

Factors of Human Interaction on the Path to Passenger Satisfaction, Perceived Value, and Intention to Recommend in Airlines

Sadiye Oya Işıkcı ¹ 

¹ İstanbul Kültür University Vocational School, İstanbul, Türkiye. (s.isikci@iku.edu.tr)

Article Info

Received: 14 June 2025

Revised: 25 August 2025

Accepted: 12 September 2025

Published Online: 18 October 2025

Keywords:

Airline industry

Human factors

Intention to recommend

Passenger satisfaction

Perceived value

Corresponding Author: Sadiye Oya Işıkcı

RESEARCH ARTICLE

<https://doi.org/10.30518/jav.1320102>

Abstract

Intense competition, high costs, and elevated customer expectations characterise civil aviation passenger transportation. It is widely accepted that passenger satisfaction is one of the key achievements in gaining a competitive advantage in this industry. While various factors influence passenger satisfaction, the airline industry inherently requires intensive interaction and communication between cabin crew and passengers, as services are delivered on an individual basis. Cabin services, therefore, play a significant role in the emergence of this satisfaction.

This study focuses on four dimensions of human interaction points during service delivery in the cabin: individual care, helpfulness, politeness, and promptness. The aim is to determine domestic passengers' opinions regarding these variables. Additionally, the study aims to statistically determine the impact of each of these variables on passenger satisfaction and the effects of passenger satisfaction on perceived value and intention to recommend. To achieve these objectives, an online survey was conducted using a quantitative research method, and a convenience sampling technique provided access to 405 respondents' answers. The collected data were coded and analysed using the SPSS software.

The empirical findings obtained through statistical analysis emphasise the importance of airline companies focusing on human factors to enhance customer satisfaction. The research statistically confirms the positive effect of human interaction points such as individual attention, helpfulness, courtesy, and promptness by cabin crew members on passenger satisfaction, as well as the audience of passenger satisfaction on perceived value and intention to recommend. Despite the increasing interest in service quality in the airline industry, the effects of various aspects of human interaction on passenger satisfaction, perceived value, and recommendation intention have been limitedly examined. Therefore, this study aims to fill this gap by addressing the interpersonal interaction dynamics between cabin crew and passengers. Based on these findings, the study provides some assessments that can contribute to the literature and the aviation industry.

A section of this study was presented at the 7th International Eurasian Social Sciences Congress (ICOESS) held in Bodrum, Muğla, Turkey, on April 27-30, 2023.

1. Introduction

The airline industry operates in a competitive business environment where retaining existing customers and attracting new ones is the key to success. Air travel has become more widespread, and customers now have numerous service provider options (Law, 2018), putting significant pressure on commercial enterprises in the civil aviation transportation sector. To succeed in a highly competitive market, an airline must understand customer needs and meet them with high-quality services that provide positive experiences (Robledo, 2001; Law et al., 2022: 741). While matching competitors in pricing, meal options, flexibility, and loyalty programs are important for staying competitive and enhancing passenger satisfaction, the most critical factor for long-term success in civil aviation is delivering high-quality service and creating a positive passenger experience (Gibbs et al., 2017: 57).

Various factors can shape passengers' experiences and influence their satisfaction in the airline industry. Services, by their nature, involve intense interaction between customers and the company, making various touchpoints between passengers and the airline crucial in shaping the overall experience. Therefore, understanding the various aspects of these touchpoints is critical for service providers in the airline industry to gain a competitive advantage.

Many studies in the literature evaluate a passenger's overall assessment of an airline's quality based on the airline's general service quality, which is more visible in terms of service quality (For example Namukasa, 2013; Brochado et al., 2019; Hamid et al., 2021; Banjarnahor et al., 2025). This includes aspects such as physical appearance, reliability, and trust. However, on the other hand, the most common and visible face of the service encountered by service recipients is the employees who deliver the service and the one-on-one

interactions established with them. In other words, it is the human touch.

This research focuses on human and humane factors in the airline industry, examining the human interactions (personal touches) between passengers and airline personnel, considering them as human touchpoints. In this context, individual attention, helpfulness, courtesy, and promptness are human touchpoints contributing to passenger satisfaction. The aim is to determine the impact of these variables on passenger satisfaction and the influence of passenger satisfaction on the perceived value of passengers and intention to recommend to others. The research aims to contribute to the literature by providing findings highlighting the importance of human touchpoints, separate from service quality.

2. Conceptual Framework

2.1. Human Interactions in Airlines

Air transportation is one of the most essential dynamics that constitute passenger transportation and tourism; with the advancements in civil aviation since the 1950s, fast, safe, and economical transportation to distant destinations has been made possible. Globalisation and liberalisation have paved the way for intense competition in air transportation by allowing numerous private airlines to enter the market. One of the most crucial tools for airlines to gain a competitive advantage is the ability to provide a high-quality service experience and thus differentiate themselves from their competitors (Akpur & Zengin, 2019: 29).

Due to the intangible nature of services, how the service is delivered becomes a significant determinant of service quality (Grönroos, 1984). This confirms the need to understand better and measure the role of employees who directly interact with and have contact with customers in shaping customer satisfaction. Communication and customer interactions are essential in designing and delivering air transportation services. Interestingly, since service quality is more visible, customers can evaluate the overall quality of an airline by using their service experience with airline employees, in other words, their interactions, as a basis (Rhoades & Waguespack, 1999). Human interactions are defined as direct encounters between a customer (passenger in the context of civil aviation) and a service provider (i.e., the airline) that co-occur and have the potential for interaction (Babbar & Koufteros, 2008: 805).

Service employees are vital in providing service excellence and productivity, which can be a significant competitive advantage. However, among the most challenging tasks in service businesses are the additional duties/expectations/requests that include being efficient and quick in operational tasks and being polite, friendly, and helpful in relationships with passengers. From the perspective of a service business, the level of service and the way it is frontline employees deliver it a significant source of competitive advantage as well as differentiation (Wirtz et al., 2008: 5). Therefore, various interactions between employees and passengers, especially between employees and the airline's customers, are of great importance.

Employees providing services in the field of air transportation (check-in personnel, cabin crew, etc.) and physical evidence (the comfort of seats, food and beverages provided) significantly impact the perception of service quality. In airlines, cabin crew members—who have the most direct and frequent interaction with passengers—are commonly portrayed in advertisements as smiling and hospitable figures, reflecting the airline's commitment to

service quality (Akpur & Zengin, 2019: 30). In this regard, it is possible to argue that individual attention (such as active listening to passengers, showing individual attention on passengers, understanding their unique needs), helpfulness (occasionally checking if passengers need anything, making efforts to find solutions to their problems, voluntarily providing information on flight-related issues), courtesy (being kind to passengers, providing service with a smile), and promptness (instantly responding to passengers' questions, quickly fulfilling their requests) as factors discussed by Babbar & Koufteros (2008) could be crucial in the communication and interaction between cabin crew members and passengers during service delivery.

In industries like civil aviation, where competing companies offer similar services, creating positive service experiences plays a central role in fostering passenger satisfaction, which in turn contributes to customer loyalty, positive word-of-mouth, and long-term competitive advantage (Auvinen & Malinen, 2022: 19).

2.2. Passenger Satisfaction, Perceived Value, and Intention to Recommend

Satisfying the customer in any business is the ultimate goal of any enterprise. In aviation, the consumer of transportation services is the passenger. Therefore, the concept of "customer satisfaction" is referred to as "passenger satisfaction" in the aviation industry (Auvinen & Malinen, 2022: 18). Excellent passenger satisfaction is one of the greatest assets for an airline in today's competitive environment. Therefore, passenger satisfaction is a fundamental objective for every airline that provides passenger services. Passenger satisfaction occurs when an airline can deliver benefits to passengers that exceed their expectations and are considered as ad value. If passengers are satisfied with the products and services an airline offers are more likely to choose that airline again (Kumar et al., 2012).

On the other hand, the flight experience is a unique experience for a passenger from start to finish. Today's airline passenger is a discerning customer with high expectations and demands. Since passengers have a wide range of options based on their needs, satisfying them is more challenging and crucial than ever. Therefore, airline companies continuously work on in-flight product development and innovation to differentiate themselves from competitors, and passenger services and satisfaction can be decisive factors in the overall success of an operation (Sanyal & Hisam, 2016: 354-355).

Understanding passengers' expectations is crucial in the airline service industry because passengers evaluate their performance by comparing it to their expectations. Passenger satisfaction can be achieved when the outcome of this comparison favours the passenger. In the airline industry, passenger satisfaction can be defined as complex customer knowledge and experience, serving as a passenger assessment (Tahanisaz & Shokuhyar, 2020; Noviantoro & Huang, 2022: 2).

Customers evaluate service quality by comparing what they require or expect with what they perceive they have received. Customers are the sole judges of service quality regardless of the industry. Suppose a customer perceives a business's service as poor. In that case, it is considered poor for that individual. Negative service experiences can result in customer dissatisfaction, which may lead to lower repurchase intention, reduced perceived value, and decreased willingness to engage in positive word-of-mouth (Nejati et al., 2009: 249).

Perceived value is the difference between the highest price consumers are willing to pay for a product or service and the

actual amount they pay. From a quality standpoint, value can be seen as the gap between the amount of money spent on a product and the quality it offers (Bishop, 1984). Essentially, when a high-quality product is purchased at a lower cost, it results in a high perceived value. From a utility perspective, value involves an overall assessment of the perceived benefits compared to the perceived sacrifices (Zeithaml, 1988). This means consumers mentally weigh what they receive against what they give up—both in monetary terms and non-monetary aspects like transaction, search, and negotiation efforts, as well as the time invested in the purchasing process (Kuo et al., 2009: 888). The evaluation of perceived value stems from the cognitive integration of a customer's perceived benefits with perceived costs. Perceived value refers to what a customer can obtain or achieve from a service provider (Jen et al., 2010: 326-327). In civil aviation, it represents passengers' evaluation of the quality of service received relative to the monetary and non-monetary costs incurred. High levels of passenger satisfaction are positively associated with increased perceived value, which in turn can lead to favorable word-of-mouth recommendations (Jen et al., 2010: 326-327).

Intention to recommend refers to the willingness of a customer to share, communicate, and guide their experience with a business's product or service with individuals or groups in their close circle whom they perceive as trustworthy. It refers to the motivation to suggest a company's service to trusted individuals, such as friends or family. In contrast, word-of-mouth communication involves the casual exchange of information between consumers who have experienced a product or service and who then share their favorable or unfavorable opinions with others considering a purchase (Suki, 2014: 27). This communication can occur between existing or potential customers and product or service providers, independent experts, or members of one's personal network, such as family and friends. Generally, it involves transferring information about a business that a customer has purchased from or consumed. In this sense, it enables other customers to make more informed choices (Chaniotakis & Lymperopoulos, 2009: 229-230). In the service sector, word-of-mouth communication is considered to have a significant impact on both retaining existing customers and acquiring new customers. Additionally, it is argued that interactions between customers and service employees can meaningfully influence word-of-mouth communication (Macintosh, 2007: 150). Perceived high service quality in customer interactions with service providers can enhance the perceived value of existing customers and lead to actions such as word-of-mouth recommendations (Choudhury, 2013: 154; Gürlér & Ertugut, 2018: 234).

It is widely acknowledged that the opinions of satisfied and dissatisfied passengers quickly spread within a business, with satisfied customers enhancing profitability and dissatisfied customers damaging the business's reputation and affecting its economic aspects (Prentice et al., 2017). Previous research findings also support the notion that satisfied customers exhibit loyalty and provide positive communication and recommendations within their social circles for the spread of good services received (Ellinger et al., 1999; Kim et al., 2006; Ladhari et al., 2011; Marcos et al., 2022; Singh et al., 2023). Therefore, providing high-quality service to passengers can be critical for an airline to survive, compete, maintain profitability, and achieve long-term growth in a highly competitive environment (Bakır et al., 2022: 21). Consequently, given the service-oriented nature of the aviation industry, there is a need to identify and analyse the relevant

factors to enhance customer satisfaction in the aviation industry from the perspective of passengers in order to understand the consequences and precursors of satisfaction (Ringle et al., 2011; Walia et al., 2021: 137). Although prior studies have emphasized the role of service quality and satisfaction, limited research has focused specifically on the human interaction dimension -particularly the impact of interpersonal dynamics between cabin crew and passengers- within the civil aviation context. This study aims to fill this gap by examining how key aspects of human interaction affect perceived value, satisfaction, and recommendation intention, thereby contributing to a more comprehensive understanding of service experiences in airline settings.

3. Materials and Methods

3.1. Research Model and Hypotheses

This study is based on a quantitative research method and has a correlational survey nature. The correlational model of the study includes seven variables. In this study, interpersonal interaction between passengers and airline flight attendants is conceptualized as a multi-dimensional construct comprising four sub-dimensions: individual attention, helpfulness, courtesy and promptness. Perceived value and intention to recommend are considered outcome variables. Customer satisfaction is forming the study's independent variable in relation to interpersonal interactions, perceived value, and intention to recommend. The research model representing these variables, the relationships between them, and the hypotheses formulated regarding these relationships are presented below.

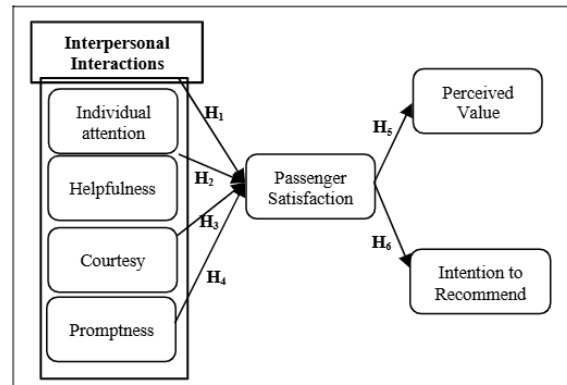


Figure 1. Research Model

The hypotheses proposed regarding the relationships between variables in the research are as follows:

- H₁.** There is a significant relationship between individual attention and customer satisfaction.
- H₂.** There is a significant relationship between helpfulness and customer satisfaction.
- H₃.** There is a significant relationship between courtesy and customer satisfaction.
- H₄.** There is a significant relationship between promptness and customer satisfaction.
- H₅.** There is a significant relationship between passenger satisfaction and perceived value.

H₆. There is a significant relationship between passenger satisfaction and intention to recommend.

3.2. Data Collection Tools

In order to gather the opinions of passengers, a survey method was employed in the study. The survey forms were distributed to participants through the online survey platform Google Forms, and the data was collected accordingly. The data collected on this platform were analysed using Microsoft Excel and then transferred to the SPSS software.

The survey form provided to respondents consisted of two main sections. The first section included questions related to participants' gender, marital status, age, education level, personal income, and personal (demographic) information. Additionally, this section contained questions aimed at identifying flight habits, such as frequency of air travel, reasons for air travel, and the most frequently used airline. The second section of the survey comprised items adapted from validated psychometric scales, and all variables were measured using a 5-point Likert scale. The scales used in the study are as follows:

Human Interactions Scale: This scale, developed by Babbar & Koufteros (2008), focuses on the human element in airline service quality. The development of the scale involved a comprehensive literature review covering various disciplines such as marketing, operations management, hospitality management, and healthcare management. While drawing insights from the widely used SERVQUAL measurement tool for measuring service quality, the scale focuses explicitly on interpersonal interactions during service delivery. The scale has four dimensions: individual attention, helpfulness, courtesy, and promptness. Through factor analyses conducted as part of the scale's development, it was found that the identified four dimensions were supported by various goodness-of-fit indices. The original scale comprised 21 statements; however, in this study, some statements that showed similarities when translated into Turkish were excluded to avoid issues like multicollinearity. Therefore, 17 statements were used, including 4 for individual attention, 3 for helpfulness, 5 for courtesy, and 5 for promptness. The original study reported acceptable levels of internal consistency, with Cronbach's alpha values ranging from .784 (individual attention) to .946.

Passenger Satisfaction Scale: This scale is adapted from the structure used in Babbar & Koufteros' (2008) research specific to the airline industry. It is designed to evaluate passengers' satisfaction with the airline company. The scale consists of 6 statements, measured on a 5-point Likert scale. The scale demonstrated reliability with a Cronbach's alpha coefficient of $\alpha = .946$.

Perceived Value Scale: Perceived value refers to the balance between perceived benefits and costs. This scale, developed by Jen et al. (2010), assesses whether passengers perceive the service they receive as valuable. The scale consists of 3 statements on a 5-point Likert scale, demonstrating a reliability coefficient of $\alpha = .823$.

Intention to Recommend Scale: This scale, developed initially by Karatepe & Ekiz (2004) for the accommodation sector and adapted by Suki (2014) for airline passengers, measures passengers' intention to recommend. Similarly, this scale is designed on a 5-point Likert scale. The variable was assessed through a scale consisting of three items. It has been reported that the structural equation modelling confirmed the consistency of the data with the model and demonstrated measurement capability. The reliability coefficient of the scale was calculated as $\alpha = .772$.

3.3. Sampling

The study's target population consists of all consumers aged 18 and above who travel by airline. The sampling method was employed due to the impossibility of obtaining information about the entire population and the inaccessibility as well as the unnecessary nature of such a population method was employed. In cases where it is not possible to determine the exact population of the sample, non-random sampling methods are used, where the sample is determined by the researcher's judgment within the population (Gegez, 2010). In this study, convenience sampling (Haşiloğlu, 2015) was used, where the sample is selected from the population based on ease of access because it is impossible to identify the entire sample that constitutes the population.

In quantitative research conducted in the field of social sciences, when the population that constitutes the target population of the study is very large or not fully known, a sample size of 384 is considered sufficient and valid with a 95% confidence interval and a 5% error tolerance (Bartlett et al., 2001; Sekaran, 2003). Therefore, a sample size of 384 is considered to have the ability to represent the population (Baştürk & Taştepe, 2013). Accordingly, the aim was to reach at least 384 survey forms. At the end of the data collection process, 421 survey forms were obtained, out of which 16 were excluded due to incomplete or incorrect filling. Thus, the study's data on the responses were obtained from 405 participants over a period of three months.

Data collecting process was conducted in accordance with the principles of research ethics. Participation in the study was entirely voluntary, and informed consent was obtained from all participants prior to data collection. Participants were clearly informed about the purpose of the study, their right to withdraw at any time without penalty, and how their data would be used. All responses were collected anonymously. The data were securely stored in password-protected digital files accessible only to the researchers. Ethical approval for this research was obtained (Approval was given at the end of the study).

4. Result and Discussion

Reliability and normal distribution analysis were performed as preliminary tests before conducting the analyses on the data obtained in the quantitative study. The obtained Cronbach's Alpha (α) and Kaiser-Meyer-Olkin (KMO) coefficients, as well as skewness and kurtosis coefficients, are presented in Table 1.

Table 1. Reliability and normal distribution of research scales

Scales	Items	α	KMO	Skewness	Kurtosis
Individual Attention	4	.878	.834	-1.038	1.046
Helpfulness	3	.781	.706	-.951	1.058
Courtesy	5	.849	.741	-.552	.403
Promptness	5	.894	.827	-.328	-.552
Passenger Satisfaction	6	.865	.882	-.544	.311
Perceived Value	3	.883	.722	-.999	1.400
Intention to Recommend	3	.884	.736	-.570	-.279
TOTAL	29	.960	.952	-	-

Upon examining the coefficients presented in Table 1, it can be concluded that all scales used in the research are reliable based on Cronbach's Alpha coefficients obtained. The KMO coefficients indicate the adequacy of sample measurement. Skewness and Kurtosis coefficients demonstrate that the data for each scale follow a normal distribution. In light of these findings, it is understood that the data is suitable for parametric analysis. The participants' demographic characteristics and travel habits are presented in Table 2.

Table 2. Demographic characteristics of the participants

Gender	n	%
Female	211	52.1
Male	194	47.9
Marital Status	n	%
Single	273	67.4
Married	132	32.6
Age Range	n	%
18-26	107	26.4
27-36	117	28.9
37-49	110	27.2
50 and above	71	17.5
Education Level	n	%
High School	50	12.3
Associate Degree	37	9.1
Bachelor's Degree	236	58.3
Graduate Degree	82	20.2
Personal Income	n	%
8506 TL and below	166	41.0
8506-20.000 TL	124	30.6
20.001 TL and above	115	28.4
Travel Frequency	n	%
Once a year or less	64	15.8
Several times a year	180	44.4
Once a month	100	24.7
Several times a month or more	61	15.1
Travel Purpose	n	%
Tourism, vacation, visit	285	70.4
Business or trade	120	29.6
Travel Type	n	%
Domestic	252	62.2
International	153	37.8

As can be observed from the values in Table 2, the distribution of participants can be summarised as follows: in terms of gender, there were 211 females (52.1%) and 194 males (47.9%); regarding marital status, 273 participants were single (67.4%), and 132 were married (32.6%); concerning age range, there were 107 participants aged 18-26 (26.4%), 117 aged 27-36 (28.9%), 110 aged 37-49 (27.2%), and 71 participants aged 50 and above (17.5%); in terms of education level, 50 participants had completed high school (12.3%), 37 had an associate degree (9.1%), 236 had a bachelor's degree (58.3%), and 82 had a graduate degree (20.2%); regarding personal income, 166 participants earned 8500 TL or below (41.0%), 124 earned between 8501-20,000 TL (30.6%), and 115 earned 20,001 TL or above (28.4%).

Analysing the participants' travel characteristics, it can be seen that in terms of travel frequency, 64 participants travelled once a year or less (15.8%), 180 travelled several times a year (44.4%), 100 travelled once a month (24.7%), and 61 travelled several times a month or more (15.1%); concerning travel purpose, 285 participants travelled for tourism, vacation, or visit purposes (70.4%), while 120 travelled for business or trade purposes (29.6%); in terms of travel type, 252 participants travelled domestically (62.2%), and 153 travelled internationally (37.8%).

A correlation analysis was conducted to determine the strength and direction of the relationships between individual attention, helpfulness, courtesy, promptness, passenger satisfaction, perceived value, and intention to recommend. The findings of this analysis are presented in Table 3.

Table 3. Results of correlation analysis on relationships between variables

	1	2	3	4	5	6	7
1 Individual Attention	1						
2 Helpfulness	.803**	1					
3 Courtesy	.627**	.653**	1				
4 Promptness	.455**	.509**	.731**	1			
5 Passenger Satisfaction	.575**	.622**	.649**	.640**	1		
6 Perceived Value	.720**	.692**	.562**	.437**	.770**	1	
7 Intention to Recommend	.659**	.668**	.618**	.596**	.697**	.823**	1

** Correlation statistically significant at the $p < 0.001$ level (two-tailed)

According to the findings obtained from the correlation analysis, there are statistically significant positive linear relationships between the variables. The correlation

coefficients indicate strong relationships between passenger satisfaction and individual attention ($r = .575$, $p < 0.01$), helpfulness ($r = .622$, $p < 0.01$), courtesy ($r = .649$, $p < 0.01$), and

promptness ($r=.640$, $p<0.01$), based on the criterion that correlations above 0.50 indicate a strong relationship (Cohen, 2013). Moreover, there are very strong positive relationships between perceived value and passenger satisfaction ($r=.770$, $p<0.01$), and between intention to recommend and passenger satisfaction ($r=.697$, $p<0.01$). These results suggest positive and meaningful associations between individual attention, helpfulness, courtesy, promptness, passenger satisfaction, and perceived value. Furthermore, all service quality factors and perceived value show strong positive correlations with the intention to recommend.

These findings indicate that there are significant positive linear relationships between the variables. However, it should be noted that correlation coefficients only provide information about the strength and direction of the relationship between two variables and do not establish a cause-and-effect relationship. In other words, although a correlation analysis

may reveal a strong relationship between two variables, it does not provide information about whether this relationship is a cause-and-effect relationship. Therefore, regression analysis was conducted to determine whether there is a causal relationship among these variables.

In the research, the first regression model was constructed based on the hypothesised relationships, with individual attention, helpfulness, courtesy and promptness as independent variables and passenger satisfaction as the dependent variables. This model aimed to test the relational hypotheses (H_1 , H_2 , H_3 , and H_4). Subsequently, regression models were constructed with passenger satisfaction as the independent variable and perceived value and intention to recommend as the dependent variables to test hypotheses H_5 and H_6 . The results of the simple linear regression analysis conducted using the enter method within the scope of these regression models are presented in Table 4.

Table 4. Results of regression analysis

Model 1	Beta	Standard Error	Standard Beta	t	R ²	P
Constant	1.625	.157		10.322		.000*
Individual Attention	.549	.039	.575	14.114	.331	.000*
Dependent Variable: Passenger Satisfaction						
Model 2	Beta	Standard Error	Standard Beta	t	R ²	P
Constant	1.480	.149		9.944		.000*
Helpfulness	.592	.037	.622	15.930	.386	.000*
Dependent Variable: Passenger Satisfaction						
Model 3	Beta	Standard Error	Standard Beta	t	R ²	P
Constant	1.465	.140		10.499		.000*
Courtesy	.630	.037	.649	17.122	.421	.000*
Dependent Variable: Passenger Satisfaction						
Model 4	Beta	Standard Error	Standard Beta	t	R ²	P
Constant	2.121	.105		20.247		.000*
Promptness	.499	.030	.640	16.731	.410	.000*
Dependent Variable: Passenger Satisfaction						
Model 5	Beta	Standard Error	Standard Beta	t	R ²	P
Constant	1.156	.123		9.414		.000*
Passenger Satisfaction	.766	.032	.770	24.196	.592	.000*
Dependent Variable: Perceived Value						
Model 6	Beta	Standard Error	Standard Beta	t	R ²	P
Constant	.780	.161		4.843		.000*
Passenger Satisfaction	.810	.042	.697	19.506	.486	.000*
Dependent Variable: Intention to Recommend						

* Statistically significant at the $p<0.001$ level

According to the regression results, the independent variables have a statistically significant effect on the dependent variable, with the magnitude of the effect varying across variables. All regression models are significant at the $p<0.001$ level. The coefficient of determination (R^2) values indicate that the models have moderate to high explanatory power, meaning that the independent variables explain a substantial proportion of the variance in passenger satisfaction, consistent with commonly accepted benchmarks (Hair et al., 2019). Specifically, individual attention has a significant positive effect on passenger satisfaction ($p<0.001$), accounting for 33.1% of its variance ($R^2=.331$). Similarly, helpfulness exerts a significant positive effect ($p<0.001$), explaining 38.6% of the variance ($R^2=.386$). Courtesy also significantly influences passenger satisfaction ($p<0.001$), with an R^2 of

0.421, while promptness has a significant positive effect as well ($p<0.001$), accounting for 41.0% of the variance ($R^2=.410$).

Regarding the hypotheses testing the relationships between passenger satisfaction and perceived value, as well as the intention to recommend, the findings from the regression models indicate statistically significant results ($p<0.001$) for both models. Passenger satisfaction explains 59.2% ($R^2=.592$) of the variation in perceived value and 48.6% ($R^2=.486$) of the variation in intention to recommend. These results support all the hypotheses (H_1 , H_2 , H_3 , H_4 , H_5 , and H_6) proposed in the study.

In conclusion, the regression analysis demonstrates that the independent variables significantly impact the dependent variable, with varying degrees of influence. The findings validate the research hypotheses and highlight the importance of factors such as individual attention, helpfulness, courtesy,

promptness, perceived value and intention to recommend in shaping passenger satisfaction in the study context.

5. Conclusion

Passengers tend to evaluate airline companies based on their satisfaction with the flight service experience (Park et al., 2004). Given the highly competitive nature of the aviation industry, passenger satisfaction is considered a critical factor in the selection of both the airline and the airport of travel (Vokáč et al., 2017; Park et al., 2019; Auvinen & Malinen, 2022). It is known that passenger satisfaction can be influenced by various factors to varying extents. However, one primary determinant can be the interpersonal interactions between passengers and cabin crew members during service delivery. Empirical evidence in the literature indicates that flight crew members are the airline employees with the most frequent and prolonged communication and interaction with passengers, making various aspects of interpersonal contact during the in-flight service critical. While some factors affecting passenger satisfaction may occasionally be beyond the control of the airline (such as cancellations and delays due to weather conditions), certain factors can be controlled and improved upon (Gibbs et al., 2017: 58). Elements such as individual attention, helpfulness, courtesy and promptness serve as critical factors in the interactions between cabin crew members and passengers, and they possess a highly controllable aspect.

The pandemic crisis, travel restrictions, followed by an economic crisis, and on the other hand, changes in passenger behaviour in the aftermath of market liberalisation, high technology, and restructuring have also brought about changes in airline services. Airlines must adapt quickly and effectively to such a competitive environment, which is crucial for success in the highly competitive aviation industry (Noviantoro & Huang, 2022: 1). When evaluating the service, a passenger will consider all the interactions throughout the entire process, from the check-in counter to baggage delivery, with a holistic perspective. However, in terms of service, the most visible face of an airline in civil aviation is the passenger services provided in the cabin. Therefore, the interactions between cabin crew members and passengers can influence perceptions, attitudes, and behaviours in a passenger's overall evaluation of the airline.

This study focuses on the human factors in airlines, explicitly examining the interpersonal interactions between passengers and cabin crew members and the related factors. The study aims to determine the impact of individual attention, helpfulness, courtesy and promptness as human service contact points between cabin crew members and passengers on passenger satisfaction, as well as the influence of passenger satisfaction on perceived value and intention to recommend the airline to others. To achieve these objectives, statistical analyses were conducted using the responses obtained from 405 participants aged 18 and above who travelled by air, collected through an online survey conducted via the Google Forms platform.

The results obtained in the study indicate positive relationships between individual attention, helpfulness, courtesy, and promptness as human service contact factors between cabin crew members and passengers and passenger satisfaction and perceived value. Furthermore, passenger satisfaction is strongly and positively linearly related to perceived value and intention to recommend. These findings

demonstrate the importance of each human service contact point in enhancing passenger satisfaction and suggest that passenger satisfaction can increase perceived value and passengers' intention to recommend the airline. Specifically, positive passenger perceptions regarding individual attention, helpfulness, courtesy and promptness as human service contact points within the cabin services framework significantly impact satisfaction formation. As a result, passenger satisfaction can positively affect perceived value and intention to recommend. These findings indicate that airline companies must focus on these factors to enhance service quality. The significant impact of these factors on passenger satisfaction also suggests that they can increase the likelihood of customers recommending the airline.

The findings presented in the study regarding the significant positive correlations between service quality dimensions—such as individual attention, helpfulness, courtesy, and promptness—and passenger satisfaction align well with prior literature in the domain of service quality and customer satisfaction, particularly within transportation and airline services. For example, Park et al. (2004) found that courteous and responsive service significantly predicted overall passenger satisfaction in the airline sector. In the context of low-cost carriers, Kim and Lee (2011) further noted that when passengers perceive a high value from the service—considering both price and quality—they tend to report higher levels of satisfaction. Ali et al. (2015) demonstrated that airline passengers' perceptions of employee helpfulness and personalized attention strongly influence their satisfaction levels and loyalty intentions. A major meta-analysis conducted by Eshaghi et al. (2024) confirms that perceived service quality and perceived value significantly and positively impact passenger satisfaction in air transport contexts. Rezaei and Keynezhad (2024) provide evidence from a public tourism transport study in Iran that similarly confirms the role of service quality and its dimensions—particularly interpersonal elements like friendliness and responsiveness—in enhancing passenger satisfaction and perceived value. Rather (2024), in a broader conceptual analysis of brand relationships in tourism, emphasizes the central role of service experiences—including individual attention and emotional engagement—in building satisfaction and subsequent advocacy behaviors. Moreover, Al Hattali et al. (2025) analyzes tourism services in Oman and conclude that cleanliness, prompt responses, and courteous behavior have a tangible effect on overall satisfaction and perceived value.

In line with the established literature, this research emphasises the importance of focusing on human factors in airlines to enhance customer satisfaction. The study statistically confirms the impact of human service contact points by cabin crew members on passenger satisfaction and the influence of passenger satisfaction on perceived value and intention to recommend. According to the study's results, the qualities displayed by cabin crew members at these human service contact points play a significant role in passenger satisfaction. These human factors are practical tools that airline companies can utilize to enhance customer satisfaction. Additionally, it highlights the significant impact of passenger satisfaction on perceived value and intention to recommend the airline to others. Therefore, by focusing on human service contact points to enhance customer satisfaction, airline companies can increase passengers' intention to recommend and loyalty to the business. In conclusion, the findings of this study highlight the importance for airline companies to focus

on human factors to enhance customer satisfaction. Understanding the critical role that airline employees play in shaping passengers' experiences is valuable information for service providers. These results can guide airline companies towards adopting a more human-centered approach to increase customer satisfaction and achieve positive outcomes.

These results can guide airline companies towards adopting a more human-centered approach to increase customer satisfaction and achieve positive outcomes. In line with these findings, airline companies are encouraged to implement concrete strategies to strengthen human service contact points. For instance, comprehensive training programs focusing on emotional intelligence, communication skills, cultural sensitivity, and service recovery can help cabin crew members enhance the quality of their interactions with passengers. Additionally, establishing structured customer feedback mechanisms, such as post-flight surveys or digital feedback platforms, can provide real-time insights into passenger experiences and help identify areas for improvement. Airlines can also consider recognition and reward systems for cabin crew members who consistently deliver high levels of service, thus reinforcing a culture of customer-centric behaviour. By investing in these initiatives, airline companies can better leverage human factors to not only increase customer satisfaction but also foster stronger and more meaningful passenger-employee interactions, which are essential for building lasting relationships, enhancing brand loyalty, and improving overall business performance.

Understanding the critical role played by airline employees in shaping passengers' experiences is valuable information for service providers (Babbar & Koufteros, 2008). The empirical findings obtained in this study support the results provided by Babbar & Koufteros (2008), indicating that individual care, helpfulness, politeness, and speed as human service contact points in the interactions between businesses and customers offer valuable opportunities for service provider airline companies to meet customers' needs and achieve positive outcomes such as satisfaction.

However, it is essential to note that, like any research, this study has certain limitations, and the results should be interpreted within the context of these limitations. Most notably, the use of convenience sampling constitutes a significant limitation that may affect the generalizability of the findings. Since participants were not selected through random sampling, the sample may not fully represent the broader population, and thus, caution should be exercised when attempting to generalize the results to other contexts. Since the online survey method used in the research only includes individuals with internet access, the representativeness of the data obtained through this method may be limited. The focus of the study on human service contact factors between passengers and cabin crew members may overlook other factors. For example, other services provided by the airline or other experiences during the flight may also influence passenger satisfaction.

On the other hand, conducting similar studies on specific airline companies in future research could allow for a broader perspective in evaluating the results. Diversifying data collection methods and collecting data from different demographics could be substantial. This would enable the examination of satisfaction profiles of passengers with different demographic characteristics. More comprehensive research could be conducted by considering other factors influencing passenger satisfaction. This would help clarify

which areas airline companies need to improve and contribute to the literature. Additionally, conducting qualitative research methods or mixed qualitative-quantitative methods to examine the interpersonal contacts between passengers and cabin crew members and their relationships with antecedents or outcomes in more detail could contribute to the literature.

Ethical approval

The research has been evaluated for its ethical considerations by the Ethics Committee Presidency of İstanbul Arel University Rectorate, and it has been determined to be ethically appropriate based on the decision with reference number E-52857131-050.06.04-284137 and the document issued on 30.05.2023.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

References

- Akpur, A., ve Zengin, B. (2019). İç ve dış müşteriler açısından kabin hizmetleri kalite algısını ölçmeye yönelik karşılaştırmalı bir araştırma. Çanakkale Onsekiz Mart Üniversitesi Uluslararası Sosyal Bilimler Dergisi, 4(1), 29-50.
- Al Hattali, L. K. K., Al-Bakari, J. H. N., Al Rasheedi, J. S. H., Al Hatmi, H. A. S., & Al Salami, S. N. A. (2025). Investigating customer satisfaction with tourism services in Oman. *Jamal Academic Research Journal: An Interdisciplinary*, 6(1), 35-49.
- Ali, F., Dey, B. L., & Filieri, R. (2015). An assessment of service quality and resulting customer satisfaction in Pakistan International Airlines: Findings from foreigners and overseas Pakistani customers. *International Journal of Quality & Reliability Management*, 32(5), 486-502.
- Auvinen, T., & Malinen, M. (2022). Passenger satisfaction studies in global aviation context: trends and best practices. Bachelor's Thesis Haaga-Helia University of Applied Sciences, Helsinki, Finland.
- Babbar, S., & Koufteros, X. (2008). The human element in airline service quality: Contact personnel and the customer. *International Journal of Operations & Production Management*, 28(9), 804-830.
- Bakır, M., Akan, Ş., Özdemir, E., Nguyen, P. H., Tsai, J. F., & Pham, H. A. (2022). How to achieve passenger satisfaction in the airport? Findings from regression analysis and necessary condition analysis approaches through online airport reviews. *Sustainability*, 14(4), 21-51.
- Banjarnahor, A. R., Simarmata, J., Gugat, R. M. D., Prakoso, O. S., & Yosafat, A. (2025). Understanding customer perception of airline service quality and brand image: A pathway to loyalty and repurchase intentions. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 8(1), 923-955.
- Bartlett, J. E., Kotrlík, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43-50.
- Baştürk, S., ve Taştepe, M. (2013). Evren ve örneklem. *Bilimsel araştırma yöntemleri içinde. Vize Yayıncılık*, Ankara, 129-159.

- Bishop, W. R. Jr., (1984). Competitive intelligence. *Progressive Grocer*, 63(3), 19-20.
- Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: Themes in online reviews. *International Journal of Contemporary Hospitality Management*, 31(2), 855-873.
- Chaniotakis, I. E., & Lympieropoulos, C. (2009). Service quality effect on satisfaction and word of mouth in the health care industry. *Managing Service Quality: An International Journal*, 19(2), 229-242.
- Choudhury, K. (2011). Service quality and WOM (word-of-mouth): A study of the Indian banking sector. *International Journal of Customer Relationship Marketing and Management (IJCRM)*, 2(2), 63-87.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Routledge.
- Ellinger, A. E., Daugherty, P. J., & Blair, Q. J. (1999). Customer satisfaction and loyalty in supply chain: The role of communication. *Transportation Research Part E: Logistics and Transportation Review*, 35(2), 121-134.
- Eshaghi, M. S., Afshardoost, M., Lohmann, G., & Moyle, B. D. (2024). Drivers and outcomes of airline passenger satisfaction: A meta-analysis. *Journal of the Air Transport Research Society*, 3, 100034.
- Gegez, A. E. (2010). *Pazarlama araştırmaları*. Beta Basım Yayın, İstanbul.
- Gibbs, L., Slevitch, L., & Washburn, I. (2017). Competency-based training in aviation: The impact on flight attendant performance and passenger satisfaction. *Journal of Aviation/Aerospace Education & Research*, 26(2), 55-80.
- Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Gürler, H. E., ve Erturgut, R. (2018). Hizmet kalitesinin müşteri tatmini ve ağızdan ağıza iletişim üzerindeki etkisi: Havayolu endüstrisinde cinsiyet temelli bir araştırma. *İşletme Araştırmaları Dergisi*, 10(1), 229-253.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.
- Hamid, M. S. B. S., Baxter, G., & Wild, G. (2021). Passenger perceptions towards service quality of airlines based in Singapore. *International Review of Management and Marketing*, 11(1), 78.
- Haşiloğlu, S. B., Baran, T., & Aydın, O. (2015). Pazarlama araştırmalarındaki potansiyel problemlere yönelik bir araştırma: Kolayda örnekleme ve sıklık ifadeli ölçek maddeleri. *Pamukkale İşletme ve Bilişim Yönetimi Dergisi*, 1, 19-28.
- Jen, W., Tu, R., & Lu, T. (2010). Managing passenger behavioral intention: an integrated framework for service quality, satisfaction, perceived value, and switching barriers. *Transportation*, 38(2), 321-342.
- Karatepe, O. M., & Ekiz, E. H. (2004). The effects of organizational responses to complaints on satisfaction and loyalty: A study of hotel guests in Northern Cyprus. *Managing Service Quality: An International Journal*, 14(6), 476-486.
- Kim, Y. K., & Lee, H. R. (2011). Customer satisfaction using low cost carriers. *Tourism Management*, 32(2), 235-243.
- Kim, W. G., Lee, Y. K., & Yoo, Y. J. (2006). Predictors of relationship quality and relationship outcomes in luxury restaurants. *Journal of Hospitality & Tourism Research*, 30(2), 143-169.
- Kumar, R., & Deshpande, M. (2012). *E-banking*. Pacific Books International, New Delhi.
- Kuo, Y. F., Wu, C. M., & Deng, W. J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*, 25(4), 887-896.
- Ladhari, R., Souiden, N., & Ladhari, I. (2011). Determinants of loyalty and recommendation: The role of perceived service quality, emotional satisfaction and image. *Journal of Financial Services Marketing*, 16(2), 111-124.
- Law, C. C. (2018). *A practical guide to airline customer service: From airline operations to passenger services*. BrownWalker, Irvine, CA.
- Law, C. C., Zhang, Y., & Gow, J. (2022). Airline service quality, customer satisfaction, and repurchase intention: Laotian air passengers' perspective. *Case Studies on Transport Policy*, 10, 741-750.
- Macintosh, G. (2007). Customer orientation, relationship quality, and relational benefits to the firm. *Journal of Services Marketing*, 21(3), 150-159.
- Marcos, A. M. B. D. F., & Coelho, A. F. D. M. (2022). Service quality, customer satisfaction and customer value: holistic determinants of loyalty and word-of-mouth in services. *The TQM Journal*, 34(5), 957-978.
- 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.
- Nejati, M., Nejati, M., & Shafaei, A. (2009). Ranking airlines' service quality factors using a fuzzy approach: study of the Iranian society. *International Journal of Quality & Reliability Management*, 26(3), 247-260.
- Noviantoro, T., & Huang, J. P. (2022). Investigating airline passenger satisfaction: Data mining method. *Research in Transportation Business & Management*, 43, 1-13.
- Park, E., Jang, Y., Kim, J., Jeong, N. J., Bae, K., & Del Pobil, A. P. (2019). Determinants of customer satisfaction with airline services: An analysis of customer feedback big data. *Journal of Retailing and Consumer Services*, 51, 186-190.
- Park, J.-W., Robertson, R., & Wu, C.-L. (2004). The effect of airline service quality on passengers' behavioural intentions: A Korean case study. *Journal of Air Transport Management*, 10(6), 435-439.
- Prentice, C., Maria, S., & Loureiro, C. (2017). An asymmetrical approach to understanding configurations of customer loyalty in the airline industry. *Journal of Retailing and Consumer Services*, 38, 96-107.
- Rather, R. A., & Rafi, A. (2024). Consumer-brand relationships in tourism and hospitality research. In *Tourism, hospitality and event management* (pp. 1-14). (Tourism, Hospitality and Event Management; Vol. Part F3652). Springer Nature.
- Rezaei, M., & Keynezhad, M. A. (2024). Explanation of the sociability urban tourism model with an Islamic realism approach: A case study of Tabriz. *Geographical Research*, 39(4), 1001-1013.
- Rhoades, D. L., & Waguespack, B. (1999). Better safe than service? The relationship between service and safety quality in the US airline industry. *Managing Service Quality: An International Journal*, 9(6), 396-400.

- Ringle, C. M., Sarstedt, M., & Zimmermann, L. (2011). Customer satisfaction with commercial airlines: The role of perceived safety and purpose of travel. *Journal of Marketing Theory and Practice*, 19(4), 459-472.
- Robledo, M. A. (2001). Measuring and managing service quality: Integrating customer expectations. *Managing Service Quality: An International Journal*, 11, 22-31.
- Sanyal, S., & Hisam, M. W. (2016). An analysis of the impact of service quality and passenger satisfaction on passenger preference for airlines: A study of the Indian aviation sector. *International Review of Management and Marketing*, 6(2), 354-357.
- Sekaran, U. (2003). *Research methods for business: A skill-building approach*. Wiley, New York.
- Singh, V., Sharma, M. P., Jayapriya, K., Kumar, B. K., Chander, M. A. R. N., & Kumar, B. R. (2023). Service quality, customer satisfaction and customer loyalty: A comprehensive literature review. *Journal of Survey in Fisheries Sciences*, 10(4), 3457-3464.
- Suki, N. M. (2014). Passenger satisfaction with airline service quality in Malaysia: A structural equation modeling approach. *Research in Transportation Business & Management*, 10, 26-32.
- Tahanisaz, S. (2020). Evaluation of passenger satisfaction with service quality: A consecutive method applied to the airline industry. *Journal of Air Transport Management*, 83, 101764.
- Vokáč, R., Lánský, M., & Szabo, S. (2017). The dependence of airport profit on passenger satisfaction and operational efficiency. *MAD-Magazine of Aviation Development*, 5(2), 11-14.
- Walia, S., Sharma, D., & Mathur, A. (2021). The impact of service quality on passenger satisfaction and loyalty in the Indian aviation industry. *International Journal of Hospitality and Tourism Systems*, 14(2), 136-143.
- Wirtz, J., Heracleous, L., & Pangarkar, N. (2008). Managing human resources for service excellence and cost effectiveness at Singapore Airlines. *Managing Service Quality: An International Journal*, 18(1), 4-19.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.

Cite this article: Isicki, S.O. (2025). Factors of Human Interaction on the Path to Passenger Satisfaction, Perceived Value, and Intention to Recommend in Airlines. *Journal of Aviation*, 9(3), 528-537.



This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License

Copyright © 2025 *Journal of Aviation* <https://javsci.com> - <http://dergipark.gov.tr/jav>