

Introduction

Background of the Study

Air travel and tourism are increasingly interdependent, with airlines no longer functioning solely as transport providers but as key coordinators of the overall travel experience. Modern passengers increasingly prefer integrated offerings that combine flights, accommodation, and related services into a single travel solution, as such integration reduces fragmentation and enhances the perceived coherence of the journey. When airlines collaborate with tourism and hospitality partners through bundled packages or shared platforms, these integrated services not only improve the travel experience but also reinforce passengers' perceptions of the airline's overall image and reliability. A strong and positive brand image, in turn, shapes passenger expectations and influences how integrated services are evaluated during the travel experience (Zhang et al., 2023).

Recent meta-analytic and empirical work confirms that perceived service quality across the travel chain is a primary determinant of passenger satisfaction; this effect remains robust across regions and carrier types.

Intentions to employ the same provider or package are linked to greater satisfaction scores which are consistently predicted by higher perceived quality and more seamless coordination in the integrated travel chain (Eshaghi et al., 2024) .

The full potential of integrated aviation-tourism offers is still underutilized in many developing destinations. According to (Samková, 2023), "an effective integrated passenger-transport management system can help a region's tourism industry grow (p. 5). Her research on integrated passenger transport systems (IPTS) highlights how coordination between various carriers and service providers, such as airlines, ground transfer companies, and hospitality/tourism nodes, facilitates a more seamless traveler experience, increasing destination appeal and repeat business. This observation shows that service integration may increase customer loyalty by lowering transactional friction and enhancing perceived value, which is directly related to the current research issue of bundled airline and tourism hospitality service packages.

Therefore, the purpose of this study is to examine how integrated airline and tourism-hospitality services affect passenger satisfaction and, in turn, passenger retention. The study looks at passenger satisfaction as a mediating mechanism through which service integration influences loyalty outcomes, drawing on SERVQUAL(Parasuraman et al., 1985) and Expectation–Confirmation Theory (Oliver, 1980) additionally, because passengers' preexisting opinions of the airline brand may influence how they evaluate integrated travel experiences, airline brand image is seen to be a moderating element that shapes how strongly integrated services influence customer pleasure.

Problem Statement

Despite the enormous potential for value creation through collaboration, many airlines and tourism/hospitality companies continue to operate independently. This implies that passengers frequently have to make independent reservations for lodging, flights, and local activities, which can be difficult, time-consuming, and prone to problems with services. According to research, travelers have a more seamless travel experience and are more likely to stick with the brand when airlines and tourism services work together. (Wang, 2023). However, issues including inadequate digital tools, inadequate infrastructure, and a lack of cooperation make such integration challenging in emerging economies, which can affect passenger satisfaction and decrease the likelihood that they would return or rebook (Wang, 2023).

Moreover, passengers' existing perceptions of an airline's brand image may influence how they evaluate integrated service offerings, potentially strengthening or weakening the impact of service integration on satisfaction and loyalty outcomes (Fu, 2023). This highlights the need to explore how integrated airline and tourism-hospitality services affect passenger satisfaction and, in turn, retention particularly in Pakistan, where this area remains under-researched.

Research Aim and Objectives

Aim:

The aim of this study is to explore how the integration of airline services and tourism/hospitality offerings affects passenger satisfaction, and how in turn this satisfaction influences passenger retention (Liasidou, 2024).

Objectives:

1. To examine the effect of integrated airline and tourism-hospitality services on passenger satisfaction.
2. To assess the mediating role of passenger satisfaction in the relationship between service integration and passenger loyalty outcomes (passenger retention).
3. To examine the moderating role of **brand image** in the relationship between service integration and passenger satisfaction.

Research Questions

- 1) How does the integration of airline and tourism-hospitality services influence passenger satisfaction with the overall travel experience?
- 2) Why does passenger satisfaction play a mediating role in the relationship between integrated airline–tourism services and passenger loyalty outcomes (retention)?
- 3) How does brand image influence the relationship between integrated airline–tourism services and passenger satisfaction?

Theoretical Framework

This study draws on two foundational theories to explain how integrated airline and tourism-hospitality services affect passenger behavior. Firstly, the SERVQUAL(Parasuraman et al., 1985) model posits that service quality is determined by five dimensions: tangibility, reliability, responsiveness, assurance, and empathy. When applied to airline and tourism service bundles, higher performance across these dimensions enhances overall passenger satisfaction and loyalty (Vinoj et al., 2024a).

Secondly, the Expectation–Confirmation Theory (ECT) (Oliver, 1980) proposes that customer satisfaction arises when perceived performance meets or exceeds initial expectations, and that satisfaction then influences passenger retentions behavior (Bakır et al., 2024). Combining these frameworks, the present conceptual model suggests:

- (a) that integration of airline and tourism-hospitality services enhances service quality across the travel journey and thereby raises satisfaction.
- (b) that higher satisfaction leads to increased passenger retention .
- (c) Brand Image moderates how strongly service integration impacts satisfaction.

By applying SERVQUAL to an end-to-end travel bundle and ECT to the satisfaction–loyalty link, this research provides a robust theoretical basis for examining the mediating role of satisfaction and the moderating role of **brand image** in the proposed model.

Significance of the Study

The proposed research offers both theoretical and practical value within the travel and tourism ecosystem. Theoretically, it enhances our understanding of how integrated airline and tourism-hospitality service models influence passenger satisfaction, retention behavior an area that remains under, explored in the context of bundled travel offerings (Eshaghi et al., 2024).

From a practical point of view, the findings show how airlines and travel-related businesses can deliberately transform service integration into measurable loyalty outcomes. Providers can meet the needs of modern travelers for convenience and unity by offering packages that combine flights, hotels, and ground services. This will lower turnover and increase loyalty. The report points out the strategic role that airlines play in improving tourism flows for policymakers and destination managers. It means that better service integration between the aviation and hospitality industries could make destinations more competitive and encourage repeat business.

Scope and Limitations

Scope: In order to assess how such integration affects customer happiness and retention, this study focuses on travelers who have used integrated airline and tourism hospitality services, such as combination flight + hotel or all-inclusive trip packages. The extent includes travelers, both local and foreign, who have used Pakistan's main airports and engaged with tourism-hospitality companies that provide packaged services. The moderating function of brand image in this association is further investigated in this study. The scope is purposefully restricted to service integration within the tourism and aviation industries, leaving out other transportation or recreational sectors (Liasidou, 2024).

Limitations: Despite its targeted strategy, there are a number of drawbacks. The quantitative, cross-sectional methodology of the study limits its capacity to identify long-term causal links. Passenger self-reports, which may contain response bias or subjective assessments of service quality, are the source of the statistics. Furthermore, generalizability across all passenger categories is limited by the use of convenience sampling. The study was conducted in the context of Pakistani aviation and hospitality, which may limit the applicability of its findings to regions with separate service standards or tourism infrastructures. (Liasidou, 2024).

Literature Review

Introduction

The concept of service integration between airlines and tourism-hospitality providers has emerged as an important topic for management and research in an era where travelers expect seamless end-to-end experiences. Service integration is putting together travel, hotel, ground transportation, and tourism activities into one package. This makes things less scattered and improves the brand image (Babić et al., 2022). Few studies examine how these constructs change when airlines collaborate with hospitality or tourism service organizations for bundled experiences, despite the fact that service quality and customer satisfaction have been thoroughly examined in the context of airlines. Additionally, the literature has mostly concentrated on developed markets, leaving large gaps in emerging locations where service ecosystems, infrastructure, and digital maturity differ significantly. Therefore, this chapter reviews existing research on airline-tourism hospitality

integration, examines service quality and satisfaction relationships, passenger retentions, and identifies mediating and moderating factors to build a rigorous theoretical foundation for the conceptual model.

Integration of Airline and Tourism Hospitality Services

Integrated travel offerings, in which airline services are combined with accommodation and ground transportation into a single, coordinated package, have gained increasing importance in contemporary travel markets. Such integration aims to provide passengers with a seamless end-to-end travel experience by minimizing fragmentation across different stages of the travel journey. By reducing the need for multiple bookings and separate service providers, integrated airline and tourism-hospitality services significantly lower booking complexity and perceived uncertainty, thereby enhancing overall travel convenience and perceived value for passengers (Shen & Yahya, 2021). When flights, hotels, and ground services are aligned within one system, passengers are better able to manage their travel plans efficiently, which positively shapes their overall evaluation of the travel experience.

Research indicates that airlines, especially those in the low-cost carrier market, are increasingly implementing integrated service strategies. According to a recent study on low-cost carriers, airlines are increasingly combining tour-related services like hotel stays, ground transportation, and city tours into their primary service offerings (Mohamed et al., 2023). Airlines transcend the conventional role of transportation providers and establish themselves as coordinators of comprehensive travel experiences through such partnerships with tourism and hospitality providers (Shen & Yahya, 2021). Airlines are able to offer complete travel solutions that satisfy travelers' growing demands for convenience, flexibility, and simplified travel plans as a result of this strategic alignment.

There is still no academic study that systematically examines how the integration of airline and tourism hospitality affects passenger behavior, even though these kinds of packages are becoming more and more popular. In particular, there is a lack of theoretical and empirical research on the impact of these integrated services on key behavioral outcomes, including passenger satisfaction, loyalty, and retention. (Leon & Dixon, 2023a).

A lot of past research in aviation and tourism has looked at airline services and hotel services as two separate areas. It has not looked at how they are connected in the modern travel environment.

By considering airline and hospitality coordination as systemic service integration, the present study aims to extend the conventional service quality model into a joint setting of both airline and tourism services. Instead of evaluating the quality of service encounters, this approach considers the travel experience as a continuous process consisting of several service encounters. This perspective of service integration would offer a broader conceptual framework for studying passenger satisfaction and the consequent behavioral outcomes, including retention. Thus, the study of airline-tourist hospitality service integration as a single entity would lead to a broader understanding of passenger behavior in the context of contemporary travel markets.

Service Quality and Passenger Satisfaction

In terms of service quality, it has traditionally been recognized as an essential factor in measuring customer happiness, as it has a direct impact on travelers' perceptions of service experiences. In such a highly competitive industry as the airline business, travelers do not only compare the price of tickets but also compare service quality. Recent academic literature has revealed a strong positive relationship between service quality and passenger pleasure (Usman et al., 2023).

For example, the SERVQUAL model is applied in the Indian airline industry in the study by Vinoj et al, (2024) This study presents empirical findings which prove that some of the basic dimensions of service quality have significant impacts on customer satisfaction. According to the study, tangible aspects, empathy, and price considerations are significant factors which impact customer satisfaction in such a way that it influences the overall attractiveness of the airline. According to the abstract, it is essential for the airlines to understand the factors which impact customer satisfaction. The study attempts to examine the impact of different dimensions of service quality using the service quality model (Vinoj et al., 2024a). These findings confirm the usefulness of SERVQUAL as an appropriate tool for analyzing travel service quality.

In terms of the overall service quality offered in an integrated model of airline and tourism-hospitality services, it would include the usual in-flight service, as well as ground transport, accommodation, and coordination. When these elements are well-integrated and provided at a high quality, the passenger will perceive the service as being reliable, responsive, and customer-centered (Lippitt et al., 2023).

Therefore, the improved quality of service in integrated airline and tourism packages has the overall impact of enhancing passenger happiness by creating a smooth and seamless experience.

This has provided the study with the necessary validation in terms of the theoretical foundations. The theoretical foundations of this research proposed that improved service quality in integrated travel options would have a positive impact on passenger satisfaction. One of the behavioral outcomes of this would be the strengthening of passenger retention. The integration of service quality in this study extends the previous research on airline satisfaction.

Passenger Retention

Passenger retention has been viewed as one of the most significant measures of long-term sustainability and customer loyalty in the aviation industry. As the cost of gaining new customers continues to rise, more and more emphasis has been placed on retaining existing customers and encouraging repeat usage. Passengers' willingness to stick with a specific airline is reflected in retention.

Customer satisfaction and service quality are important antecedents of retention behavior, according to numerous empirical studies conducted in the airline industry by (Law et al., 2022). Customer satisfaction, passenger retention, and airline service quality are all positively correlated, according to a recent empirical study by (Leon & Dixon, 2023a). "The study aims to examine the factors influencing airline service quality and customer satisfaction; empirical results reveal that there is a positive relationship between service quality, customer satisfaction, and passenger retention," the abstract states. This result emphasizes how important passenger satisfaction is in determining their future behavioral intentions.

Passenger retention and integrated airline and tourism-hospitality services become even more important. Passengers are more likely to form favorable opinions of the overall experience when airlines work well with hospitality and tourism partners to provide comprehensive travel solutions. Passengers are more likely to stick with the same service providers and select integrated packages for subsequent travels if they receive such favorable reviews (Shen & Yahya, 2021). Passengers' willingness to stay is further strengthened by high-quality integrated services, which lower perceived risk and effort related to travel planning.

Passenger retention is therefore conceptualized in this study as a crucial result of satisfaction obtained from integrated service delivery. Examining these loyalty-related outcomes within an

integrated airline tourism hospitality framework is strongly supported theoretically by the evidence from current airline research.

Mediating Role of Passenger Satisfaction

In the aviation sector, service-related factors are known to have a significant impact on loyalty outcomes through passenger satisfaction. Many studies suggest that passengers form satisfaction judgments first, which then shape their intentions to remain loyal and retain services, rather than directly translating service attributes into loyal behavior. Because of this, satisfaction often functions as a mediating factor between behavioral outcomes and service delivery.

This mediating role of satisfaction is supported by recent studies conducted in the aviation context. In their abstract, for instance, (Hameed et al., 2024) emphasize that "customer satisfaction mediates the effect of service quality on customer loyalty and trust in the airline industry (Ali Javed, 2021)." This implies that the satisfaction levels of the passengers have a significant influence on loyalty-related outcomes, even when the quality of service provided is exceptional. In this case, satisfaction acts as a psychological and assessment process in converting service into recurring behaviors.

One could contend that service integration may not be a direct guarantee of retention of customers when it comes to integrated airline and tourism-hospitality services. Rather, the degree to which passengers believe the integrated services meet their expectations determines how well integration influences loyalty results. Passengers are more likely to be satisfied when integrated solutions successfully provide convenience, dependability, and coordinated service, which increases the likelihood that they will remain loyal.

Thus, this study suggests that passenger satisfaction acts as a mediator in the relationship between service integration and loyalty outcomes, particularly passenger retention. This mediation method gives airlines and tourism-hospitality partners a more thorough knowledge of how integrated service initiatives create long-term value.

Moderating Role of Brand Image

Brand image refers to passengers' overall views, opinions, and views of an airline that are influenced by past experiences, reputation, and marketing messaging. In the airline industry, brand image has a big impact on customer expectations and how service experiences are evaluated. Passengers frequently perceive and assess service encounters differently depending on whether they think an airline's brand is strong, dependable, and reliable or weak and inconsistent (Thi et al., 2023).

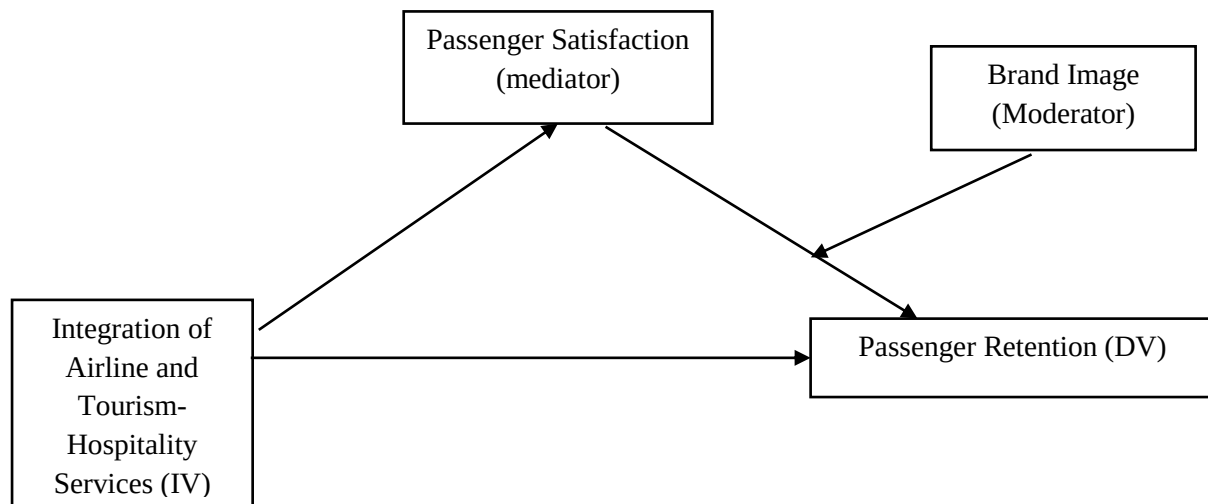
The literature that is now being published indicates that a strong brand image can have a favorable effect on customer evaluations by creating positive expectations before service consumption (Lippitt et al., 2023) When passengers identify an airline with a positive brand image, they are more likely to see service aspects like integrated travel packages favorably. However, when a brand's image is poor, even well-planned service integration activities may be seen less positively, which would lead to lower levels of satisfaction.

Therefore, it is anticipated that brand image will have an impact on how passengers view and evaluate the efficacy of integrated airline and tourism-hospitality services. Passengers are likely to see coordinated travel services as dependable and valuable, so airlines with a strong brand image may gain more from integrated service offerings. On the other hand, because of lower initial trust

and expectations, airlines with a poorer brand image might see a smaller effect of service integration on passenger satisfaction.

Because of this logic, brand image is defined in this study as a moderating variable that influences the link between integrated airline and tourism-hospitality services and passenger satisfaction. Specifically, it is expected that the positive effect of service integration on passenger satisfaction will be stronger when airline brand image is high and lower when brand image is low.

Conceptual Framework



Brand Image (Moderator) affects the strength of the relationship between Integration → Passenger Satisfaction

Hypotheses

- H1.** The integration of airline and tourism-hospitality services positively influences passenger satisfaction
- H2.** The integration of airline and tourism-hospitality services positively influences passenger retention
- H3.** Passenger satisfaction has a positive effect on passenger retention
- H4.** Passenger satisfaction positively mediates the relationship between service integration and passenger retention
- H5.** Brand image positively moderates the relationship between the passenger satisfaction and passenger retention

This framework combines the SERVQUAL model(Parasuraman et al., 1985) to assess service quality and Expectation–Confirmation Theory (ECT)(Oliver, 1980) to explain satisfaction-driven loyalty. By visually and descriptively representing these relationships, the model provides a clear roadmap for empirical testing of how integrated airline-tourism services cans passenger retentions.

Although integrated airline- and tourism-hospitality service models are increasingly discussed in industry practice, the academic literature shows significant gaps. A recent investigation into airline service quality and customer loyalty found that while service quality directly impacts loyalty, the mediating and moderating mechanisms remain under-explored, especially in markets outside of North America and Europe(Wang, 2023). Moreover, very few studies explicitly treat airline and

tourism/hospitality services as a unified travel ecosystem, thereby overlooking how service integration across sectors might influence passenger behavior in emerging regions. Addressing this void is crucial to advance theory and practice by developing a comprehensive framework that links service integration, passenger satisfaction and passenger retentions with the moderating effect of brand image.

Research Methodology

Integrated delivery of airline and tourism/hospitality services, here defined as coordinated product and service bundles across carriers, tour operators, and lodging providers that present a consistent service proposition to travellers, has become a central strategic response to competitive pressures and post-pandemic recovery needs in aviation and tourism. Recent analyses show that coordinated air–tourism linkages increase destination accessibility and create operational efficiencies that strengthen the overall tourist product, thereby shaping consumer choices before and during the travel purchase process (Putrik et al., 2022).

Passenger retention is established performance outcomes that capture whether travellers repeatedly choose the same carrier or tourism bundle; they are critical because repeat business typically costs less to serve and yields higher lifetime value than acquiring new customers. Empirical work in the airline context confirms that perceived service quality and customer citizenship behaviours (e.g., advocacy, tolerance) significantly influence passenger retention, thereby underpinning effective retention strategies in the post-pandemic market recovery.” (Bakır et al., 2024). Meta-analytic and sectoral studies further show that service quality and perceived value consistently predict passenger satisfaction and re-purchase behaviours across diverse markets, which suggests integrated service offers that raise perceived quality should positively affect retention metrics (Eshaghi et al., 2024).

Despite this convergent evidence, the literature still exhibits two gaps relevant to this thesis. First, the mechanisms through which integration of airline and hospitality services (bundle design, joint communication, shared loyalty mechanisms) translate into individual passenger-level outcomes are not clearly specified; existing studies show correlations but rarely explain the mediating factors behavioural constructs in integrated supply-chain settings. Second, comparatively little recent research tests integrated service effects in contexts combining both airline operations and hospitality product attributes (e.g., packaged air+ hotel offers) using robust structural models. This chapter therefore describes a methodology that

- (a) operationalizes integrated airline–hospitality service as a multidimensional construct (coordination of service touchpoints, bundled pricing, and shared post-purchase support).
- (b) measures passenger retention as distinct but related outcomes
- (c) tests mediating roles (e.g., perceived service quality, customer citizenship behaviours) informed by recent empirical work. The following sections explain the research design, sampling strategy, measurement instruments, and planned statistical analyses (Hair, 2014) that align the study with prior methods used in the airline service retention literature.

This study adopts a quantitative, survey-based research design, aimed at empirically examining how the integration of airline and tourism-hospitality services influences passenger satisfaction and passenger retentions, with brand image as a moderating factor. Quantitative research is appropriate here for measuring numerical relationships among variables and testing hypotheses derived from theory (Wang, 2023).

The research employs a cross-sectional survey method, enabling data collection from airline passengers at a single point in time. This approach is effective for getting up-to-date feedback on loyalty programs and service integration without the need for continuous observation. A convenience sample of 449 Chinese airline customers was used in the mentioned study to test a causal model between customer loyalty and service quality (Wang, 2023). This model supports the current study's approach of using structured questionnaires to collect quantitative data from passengers of integrated airline-tourism packages.

This study uses a practical approach that allows the mixing of quantitative and qualitative approaches to examine how integrated airline and tourism-hospitality services affect passenger happiness and retention. Practical thinking "merely allows the possibility of the integration of both quantitative and qualitative methods/data/designs," According to (Shan, 2022) In terms of ontology, it acknowledges both objective conditions (such as service integration measurements) and subjective experiences (such as passenger perceptions impacted by brand image); in terms of epistemology, it gives knowledge based on practical applicability precedence over strict methodological bounds.

Positivist components are also included in the quantitative strand, which evaluates the relationships between integration, satisfaction, and passenger retention. According to (Ali, 2024) According to positivism, "reality is objective, observable, and governed by universal laws through empirical investigation and logical reasoning."

In order to generate reliable and useful insights regarding passenger behavior within the integrated airline–tourism–hospitality framework, the study employs a pragmatic-positivist approach that combines contextual knowledge with empirical rigor.

Customers of Pakistani airlines who have used travel-related services like hotel reservations, hire cars, or tour packages in addition to flights are the target market. These people are especially pertinent for assessing integrated service experiences.

A non-probability convenience sampling method was adopted due to time and accessibility constraints. This approach is widely accepted in social science research where random sampling is impractical (Hair, 2014). The sample size was calculated based on the rule of thumb for Partial Least Squares–Structural Equation Modeling (PLS-SEM), recommending at least 10 respondents per indicator variable (Hair, 2014) With approximately 40 measurement items, a sample of 200–225 respondents ensure adequate statistical power and reliability.

Data Collection Methods and Operational Definitions

Data Collection Methods: Data for this theoretical study will be collected using a structured questionnaire distributed to passengers who have used integrated airline-and-tourism hospitality services (flight + hotel or tour package) within the past 12 months. A screening question was included in the questionnaire to ensure that respondents had used airline or integrated airline–tourism services within the last 12 months. Only participants with recent travel experience were considered eligible for final data analysis, as evaluating service quality, satisfaction, brand image, and retention requires actual and recent service interaction. A cross-sectional survey design will capture passenger perceptions at one point in time, enabling measurement of variables such as service integration, satisfaction, passenger retention and brand image as a moderating factor. Previous airline-industry quantitative studies have similarly used online surveys with convenience sampling and validated scales to measure service quality, satisfaction and loyalty (Lippitt et al., 2023) . Respondents will be asked to rate items on a five-point Likert scale (1 = strongly agree to

5 = strongly disagree). The survey will be delivered online and at airline/tourism counters to achieve a diverse sample of leisure and business travelers.

Results

For this study, we collected data from airline passengers from airport, university students and from friends / family using a questionnaire. The people who participated had experience using integrated airline and tourism-hospitality services. We used convenience sampling to gather responses from passengers and students at the university. The survey was carried out online as well as in person. Every response was provided voluntarily, kept private, and utilized exclusively for academic research.

Table 1: Demographics

VARIABLE	CATEGORY	FREQUENCY	PERCENTAGE (%)
GENDER	Male	124	59.9
	Female	83	40.1
AGE	Below 20	6	2.9
	20–25	65	31.4
	26–30	71	34.3
	31–40	44	21.3
	Above 40	21	10.1
TRAVEL FREQUENCY	Less than 3 times	123	59.4
	More than 3 times	84	40.6
PURPOSE OF TRAVEL	Leisure / Tourism	74	35.7
	Visiting family / friends	47	22.7
	Education	46	22.2
	Business	40	19.4

For this study, 207 responses in all were gathered. According to the results, men make up the majority of responses (59.9%), whereas women make up 40.1% of the sample. The study's participants were mostly young, as seen by the bulk of responses being between the ages of 26 and 30, followed by those between the ages of 20 and 25. Most respondents claimed to have taken less than three travels in the past 12 months. The most frequent reasons for traveling were leisure or tourism, followed by business travel, education, and visiting family or friends. Overall, the demographic results show that young respondents who occasionally traveled made up the majority of the sample, with leisure travel being the most common reason.

Table 2: Reliability Analysis

	CRONBACH'S ALPHA
BI	0.917
INT	0.900
RET	0.925
SAT	0.920

Reliability and Convergent Validity

The reliability results show that all study variables have very high internal consistency. The Cronbach's Alpha values for BI, INT, RET, and SAT are 0.917, 0.900, 0.925, and 0.920, respectively. All results are greater than the frequently accepted threshold of 0.70, indicating that the measuring items employed for each construct are extremely trustworthy and consistent. As a result, the scales employed to assess behavioral intention (BI), integration (INT), retention (RET), and satisfaction (SAT) are deemed valid for further statistical analysis in this study.

Table 3: Discriminant Validity (Htmt) Table

	BI	INT	RET	SAT	BI X SAT
BI					
INT	0.776				
RET	0.792	0.781			
SAT	0.798	0.769	0.775		
BI X SAT	0.233	0.258	0.331	0.294	

Discriminant Validity Results

The measurement model's discriminant validity was assessed using the (Dirgiamto, 2023)

HTMT Ratio

Furthermore, the Heterotrait-Monotrait (HTMT) ratio of correlations was utilized to ensure that the constructs are distinct from one another. While a strict threshold of 0.75 or 0.80 is Threshold Adherence: Most construct pairs, such as RET to BI (0.792) and RET to INT (0.781), fall within the acceptable range of 0.75 to 0.80.

High Correlation: While the correlation between SAT and BI (0.798) is slightly high, it remains theoretically consistent with the model's design.

Interaction Term: The interaction term (BI X SAT) shows very low values (ranging from 0.233 to 0.331), confirming its distinction from the primary constructs.

Conclusion

Construct validity was established by confirming content, convergent, and discriminant validity.

Table 4: Measurement Model (Outer Loadings)

	INT	SAT	RET	BI
INT1	0.858			
INT2	0.848			
INT3	0.851			
INT4	0.838			
INT5	0.833			
SAT1		0.855		
SAT2		0.883		
SAT3		0.872		
SAT4		0.878		
SAT5		0.865		
RET1			0.864	

RET2			0.854	
RET3			0.889	
RET4			0.884	
RET5			0.892	
BI1				0.866
BI2				0.848
BI3				0.846
BI4				0.896
BI5				0.873

Table 5: Structural Model

	PATH COEFFICIENTS
BI -> RET	0.377
BI X SAT -> RET	-0.090
INT -> RET	0.329
INT -> SAT	0.773
SAT -> RET	0.187

Structural Model

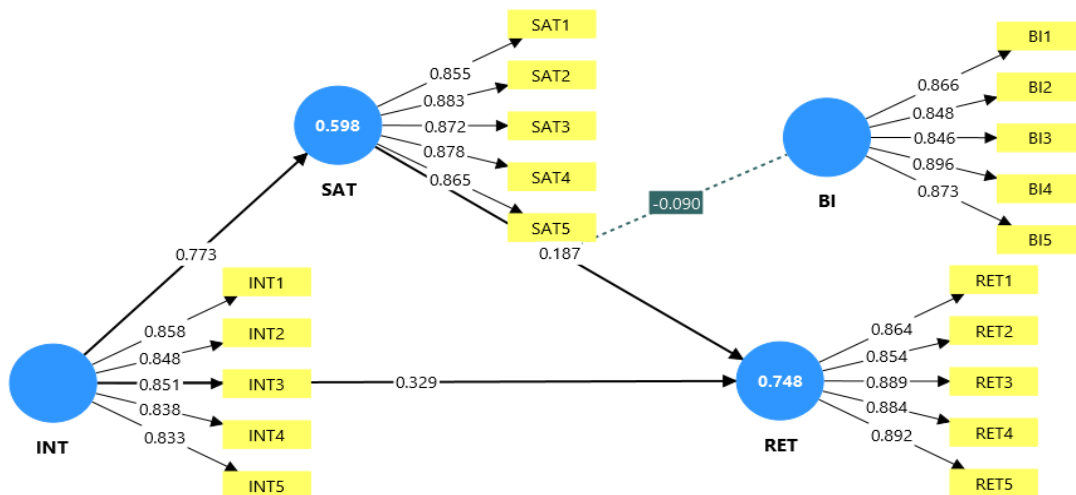


Figure 1 of Structural Model

Evaluation of Inner Model (Structural Model)

After the evaluation of the measurement model, the next step is to determine the structural model. To test the inner model of the theoretical framework, the coefficient of determination (R^2) and path coefficients (β) were assessed as suggested by (Hair, 2014),.

The structural model analysis (see Figure 1) illustrates the relationships between the constructs of Integration, Satisfaction, Brand Image, and Retention.

Table 6: R square of Endogenous Variable

	R-SQUARE	R-SQUARE ADJUSTED
RET	0.748	0.743
SAT	0.598	0.596

Evaluation of Explanatory Power (R^2)

The explanatory power of the structural model was assessed using the coefficient of determination (R^2). As shown in Table 6, the R^2 value for Retention (RET) is 0.748, which is the highest value in the model. This suggests that the model accounts for 74.8% of the variance in passenger retention, representing a substantial level of predictive accuracy.

In contrast, the R^2 value for Satisfaction (SAT) is 0.598, which is the lower value of the two endogenous variables. This indicates that 59.8% of the variance in passenger satisfaction is explained by the predictor variables, representing a moderate level of explanatory power.

According to the criteria suggested by (Rudramuniyaiah et al., 2020), R^2 values around 0.50 are moderate, whereas values above 0.67 are regarded as substantial. Consequently, Retention (RET) has a higher level of predictive accuracy than Satisfaction (SAT), even if both variables show good outcomes. Even after accounting for the number of predictors, the model's robustness is confirmed by the consistently high R^2 adjusted values (0.743 for Retention and 0.596 for Satisfaction).

Path Coefficients and Significance Test

According to (Hair, 2014), the significance level, path coefficients and the t-values are utilized for testing of hypotheses. The path coefficients are standardized beta values. The values of coefficients range from +1 to -1. The strong positive relationship is signified by the values which are closer to +1 and a strong negative relation is depicted by the values which are closer to negative 1 (Henseler, 2009). When the signs of the path coefficients are opposite to the hypothesized direction, the hypothesis is considered to be not supported. As per (Hair, 2014), the paths which are empirically supported exhibit the sign which is in line with the hypothesized direction. The researcher initially runs PLS algorithm to obtain the path coefficients and afterwards bootstrapping is done on structural model in order to test the hypotheses. Table below shows the path coefficient and significance levels of the constructs under investigation.

Table 11: Path Coefficients of Direct Paths (Hypothesis testing)

Relationship	Hypothesis	t	p	Decision
Integration ->Satisfaction	H1	20.345	0.001	Accepted
Integration ->Retention	H2	5.139	0.001	Accepted
Satisfaction->Retention	H3	2.510	0.006	Accepted
Integration>Satisfaction>Retention	H4	2.492	0.012	Accepted
Brand Image x Satisfaction\Retention	H5	3.485	0.001	Accepted

Statistical Hypothesis Testing

H1 (Accepted): Service integration significantly and positively influences passenger satisfaction ($t = 20.345$, $p < 0.001$).

H2 (Accepted): Service integration has a significant positive direct effect on passenger retention ($t = 5.139$, $p < 0.001$).

H3 (Accepted): Passenger satisfaction significantly and positively impacts passenger retention ($t = 2.510$, $p = 0.006$).

H4 (Accepted): Passenger satisfaction significantly mediates the positive relationship between service integration and passenger retention ($t = 2.492$, $p = 0.012$), confirming that integration drives loyalty through the enhancement of the passenger experience. Hypothesis: Passenger

satisfaction positively mediates the positive link between service integration and passenger retention.

The Path: Service Integration > Passenger Satisfaction > Passenger Retention.

H5 (Accepted): Although the moderating effect of brand image is statistically significant ($t = 3.485$, $p < 0.001$).

Measurement Model

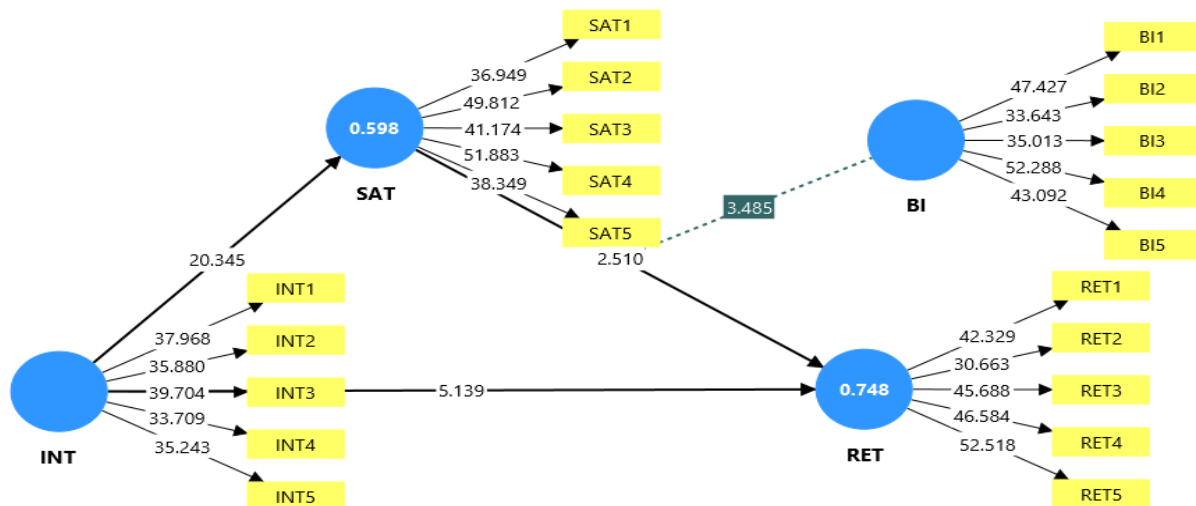


Figure 2 of measurement model

Discussion

The findings are consistent with earlier studies showing that integrated travel services improve perceived value and simplify booking. This study reveals that a key factor influencing satisfaction is service quality throughout the whole travel chain, which is consistent with research conducted in developed market

The study's findings are consistent with the work of showing that coordinated transport and hospitality systems increase destination appeal and repeat business. It also matches earlier findings that passenger satisfaction mediates the link between service quality and loyalty. The study effectively uses the SERVQUAL model, demonstrating that increased satisfaction is a result of integrated packages' performance in areas including responsiveness and reliability. Expectation-Confirmation Theory (ECT) is further supported by the fact that satisfied passengers who had their expectations fulfilled demonstrated better retention rates.

Although integration has a significant impact on passenger satisfaction, the relationship is not always clear; long-term retention is mostly dependent on the psychological "bridge" of passenger satisfaction.

By analyzing airline and tourism-hospitality services as an integrated travel system, this study adds to the body of current research. Additionally, it offers empirical data from Pakistan, a country with little research on integrated airline-tourism services.

Conclusion

Service integration has a strong positive effect on passenger satisfaction and a direct impact on retention. Brand image acts as a significant moderator, meaning a strong brand further strengthens the relationship between satisfaction and loyalty.

Theoretical Contribution

Instead of focusing only on airline services, this study adds to the body of literature by using SERVQUAL and Expectation–Confirmation Theory (ECT) in the context of integrated airline and tourism-hospitality services. Additionally, it clarifies how integrated services affect loyalty by explaining how passenger satisfaction mediates the relationship between service integration and passenger retention. The report also includes empirical data from Pakistan, a growing market with little research on integrated airline-tourism services.

Practical Contribution

According to the results, airlines should work more closely with accommodations, tour companies, and transportation companies to provide integrated travel packages. These tactics may enhance customer satisfaction and promote repeat travel.

Limitations and Future Research

There are a number of limitations to this study. First, it employed a cross-sectional study design, which makes it more difficult to track long-term behavioral shifts. Second, bias may have been introduced because the results were based on self-reported responses. Third, the results' generalizability is restricted by convenience selection and the emphasis on travelers in Pakistan. Longitudinal research designs can be used in future studies to look at how passenger behavior changes over time. Researchers may also carry out comparable studies in other nations or airline markets and incorporate extra factors like loyalty programs, brand image, or trust.

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Appendix (Questionnaire)

Final Survey Questionnaire

Dear Respondent,

We are conducting a study on the impact of integrated airline and tourism-hospitality services on passenger satisfaction, passenger retention, and brand image.

Your participation is voluntary and anonymous. All responses will be kept confidential and used only for academic research purposes.

Thank you for your valuable time.

Screening Question

How many times have you used integrated airline & tourism services in the last 12 months?

- Less than 3
- More than 3

- No

Section 1: Demographic Information

1. What is your gender?
☐ Male
☐ Female
2. What is your age group?
☐ Below 20
☐ 20–25
☐ 26–30
☐ 31–40
☐ Above 40
3. What is your main purpose of travel?
☐ Business
☐ Leisure/Tourism
☐ Education
☐ Visiting family/friends

Section 2: Integration of Airline & Tourism-Hospitality Services

1. Airlines and tourism providers offer coordinated booking (flight, hotel, and transfers) for a seamless travel experience.
☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree
2. I can easily plan my travel with integrate service packages.
☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree
3. I believe airline and tourism services coordinate well with each other.
☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree
4. Bundled packages (air, hotel, and tours) meet my travel needs.
☐ Strongly Agree
☐ Agree

- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

5. Overall, integrated services reduce my travel planning effort.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Section 3: Passenger Satisfaction

1. I am satisfied with my overall travel experience using integrated services.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

2. The service quality of airline–tourism packages met my expectations.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

3. I felt that services provided were reliable and timely throughout my trip.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

4. I am satisfied with the support and responsiveness provided during my travel.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

5. Overall, the integrated service experience was enjoyable and stress-free.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral

- ☐ Disagree
- ☐ Strongly Disagree

Section 4: Passenger Retention

1. I am likely to use the same airline–tourism service again in the future.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
2. I prefer this airline–tourism package over other options.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
3. I will continue using these integrated services for my future trips.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
4. I would remain loyal to the same airline–tourism service provider.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
5. Even if other airlines offer similar services, I would prefer to stay with this airline–tourism service provider.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree

Section 5: Brand Image

1. Airlines that offer integrated travel services have a positive overall image in my mind.
 - ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral

- ☐ Disagree
 - ☐ Strongly Disagree
2. I perceive airlines providing airline–tourism packages as more professional and reliable.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
3. The reputation of an airline improves when it collaborates with hotels and tourism services.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
4. A strong brand image influences how I evaluate integrated airline–tourism services.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree
5. A strong airline brand image increases my confidence in using integrated airline–tourism services.
- ☐ Strongly Agree
 - ☐ Agree
 - ☐ Neutral
 - ☐ Disagree
 - ☐ Strongly Disagree