuit of ties with safety organizations and industry certifications by an airline might serve as concrete evidence of the airline's dedication to safety. This can potentially boost passengers' perceptions of safety and customers' loyalty to the airline's brand. Last but not least, airlines would want to consider tailoring their pricing tactics and loyalty programs to reward consumers who prioritize safety. This would allow them to provide incentives to passengers who are concerned about their own safety. In conclusion, these practical implications highlight the importance of strategic safety investments, effective communication, crisis readiness, employee training, passenger education, data analysis, partnerships, certifications, and customized pricing strategies as necessary actions for airlines to take in order to improve the safety perception of their services and, as a result, cultivate greater brand loyalty among their customers.

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