

9-15-2023

Perception of Crisis Management, Service Quality, and Loyalty Programs on Airline Travel Intention: What Roles Do Fear of COVID-19 and Risk Attitude Play?

Sohel M. Imroz

Embry-Riddle Aeronautical University, imrozm1@my.erau.edu

Tamilla Curtis

Embry Riddle Aeronautical University, curtist@erau.edu

Scott C. Ambrose

Embry-Riddle Aeronautical University, ambrose2@erau.edu

Follow this and additional works at: <https://commons.erau.edu/publication>



Part of the [Management and Operations Commons](#), and the [Virus Diseases Commons](#)

Scholarly Commons Citation

: Imroz, S.M.; Curtis, T.; Ambrose, S.C. Perception of Crisis Management, Service Quality, and Loyalty Programs on Airline Travel Intention: What Roles Do Fear of COVID-19 and Risk Attitude Play? *Sustainability* 2023, 15, 13753. <https://doi.org/10.3390/su151813753>

This Article is brought to you for free and open access by Scholarly Commons. It has been accepted for inclusion in Publications by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.

Article

Perception of Crisis Management, Service Quality, and Loyalty Programs on Airline Travel Intention: What Roles Do Fear of COVID-19 and Risk Attitude Play?

Sohel M. Imroz *, Tamilla Curtis and Scott C. Ambrose 

Management, Marketing and Operations Department, David B. O'Maley College of Business, Embry-Riddle Aeronautical University, Daytona Beach, FL 32114-3900, USA; curtist@erau.edu (T.C.); ambross2@erau.edu (S.C.A.)

* Correspondence: imrozs@erau.edu

Abstract: This research investigates the antecedents of airline travel intention, including the effects of crisis management, service quality perceptions, and loyalty programs, along with the fear of coronavirus disease (COVID-19) and risk attitude among individuals from different parts of the world during the peak of the pandemic. Its main objective is to assess how these variables impact passenger airline travel intention. Partial least squares structural equation modeling was used to assess the measurement model and test the hypothesized relationships on the sample of 944 travelers. Results indicated strong positive associations between fear of COVID-19, risk-averse attitudes, and service quality with respect to travel intention. On the other hand, perception of crisis management handling and loyalty programs did not have significant influence on travel intention during the global pandemic. Interestingly, the researchers found that risk-averse attitude positively influences both crisis management and service quality perception. Therefore, airline decision-makers need to consider the psychological aspect of fear of COVID-19 and other researched dimensions to regain passenger confidence and stimulate travel demand regardless of the risk-averse attitude.

Keywords: COVID-19; risk attitude; crisis management; service quality; loyalty programs; travel intention



check for updates

Citation: Imroz, S.M.; Curtis, T.; Ambrose, S.C. Perception of Crisis Management, Service Quality, and Loyalty Programs on Airline Travel Intention: What Roles Do Fear of COVID-19 and Risk Attitude Play? *Sustainability* **2023**, *15*, 13753. <https://doi.org/10.3390/su151813753>

Academic Editor: Luigi Dell'Olio

Received: 20 July 2023

Revised: 28 August 2023

Accepted: 30 August 2023

Published: 15 September 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Traveling is a part of our life. We travel for business, leisure, visiting family and friends, seeing new places, etc. However, the pandemic greatly troubled our lives and travel patterns. As such, people around the globe must adapt to the new world and learn new behaviors. The aviation and tourism industries faced several challenges. The pandemic disturbed airline operations, airports, hotels, restaurants, car rental companies, and other businesses. Governments of many countries closed the borders and implemented lockdowns to protect their citizens. Consequently, aircraft fleets were grounded, and airlines went through numerous layoffs and workforce reductions. The industry faced billions of USD in losses. The International Civil Aviation Organization reported that, in 2020, the global economic impact for aviation was a 50% reduction in seat capacity, a reduction of 2.699 billion passengers, and USD 371 billion in revenue losses [1]. For the airlines to survive, governments all over the world provided bailout packages, since aviation is considered a strategic industry representing a country's national interests. The availability of vaccines contributed to the travel restrictions being lifted and air travel being resumed. However, as the number of airline passengers started to increase, many were still questioning whether it was safe to travel and worth going through the rapidly changing requirements and regulations, including COVID-19 testing, quarantines, and other protective measures. These requirements were time-consuming, costly, and unpleasant, which created a great deal of uncertainty and anxiety.

Travel intentions and factors that influence them are important areas for airlines to assess to stimulate consumer demand. Airlines can formulate strategies to address issues that negatively impact consumer desire to travel by air and promote factors that positively influence these choices. Therefore, crisis management became a priority during this challenging time. The pandemic had a devastating effect, not only on industries but also on individual well-being. The effects of COVID-19 on mental health, such as fear, depression, and anxiety, have been well documented. The uncertainty and fast-changing environment can be linked to the increase in the levels of stress and worries. The national U.S. data indicate a significant increase in the average share of adults reporting symptoms of anxiety and depressive disorders, from 11 percent between January and June 2019 to 41.1 percent in January 2021 [2].

Fear is a basic human emotion that makes us aware of danger. Academic research investigated factors that negatively affect travel intentions, such as fear, travel anxiety, perceived risk, and risk attitude [3–7]. Even though the decision to travel is linked to an individual's state of mind and psychological factors, research on emotions and feelings has been lacking for the aviation and tourist industries [6]. In addition to these adverse factors, airline managers need to know what factors positively influence consumer behavior regarding air travel. Consumers form their expectations from interactions with the company, positive word of mouth, publicly available information (including airline rankings), media, and other sources. The more consumers expect, the wider the gap becomes between consumer expectations and a company's actual performance. Therefore, additional measures can positively influence consumer perceptions of the company, such as excellence in service quality and new safety measures.

Loyalty programs or Frequent Flier Programs (FFPs) are strategies used by airlines to attract consumers and to stimulate travel demand. However, FFPs are more important for business travelers than leisure travelers [8]. During the pandemic, business travel was severely disrupted due to businesses switching to online operations and employees working from home. Consequently, in 2021, when airlines resumed their operations, the recovery was mostly led by low-cost carriers [9]. According to Airports Council International's industry outlook for 2023, global passenger traffic reached 72% of 2019 levels in 2022 and is forecasted to reach 92% of 2019 levels by the end of 2023 [10]. Therefore, most of the major airlines are on track to reach pre-COVID-level traffic after suffering major setbacks in 2020 and 2021.

The aims of this research are threefold. First, it investigates consumers' emotional states, such as fear of COVID-19, and their risk attitudes under the condition of crisis. The framework of [6], which was tested on Hong Kong residences, was extended in this study by adding additional dimensions, such as service quality and loyalty programs, and surveyed individuals from different parts of the world. Second, it studies consumers' crisis management perceptions of how airlines handled passenger safety during the COVID-19 pandemic. This will help to determine how the perception of organizational strategies influences the consumer's decision to travel. Third, it examines whether the commonly used organizational strategies for attracting consumers and influencing their purchase decisions, such as the service quality aspect and FFPs, are still considered to be significant for an individual's decision to travel despite the damaging effects of the pandemic.

The study will provide valuable insights to the airline decision-makers on crisis management and to academia by extending the research stream on consumer behavior and its influences on the aviation industry. The research was conducted under the condition of crisis during the COVID-19 outbreak, which heavily impacted the travel and tourism industries and consumers' purchase decisions. New organizational strategies are critical to addressing the crisis and bringing back consumer confidence. The research findings will be beneficial to airline managers for shaping their strategies during the pandemic by identifying factors that impede individuals' decisions to fly and identifying factors that positively influence a consumer's decision to select air travel. As such, airline managers

should pay close attention to the positive factors since they will help consumers reduce the emotional state of COVID-19 fear and risk-averse attitude towards flying.

2. Literature Review and Hypothesis Development

2.1. Fear of COVID-19

Fear is an adaptive emotion caused by danger, pain, harm, or potential threat [6,11]. It is hard to define emotion because observing how emotion is developed, created, or expressed is not simple [6]. There are many detrimental effects on individuals and society when the level of fear is excessive or insufficient. Excessive fear causes mental health problems or anxiety at the individual level and panic shopping or xenophobia at the societal level [11]. Negative effects of insufficient fear on the individual and societal levels include creating reckless policies, ignoring risks, or disregarding safety measures and precautions [11]. Since the outbreak of COVID-19 in December 2019, people worldwide have become increasingly fearful and worried about the virus [9,12]. The study from the Sciensano Belgian Institute for Health in 2020 found a significant increase in anxiety among the research participants, from 11% in 2018 to 20% in April 2020. The same study reported an increase in depressive disorder, from 10% in 2018 to 16% in April 2020 [11].

Fear of COVID-19 was also attributed to reduced economic growth and increased negative feelings towards people from countries most affected by the virus [11,13]. According to [14], the following five factors are related to people's fear of COVID-19: danger and contamination, economic consequences, xenophobia, compulsive checking and reassurance seeking, and traumatic stress symptoms. In another study, the domains of fear identified by [15] include fear for the body, fear for the significant others, fear of not knowing, and fear of inaction. To make it worse, the level of fear, panic, and anxiety increases when there is a large amount of misinformation that is unverified, fake, or exaggerated quickly circulating in various social media [16].

Recent studies such as [17] explored the impact of COVID-19 fear on hotel employees and found "both direct and interactive effects on stress and job insecurity" [17] (p. 7) and indirect effect on "stress through job insecurity" [17] (p. 7). In another study, [18] investigated the impacts of COVID-19 (e.g., coronavirus threat, financial strains, resources impact, and social isolation), depression, and personal control on tourism employees' health and well-being in Jordan during the pandemic. Results in that study revealed that coronavirus threats have a positive effect on employees' depression and a negative effect on their personal control. The study, however, did not find any mediating effect of depression or personal control on the relationships between coronavirus threats and employees' perceived health. The additional dimensions investigated in these studies may very well affect airline passengers' travel intentions.

2.2. Risk Attitude

Risk attitude is attitude towards uncertainty or risk and can be defined as "a chosen state of mind concerning those uncertainties that could have a positive or negative effect on objectives" [19] (para. What is Risk Attitude?). In other words, risk attitude shapes risk-taking behaviors during uncertain or risky situations [6,20]. According to [19], three types of risk attitude are risk aversion, risk seeking, and risk neutral. People with risk aversion attitude prefer certain events, or events with low uncertainty, to highly uncertain ones. People with risk seeking attitude gravitate toward uncertain events or situations. Lastly, people with risk neutral attitudes have an indifferent mindset toward risk or uncertainty.

The study of [21] examined the perception of COVID-19, travel risk perception, and travel behavior of travelers in Austria, Germany, and Switzerland two weeks before and immediately after COVID-19 was declared a pandemic. The study found that risk perception of COVID-19, travel risk perception, and travel behavior (willingness to cancel or change travel plans) significantly increased over the two-week period. The study also found that younger travelers travelled less and showed the highest risk perception of COVID-19 and travel behavior, while the older, more experienced travelers showed the

lowest risk perception of COVID-19, travel risk perception, and travel behavior. A more recent study [22] investigated the psychological benefits of a natural environment on South Korean male campers. That study found a significant relationship between campers' affective risk perception of COVID-19 and perceived restorativeness (i.e., having the power to renew one's psychological capabilities), and between their perceived restorativeness and well-being.

Factors determining risk attitude are possible actions, possible events, results of the actions or events, and likelihood of the actions or events occurring [19]. Risk attitude is often influenced by individual risk perception [23]. For any given risk or uncertainty, the perception of risk can differ from one person to another. Individual risk perception is often based on the perceived impact or negative consequences of the event and the environment [6] and is very important for judgment and decision-making [6,24]. For example, the study of [25] found that people's perception and attitude towards food is affected by the fear of COVID-19. Another study found that fear of COVID-19 positively affects passengers' risk attitude among "travel bubble" destinations [6]. The study of [26] found that fear of COVID-19 is positively associated with risk perception. The more individuals fear, the less likely they will be willing to engage in risky behavior. Thus, we propose the following hypothesis:

Hypothesis 1 (H1). *Fear of COVID-19 positively affects airline passengers' risk-averse attitudes.*

2.3. Crisis Management Perception

Crisis management is the comprehensive process of identifying and implementing the strategies and action items to help organizations deal with a crisis, threat, or risk [27]. The primary goals of crisis management are to minimize damage and maximize safety. According to [27], there are three stages of crisis management: pre-crisis, crisis response, and post-crisis. The purpose of the pre-crisis stage is to identify various scenarios and to develop and practice effective ways to respond to those scenarios. Assessing risk, establishing early monitoring systems, developing crisis response plans, and identifying necessary resources to carry out the response plan are important tasks in the pre-crisis stage [27]. The crisis management plan is carried out during the crisis response stage. It is a common practice to have a manager or expert leading the crisis response team's activities and maintaining regular communication with all the stakeholders. During the post-crisis stage, the crisis manager works with the team to review and evaluate the results of the crisis response plan and adjust or update the plan as needed [27]. The crisis management framework proposed by [28] includes risk retention, risk transfer, risk reduction, and risk avoidance. The first step of this model is assessing all the existing and potential risks and threats based on their severity and frequency.

Crisis management perception is very important for all industries and organizations. Having a written crisis management plan for man-made and natural disasters indicates an organization's commitment for satisfactory tourist care and increased tourist attraction and retention [29–31]. According to [31] (p. 114), "tourist destinations whose local authorities and hotels have a written crisis management plan and actively implement it recover better and faster than do their counterparts". Other studies also share similar results [32,33].

Airlines were mandated by the government to provide the highest level of safety under the condition of crisis during the pandemic. The aviation industry efforts, including preventive measures such as mandatory mask requirements, blocking of the middle seat, sanitization stations, information on airplane disinfection, and implementation of newer air filtration systems, were widely advertised and visible to passengers. According to the United States Center for Disease Control (CDC), most viruses do not spread easily on flights because of how air circulates and is filtered on airplanes [34]. Other researchers also claimed that when airline passengers properly follow the CDC guidelines, the risk of COVID-19 during air travel is lower than the risk from an office building, classroom, supermarket, or commuter train [35].

The study of [36] proposed implementing several prevention and control measures to limit the spread of COVID-19: temperature screening, travel history questionnaire, rapid testing at entry, quarantine, post-entry surveillance and tracking, distribution of public health information, traveler sensitization, and certification of disease-free status. Airline passengers flying during the pandemic witnessed various safety measures before, during, and after their flight. Many of these safety protocols were mandated by the government and transportation agencies such as Federal Aviation Administration (FAA) in the United States. Additionally, the CDC provided travel-related requirements and guidance for airlines and passengers because of the pandemic [37]. However, despite the publicized safety measures, we are proposing that risk-averse passengers will hold negative attitudes toward airline crisis management perception. Based on the above discussion, we offer the second hypothesis as below:

Hypothesis 2 (H2). *Airline passengers' risk aversion negatively affects their crisis management perception.*

2.4. Service Quality

Service quality is a comparison of perceived expectations of a service with its perceived performance [38]. Many researchers have found a positive relationship between service quality and the profitability of a firm [39], customer satisfaction [40], and customer loyalty [41]. The study of [42] categorized service quality for the airline industry into three dimensions: reliability and customer service (R&CS), convenience and accessibility (C&A), and inflight service. That study found a positive relationship among C&A, inflight service, and service quality. The study of [43] focused on the airline industry in Malaysia and found that all three service quality dimensions play a significant role in explaining airline loyalty. In [44], service quality was identified as a key input for customer satisfaction, and [45] mentioned customer satisfaction as the foundation of a loyal customer base.

The study of [46] offered a list of preflight and in-flight service quality measures of the 20 biggest airlines. It is noteworthy that these preflight and inflight measures have varying degrees of effectiveness. Preflight measures include masks, negative testing PCR certificates, thermoscanners, hygiene kits, health screenings for staff, personnel protective equipment, social distancing when boarding, systematic boarding, and rapid tests before boarding. Inflight measures include masks; systematic boarding; social distancing enforced (empty seats); permission to eat or drink during the flight; use of HEPA filters to remove at least 99.97% of dust, pollen, mold, bacteria, and any airborne particles; inflight disinfection of sanitary facilities; pre/post flight disinfection; use of passenger locator card; special disembarking; and reserved isolation seats. However, despite such efforts, we are proposing that risk-averse passengers will hold negative attitudes towards service quality perception. The more risk-averse one tends to be, the more critical they are likely to be in evaluating service quality. Based on the above discussion, we offer the third hypothesis for this study:

Hypothesis 3 (H3). *Airline passengers' risk aversion negatively affects their service quality perception.*

2.5. Loyalty Program

A customer loyalty program is a "membership-based marketing strategy" [45] (p. 44) to encourage customers to continue to shop at or use the services of a business associated with the program [47]. Such programs can be point-based, tiered, fee-based, or value-based [48]. The loyalty program in the airline industry is commonly referred to as the Frequent Flier Program (FFP). FFPs encourage passengers to repeat ticket purchases from the same airline and help the airlines improve their customer retention rate. FFPs also offer various incentives to passengers who purchase tickets more frequently and in larger volumes [49].

The importance of FFPs in influencing passengers' airline preferences and loyalty is well documented [49–51]. The study of [8] found that airline loyalty programs play a more significant role for business and frequent travelers compared to casual and leisure travelers. Other researchers found that FFPs increase the switching cost for airline passengers, thus influencing their flying habits [40,52]. In a longitudinal study examining the long-term impacts of loyalty programs on consumer purchase behavior and loyalty, [53] found that frequent users of the loyalty program are most likely to claim their rewards but less likely to change their purchase behavior. That study also stated that less frequent users of the loyalty program gradually increase their purchase frequency and become more loyal to the firm.

A recent study [54] investigated the impact of customer involvement on airline loyalty programs in Brazil. Results of the study indicated a positive effect of customer satisfaction on a loyalty program for highly-involved customers. In addition, the study showed a positive effect between perceived functional value and satisfaction for the customers with low involvement. Passengers with varying degrees of involvement with the airline loyalty programs may influence their travel intention. Another recent study [55] examined customers' perceptions of airline cause-related marketing strategy (when a for-profit business forms a partnership with a nonprofit charity or cause) and its effect on their loyalty. Results of that study revealed brand attitude's significant mediating role and brand consciousness's moderating role in building customer loyalty.

2.6. Travel Intention

Travel intention is a person's desire to travel [6] and can be defined as "the subjective probability of whether a customer will or will not take certain actions that are related to a tourist service" [56] (p. 3). According to [6], two sources of travel intention are personal and information. Personal sources may include past travel experience [57] and nationality/culture [7]. Perceptions of risk and safety are also important factors that can affect travel intention [6]. These factors can be developed or significantly affected by information sources like mainstream media (e.g., major cable TV sources, newspapers, etc.) or social media [58]. People are more likely to avoid a travel destination if they perceive it as risky or unsafe. Conversely, people are more likely to select a travel destination if they perceive it as less risky or safe.

The study of [59] investigated the influence of the COVID-19 pandemic on Romania's population's travel patterns and habits regarding psychological and economic factors. In [59], researchers found that psychological factors, especially the fear of contamination, negatively impact travelers' willingness to travel. Psychological factors positively impacting travelers' decisions to travel include the hygiene and health conditions in the host destination. The results also suggest that, as travelers become more comfortable with perceived uncertainty, they are more likely to resume traveling in the next six months. In addition, travelers with higher incomes are more likely to allocate a bigger budget for their travel and tourism purposes. Another study of [60] examined the impact of Serbian tourists' risk perceptions on their travel intention during the COVID-19 pandemic and identified five categories of perceived risk: health, psychological, financial, destination, and travel risk. Their study found that Serbian tourists' perceptions of health, psychological, financial, and destination risks negatively affect their travel intentions, and travel risk negatively affects intention to travel abroad.

The study of [56] found several determinants of travel intention that included value for money, overall satisfaction, responding to advertisements, marriage, overall image, and requesting visitor information. Based on the above discussion, it can be assumed that airline passengers are likely to travel more when their perception of crisis management, service quality, and loyalty programs increases. Therefore, we propose the following three additional hypotheses:

Hypothesis 4 (H4). Crisis management perception positively affects airline passengers' travel intentions.

Hypothesis 5 (H5). Service quality positively affects airline passengers' travel intentions.

Hypothesis 6 (H6). Loyalty programs positively affect airline passengers' travel intentions.

The conceptual framework is presented in Figure 1.

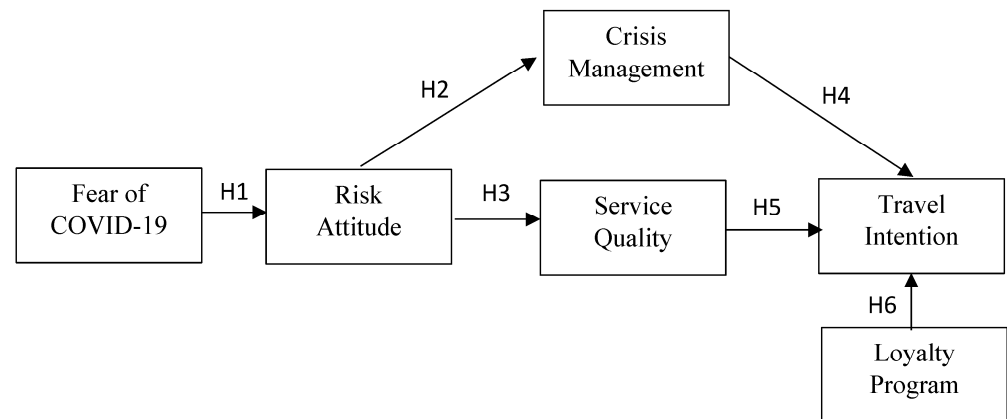


Figure 1. Conceptual framework.

3. Methodology

A survey instrument was prepared to measure the perception of fear of COVID-19 and risk attitude on crisis management perception, service quality, and travel intention. Additionally, the effect of loyalty programs on travel intention was also investigated. Based on the literature review, published scales were identified and utilized for this study. Wording was modified slightly to fit the airline industry. Each item was measured on a seven-point Likert scale from “Strongly Disagree” to “Strongly Agree”. The researchers also added a single-item crisis management perception scale to assess how the airlines handled passenger safety during the COVID-19 pandemic. Table 1 lists the scales taken from the literature to measure the constructs in the conceptual model including item loadings and reliability scores.

Table 1. Survey Items, Item Loadings, and Reliability Scores.

| Construct and Item Details | Outer Loadings |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Fear of COVID-19 ($\alpha = 0.93$; AVE = 0.70) Source [6] | |
| 1. I am most afraid of the novel corona virus (COVID-19). | 0.759 |
| 2. It makes me uncomfortable to think about COVID-19. | 0.805 |
| 3. My hands become sweaty when I think about COVID-19. | 0.859 |
| 4. I am afraid of losing my life because of COVID-19. | 0.858 |
| 5. When watching news and stories about COVID-19 on social media or any other media (i.e., TV, Radio), I become nervous or anxious. | 0.863 |
| 6. I cannot sleep because I am worried about getting COVID-19. | 0.834 |
| 7. My heart races or palpitates when I think about COVID-19. | 0.865 |
| Risk Attitude ($\alpha = 0.89$, AVE = 0.82) Source [6] | |
| 1. I cannot accept going to travel during the COVID-19 pandemic with my family and friends. | 0.907 |
| 2. I cannot accept that friends and relatives travel during the pandemic. | 0.918 |
| 3. I will not eat with friends and relatives after their travels. | 0.893 |

Table 1. Cont.

| Construct and Item Details | Outer Loadings |
|---------------------------------------------------------------------------------|----------------|
| Service Quality ($\alpha = 0.91$; AVE = 0.54) Source [61,62] | |
| 1. I feel safe when I fly with airlines. | 0.666 |
| 2. The aircraft has clean and comfortable interiors and seats. | 0.764 |
| 3. Employees of airlines look neat and tidy. | 0.612 |
| 4. Airlines provide quality food. | 0.741 |
| 5. The cabin crew of airlines are friendly and have good language skills. | 0.658 |
| 6. Airlines provide good in-flight services. | 0.766 |
| 7. My inflight-experiences have exceeded my expectations. | 0.758 |
| 8. The inflight services that airlines offer are worth what I pay for. | 0.800 |
| 9. Airlines have sound loyalty programs to recognize me as a frequent customer. | 0.743 |
| 10. Airlines have efficient baggage handling. | 0.750 |
| 11. My concerns are highly valued by airlines | 0.783 |
| Loyalty ($\alpha = 0.82$; AVE = 0.73) Source [45] | |
| 1. Loyalty programs make me strongly connected to airlines. | 0.863 |
| 2. I fly more frequently on certain airlines to earn more points. | 0.874 |
| 3. If airlines do not have a customer loyalty program, I miss out on benefits. | 0.833 |
| Travel Intentions ($\alpha = 0.71$; AVE = 0.63) Source [6] | |
| 1. I would like to travel sometime in the future. | 0.652 |
| 2. I prefer to travel by airlines compared to other forms of transportation. | 0.838 |
| 3. I will recommend traveling by airlines to my relatives and friends. | 0.876 |
| Crisis Management Perception (Single Item) | |
| 1. Airlines have handled passenger safety well during the COVID-19 pandemic. | N/A |

Note: α = Cronbach's Alpha, AVE = Average Variance Extracted.

The sample was collected using Amazon Mechanical Turk (MTurk) crowdsourcing virtual marketplace across different geographic regions. The survey instrument was available to participants until the research funds were depleted. The participants were required to be at least 18 years of age and to have flown on a commercial airline in the last three years. Immediately following the initial screening questions, respondents were instructed to keep in mind their general experiences traveling and flying for the remainder of the survey questions. The final sample comprised 944 complete and valid responses. A demographic summary is contained in Table 2.

Table 2. Demographic Summary of Research Participants.

| Demographics | | | |
|----------------------|-------|------------------------------|-------|
| Gender | Total | Age | Years |
| Male | 609 | Average | 34 |
| Female | 331 | Range | 18–73 |
| Education level | | Income Level | Total |
| High School Graduate | 48 | Below USD 25K | 170 |
| Some College | 94 | Between USD 25K and USD 50K | 332 |
| Two Year Degree | 45 | Between USD 50K and USD 75K | 249 |
| Four Year Degree | 466 | Between USD 75K and USD 100K | 136 |
| Graduate Degree | 282 | USD 100K and above | 57 |
| Doctorate Degree | 8 | | |

Table 2. *Cont.*

| Demographics | |
|-----------------------------------|-----|
| Ethnicity | |
| White | 519 |
| Black or African American | 74 |
| American Indian or Alaskan Native | 10 |
| Asian | 314 |
| Other | 27 |

4. Data Analysis

Partial least squares structural equation modeling (PLS-SEM) was used to assess the measurement model and test the hypothesized relationships. The study of [63] suggests using PLS-SEM in two stages. First, the measurement model is assessed to evaluate internal consistency, convergent validity, and discriminant validity. The conceptual framework exhibited internal consistency with all constructs exhibiting Cronbach's alpha scores above 0.7. Convergent validity was also established as reflected in the average variance extracted (AVE) score for each construct. All the AVE scores were comfortably above the suggested threshold of 0.5 [63]. Discriminant validity was evaluated by examining cross-loadings and using the hetero-monotrait method (HTMT) suggested by [64]. All the items loaded significantly on their respective constructs while staying comfortably below thresholds that would indicate overlap concern. Table 1 lists the items, Cronbach's alpha scores and AVEs for each construct. Lastly, variance inflation factors (VIFs) were assessed. All values were below 5, indicating that the model is not unduly impacted by multicollinearity.

In the second stage, PLS-SEM models are assessed for their predictive capability. The adjusted (R^2) values for the endogenous constructs are provided in Table 3. The explained variance for both crisis management and service quality are in the low range, while the explained variance for risk attitude and travel intention are in the moderate range, according to the guidelines offered by [63]. These findings are reasonable considering that several factors can influence an individual's perception of service quality and crisis management handling. Yet, it was expected that fear of COVID-19 would strongly influence risk attitude, and the impact of the model on the end-stage dependent variable exhibited healthy levels of explanation regarding travel intention. Moreover, predictive relevance was established with significant effect sizes (f^2) established on associations involving the endogenous constructs. The individual path coefficients are subsequently reported in the results section.

Table 3. Adjusted R^2 Values for Endogenous Constructs.

| Endogenous Constructs | R^2 (Adjusted) |
|-----------------------|------------------|
| Crisis Management | 0.06 |
| Service Quality | 0.15 |
| Risk Attitude | 0.59 |
| Travel Intentions | 0.46 |

5. Results

To assess the consistency of the structural weights associated with the hypothesized linkages in the conceptual framework, it is recommended that a bootstrapping procedure should be run using a re-sample of 10,000 [63]. Results of this procedure indicate a strong positive association between fear of COVID-19 and risk-averse attitude ($\beta = 0.75$; $p < 0.00$) supporting H1. Surprisingly, risk-averse attitude was found to positively impact the perception of crisis management ($\beta = 0.25$; $p < 0.00$), not supporting H2. Moreover, H3 was not supported, either, since risk-averse attitude was also found to positively affect

the perception of service quality ($\beta = 0.39$; $p < 0.00$). Meanwhile, crisis management did not exhibit a significant association with travel intention, disconfirming H4. On the other hand, perception of service quality did positively impact travel intention ($\beta = 0.65$; $p < 0.00$), supporting H5. Lastly, loyalty programs amidst the COVID-19 crisis did not influence travel intention. Hence, H6 was not supported.

Demographic control variables, such as age, income, and education were allowed to co-vary in the model, and these controls did not significantly influence the relationships nor did they exhibit significant impact with the endogenous constructs on their own. A summary of the results is offered in Table 4. The following section offers a discussion of the findings and the associated implications for airlines.

Table 4. Results Summary.

| Hypotheses | Predictors | β | <i>t</i> Value | <i>p</i> Value | Result |
|------------|--------------------------------------------------|---------|-------------------|----------------|-------------|
| H1 | COVID-19 → Risk Attitude | 0.75 | 34.8 | 0.00 * | Supported |
| H2 | Risk Attitude → Crisis Management Perception | 0.25 | 7.0 | 0.00 * | Unsupported |
| H3 | Risk Attitude → Service Quality | 0.39 | 11.3 | 0.00 * | Unsupported |
| H4 | Crisis Management Perception → Travel Intentions | | (not significant) | | Unsupported |
| H5 | Service Quality → Travel Intentions | 0.65 | 14.6 | 0.00* | Supported |
| H6 | Loyalty Program → Travel Intentions | | (not significant) | | Unsupported |

* $p < 0.01$

6. Discussion

6.1. Fear of COVID-19

Our research findings indicate that fear of COVID-19 is a significant predictor of risk attitude. Fear of COVID-19 influences the consumer's emotions and their attitude towards future actions. This is consistent with the academic literature [11,14]. The more worried individuals are, the more they try to avoid a situation perceived as dangerous or uncertain. Media coverage of the COVID-19 spread, the publicized statistics of the infection rates and death tolls, and word of mouth made travelers aware of the severity of the situation. They became fearful of catching the disease, having health consequences, and passing the virus to others. They were also afraid of being stuck in the location and unable to come back home due to the fast-changing regulations, going through quarantine requirements, numerous COVID-19 testing, and the overall fear of uncertainty. Moreover, during the peak of the pandemic, governments were strongly discouraging travel and implementing many lockdowns worldwide, closing the national borders, and stopping airline operations altogether. We cannot influence or predict the fast-changing environment; we can only remain to be flexible and adaptable. The outbreak of COVID-19 significantly decreased travel demand since many individuals chose to stay at home due to the emotional impact of fear and risk-averse attitude towards travel.

6.2. Risk Attitude

Interestingly, our research findings indicated that risk aversion positively influences both crisis management perception and service quality perception. There are a few potential explanations for these contrarian findings. Perhaps, despite the mental uncertainty towards air travel under the condition of crisis, individuals still recognized airline actions as positive measures regarding crisis management and commitment to the service quality aspect. It has been found that people who engage in risky activity often do not consider the potential risk of their action or underestimate potential hazards [65]. Researchers have also found that people engaging in risky undertakings score higher on impulsivity [66]. They might subconsciously assume that they will not be affected by negative outcomes [67]. Many airline passengers who flew during the pandemic had to overcome a high degree of risk

aversion attitude. They may have invoked a certain level of confirmation bias in viewing the steps that airlines have taken favorably to mitigate their internal dissonance.

6.3. Crisis Management

Another interesting finding is that, while crisis management perception may have a significant impact on deciding on a specific travel destination [29–31], it does not translate into passengers' travel intentions. Passengers might not be aware of airline safety measures in place and became familiar only after personal interaction with the airline. In this case, the publicly available information on airline commitment to passenger safety should be easily accessible. Media and word of mouth play large roles in disseminating this information. Passengers become familiar with some of the crisis management safety features, discussed earlier in this paper, as they progress through their travel; therefore they have no impact on travel intention. Thus, crisis management can serve as a tool for retaining customers and influencing new customer travel decisions.

6.4. Service Quality

The research finding indicated that service quality does influence travel intentions. This is congruent with the academic literature. Quality of preflight, inflight, and postflight services are directly related to passenger satisfaction [62], which, in turn, affects future travel intentions. It is noteworthy that customer satisfaction differs from person to person, as some passengers are more interested in certain types of service quality (e.g., safety measures at different stages of travel), while other passengers are more interested in different types of service quality (e.g., interaction with the flight attendants, quality of food, handling of their luggage, etc.). Passengers often compare their expected service quality with actual experiences to plan for future travels, and the service quality of the crisis management measures discussed in this paper can be key attributes for comparison.

6.5. Loyalty Programs

Loyalty programs, or FFP, are rewards to attract and retain customers, which are linked to improving retention rates, reducing switching costs, and stimulating travel demand. However, the research findings did not find support that FFP influences travel intentions. This interesting finding is not congruent with the academic literature. However, this can be explained by the fact that crisis plays a large role in influencing consumer decisions to travel. As indicated by [8], FFP programs are more influential for business travelers than for leisure travelers. During the pandemic, businesses went through the re-organizations, including reductions of workforce and working from home. Zoom Cloud Meetings, Microsoft Teams, and other software programs allow individuals to conduct meetings with more than 100 participants at the same time from the convenience of their home offices. As such, business travel was significantly reduced. In contrast, in 2021, low-cost airlines were leading the recovery with their leisure market, including VRF (visiting relatives and friends) passengers. This group of passengers is strongly influenced by price and can easily switch between competitors.

Airlines offer various incentives to make FFPs more appealing and increase the level of passenger confidence in their airline. Incentives such as providing FFP members with free tickets, free seat or class upgrades, access to an airport lounge, priority check-in and boarding, extra baggage allowance, and other rewards or discounts are designed by airlines to attract and retain their own customers. While FFP was not found to be a predictor of travel intentions during the crisis, additional factors that might influence consumers' travel intentions can include the knowledge of the COVID-19 statistics, adherence to hygiene practices, availability of vaccines and testing facilities, quarantine requirements, social distancing restrictions, etc.

6.6. Managerial Implications

Although airlines are not able to control external events, they can ensure passengers' safety by implementing additional measures during a pandemic like COVID-19. Airlines are also in control of the quality of services provided. Our research findings indicated that service quality perception is a significant predictor of travel intention regardless of the crisis. Individuals develop their perceptions based on the reported facts, word of mouth, and personal experiences compared to the expected. Airlines can take additional service quality and crisis management measures at different stages of passenger travel, including prior to travel, at the airport, at the gate, onboard, and after the flight. New measures before travel may include asking passengers to complete a "ready-to-fly" checklist, downloading mobile apps for contactless check-in, and emailing customers face-covering requirements and other policies. Checking passengers' temperatures, installing sneeze guards, promoting social distancing, etc. are effective safety measures used in the airport lobby. Disinfecting high-touch areas (e.g., charging stations, lobby seats, plane seats, table trays, arm rests), installing hand sanitizing stations, self-scanning boarding passes, etc. are a few examples of additional measures at the gate and onboard. As such, the cleanliness and comfort of the aircraft, on-time performance, the appearance of employees, quality of food, in-flight services, baggage handling, and other aspects are very important in influencing passengers' perceptions of service quality. Service quality is a key to retaining and regaining passenger confidence [68].

Although many of these factors were implemented during the COVID-19 pandemic worldwide, there was significant variation in the degree to which these requirements were followed. There are several important ways, in the event of another epidemic in the future, to quickly rebuild passenger confidence in air travel. First, passengers should be able to board a plane anywhere in the world and be confident that the same hygiene practices are being followed. Following a consistent set of safety protocols and quarantine requirements around the world may significantly increase passenger confidence. Another key to increasing passenger confidence is the growing relevancy of trust and the reputation of the airlines. For the airlines, the path to trust and reputation with their customers can include building empathy by understanding their fears and priorities and by creating and implementing effective solutions to reduce touchpoints and interactions throughout their journey experience. This could largely be achieved by implementing facial recognition technology, eliminating redundant validation of the passenger identity, opting for online check-in and electronic boarding passes, and using the airline's touchless baggage check option. Any of these practices is likely to increase passenger confidence during future air travel.

Furthermore, during the pandemic, airlines faced significant reductions in flights and capacity. Half-empty flights and less-crowded airports could contribute to an increase in positive passenger experiences and perceptions of airlines. Media also provided positive coverage regarding the airlines' protective measures. Interestingly, according to the American Customer Satisfaction Index Study, airline passenger satisfaction was much higher during 2020 and 2021 than prior to the pandemic [69]. It seems that, with the reduced schedule and load factors, carriers focused on improving airline customer experience by not only meeting customer expectations but also exceeding them. Travel uncertainty can be reduced with airlines promoting their safety measures. Even though individuals become concerned with the outcomes of their decision to travel, they still believe that airlines are doing their best to protect passengers against the disease and still provide a high quality of service. Therefore, crisis management and service quality perceptions are positively influenced by risk attitude regardless of the individuals' risk aversion state of mind.

7. Conclusions

This research contributes to a better understanding of consumers' travel intentions and their antecedents under the condition of crisis. This study extended the framework of [6] by adding additional dimensions, such as crisis management perception, service quality,

and loyalty programs. Better understanding what influences travel intentions, especially under the condition of crisis, will assist the decision-makers in the airline industry to focus on the factors that can influence consumer behavior. The study findings indicated that fear of COVID-19 influences risk attitude, and service quality influences travel intentions. Understanding the consumers' psychological aspects, such as fear of COVID-19 and risk attitude, will help airlines reduce individuals' negative mindsets and uncertainty. While some factors that influence consumers' intentions to travel remain unchanged regardless of the unfavorable external environment, other factors can fluctuate under the condition of crisis. Service quality perception remains as one of the strongest predictors of behavioral intentions. However, the perception of crisis management and FFP did not translate into influencing consumers' future travel plans.

Future research should focus on conducting follow-up studies to further assess the contrarian findings found here associated with risk aversion and crisis management perception on travel intention. Now that more flying has been restored, it is important to assess passengers at a different point in time to identify if perceptions have shifted. At the same time, it is important for airlines to remain vigilant in promoting their safety measures along with high levels of service quality. It would be unwise to simply assume that, as the pandemic wanes, passengers' comfort levels with air travel will rise. As flights become fuller and less risk-averse travelers begin to venture out, these travelers may be more critical of an airline's role in ensuring their safety and comfort. This study has some limitations. For example, the survey could not be carried out for a longer time to attract more respondents due to lack of adequate funding. There is also an unbalanced number of respondents by gender—only 34% were female. Future research with more participants and a balanced number of respondents by gender may produce additional insights.

In conclusion, the aviation industry needs to adapt to the new environment to reach the pre-COVID-19 levels in passenger traffic. Consumers must adapt to the new world and new norms. Air travel should provide passengers with positive and safe experiences. High-quality service and airline safety measures will help consumers to ease their fear, reduce risk aversion, and positively influence consumers' travel decisions. Airline decision-makers must consider the psychological aspect of passengers' COVID-19 fear and risk attitude to regain their confidence and stimulate travel demand. This is not the first time airlines faced a downturn and reduction in air travel. Past events, including the 9/11 attacks in the United States, terrorism, accidents, diseases in different parts of the world, financial crises, etc. definitely slowed down air travel; however, the passengers always regain confidence in safe and reliable air travel. It is only a matter of time.

Author Contributions: Methodology—S.C.A. and T.C.; data collection—T.C.; data validation—S.C.A. and T.C.; writing, reviewing, and editing—S.M.I., T.C. and S.C.A.; literature review—S.M.I. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The IRB approval for this study was received on 4/22/2021 (Approval # 21-118).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. ICAO. Economic Impacts of COVID-19 on Civil Aviation. *Economic Development*. 2021. Available online: <https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx> (accessed on 15 September 2021).
2. KFF. The Implications of COVID-19 for Mental Health and Substance Use. *Kaiser Family Foundation*. 2021. Available online: <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/> (accessed on 1 September 2021).

3. Dowling, G.R.; Staelin, R. A model of perceived risk and intended risk-handling activity. *J. Consum. Res.* **1994**, *21*, 119–134. [[CrossRef](#)]
4. Gnoth, J.J.; Zins, A.H.H.; Lengmueller, R.R.; Boshoff, C. Emotions, mood, flow and motivations to travel. *J. Travel Tour. Mark.* **2020**, *9*, 23–34. [[CrossRef](#)]
5. Gupta, A.; Gupta, D.R.; Arora, N. The relationship between perceived travel risk, travel safety, travel anxiety and intentions to travel: A path analysis study of domestic traveler in India. *Int. J. Tour. Travel* **2010**, *3*, 25–35.
6. Luo, J.M.; Lam, C.F. Travel Anxiety, Risk Attitude and Travel Intentions towards “Travel Bubble” Destinations in Hong Kong: Effect of the Fear of COVID-19. *Int. J. Environ. Res. Public Health* **2020**, *17*, 7859. [[CrossRef](#)] [[PubMed](#)]
7. Reisinger, Y.; Mavondo, F. Travel anxiety and intentions to travel internationally: Implications of travel risk perception. *J. Travel Res.* **2005**, *43*, 212–225. [[CrossRef](#)]
8. Dolnicar, S.; Grabler, K.; Grün, B.; Kulnig, A. Key drivers of airline loyalty. *Tour. Manag.* **2011**, *32*, 1020–1026. [[CrossRef](#)]
9. Kommenda, N.; Georgiadis, P. How the World’s Airlines Took off Again. Financial Times. Available online: <https://ig.ft.com/covid-air-traffic/> (accessed on 9 April 2022).
10. Airports Council International. The impact of COVID-19 on Airports and the Path to Recovery. Airports Council International. 22 February 2023. Available online: <https://aci.aero/2023/02/22/the-impact-of-covid-19-on-airportsand-the-path-to-recovery-industry-outlook-for-2023/> (accessed on 18 August 2023).
11. Mertens, G.; Gerritsen, L.; Duijndam, S.; Saleminck, E.; Engelhard, I.M. Fear of the coronavirus (COVID-19): Predictors in an online study conducted in March 2020. *J. Anxiety Disord.* **2020**, *74*, 102258. [[CrossRef](#)]
12. McCarthy, J.U.S. Coronavirus Concerns Surge, Government Trust Slides. Gallup. 2020. Available online: <https://news.gallup.com/poll/295505/coronavirus-worries-surge.aspx> (accessed on 15 September 2021).
13. Sorokowski, P.; Groyecka, A.; Kowal, M.; Sorokowska, A.; Białek, M.; Lebuda, I.; Dobrowolska, M.; Zdybek, P.; Karwowski, M. Can information about pandemics increase negative attitudes toward foreign groups? A case of COVID-19 outbreak. *Sustainability* **2020**, *12*, 4912. [[CrossRef](#)]
14. Taylor, S.; Landry, C.A.; Paluszek, M.M.; Fergus, T.A.; McKay, D.; Asmundson, G.J.G. Development and initial validation of the COVID Stress Scales. *J. Anxiety Disord.* **2020**, *72*, 102232. [[CrossRef](#)]
15. Schimmenti, A.; Billieux, J.; Starcevic, V. The four horsemen of fear: An integrated model of understanding fear experiences during the COVID-19 pandemic. *Clin. Neuropsychiatry J. Treat. Eval.* **2020**, *17*, 41–45. [[CrossRef](#)]
16. Rubin, G.J.; Wessely, S. The psychological effects of quarantining a city. *Br. Med. J.* **2020**, *368*, m313. [[CrossRef](#)] [[PubMed](#)]
17. Üngüren, E.; Arslan, S. How does COVID-19 fear affect job insecurity and stress for hospitality employees? A moderated mediation model for age and financial status. *Tour. Manag. Stud.* **2022**, *18*, 7–20. [[CrossRef](#)]
18. Al-Ababneh, M.M.; Al-Shakhsheer, F.J.; Habiballah, M.A.; Al-Badarnah, M.B. Assessing the impact of the COVID-19 pandemic on tourism workers’ health and well-being in Jordan. *Tour. Manag. Stud.* **2022**, *18*, 19–38. [[CrossRef](#)]
19. Rogan, M. Defining Risk Attitudes. Laevo Services. 3 May 2020. Available online: <https://www.laevo-services.com/post/defining-risk-attitudes> (accessed on 1 October 2021).
20. Hillson, D.; Murray-Webster, R. *Understanding and Managing Risk Attitude*; Gower Publishing: Aldershot, UK, 2007.
21. Neuburger, L.; Egger, R. Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Curr. Issues Tour.* **2021**, *24*, 1003–1016. [[CrossRef](#)]
22. Choi, S.; Choi, N.; Kim, I. Effect of restorative experience in reducing the risk perception of COVID-19 infection: Korean male campers’ well-being and willingness to pay a premium for camping. *J. Men’s Health* **2023**, *19*, 26–39. [[CrossRef](#)]
23. Winsen, F.; Wauters, E.; Lauwers, L.; Mey, Y.; Passel, S.; Vancouteren, M. Combining Risk Perception and Risk Attitude: A Comprehensive Individual Risk Behavior Model. ResearchGate. 2011. Available online: https://www.researchgate.net/publication/239805225_Combining_risk_perception_and_risk_attitude_A_comprehensive_individual_risk_behavior_model (accessed on 10 July 2021).
24. Yavas, U. Foreign travel behaviour in a growing vacation market: Implications for tourism marketers. *Eur. J. Mark.* **1987**, *21*, 57–69. [[CrossRef](#)]
25. Xie, X.; Huang, L.; Li, J.J.; Zhu, H. Generational differences in perceptions of food Health/Risk and attitudes toward organic food and game meat: The case of the COVID-19 crisis in China. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3148. [[CrossRef](#)]
26. Han MF, Y.; Mahendran, R.; Yu, J. Associations between fear of COVID-19, affective symptoms and risk perception among community-dwelling older adults during a COVID-19 lockdown. *Front. Psychol.* **2021**, *12*, 638831. [[CrossRef](#)]
27. Posey, B. Crisis Management. TechTarget. 2020. Available online: <https://whatis.techtarget.com/definition/crisis-management> (accessed on 30 October 2021).
28. Wilks, J.; Davis, R.J. Risk management for scuba diving operators on Australia’s Great Barrier Reef. *Tour. Manag.* **2000**, *21*, 591–599. [[CrossRef](#)]
29. Bach, S.; Pizam, A. Crimes in hotels. *J. Hosp. Tour. Res.* **1996**, *20*, 59–76. [[CrossRef](#)]
30. Beirman, D. A comparative assessment of three southeast Asian tourism recovery campaigns: Singapore roars: Post SARS 2003. In *Tourism, Security and Safety*; Routledge: Abingdon, UK, 2005; pp. 251–269. [[CrossRef](#)]
31. Rittichainuwat, B.N. Tourists’ and tourism suppliers’ perceptions toward crisis management on tsunami. *Tour. Manag.* **2013**, *34*, 112–121. [[CrossRef](#)]
32. Barton, L. Crisis management: Preparing for and managing disasters. *Cornell Hotel Restaur. Adm. Q.* **1994**, *35*, 59–65. [[CrossRef](#)]

33. Ritchie, B.W. Chaos, crises, and disasters: A strategic approach to crisis management in the tourism industry. *Tour. Manag.* **2004**, *25*, 669–683. [CrossRef]
34. Read, J. How Clean Is the Air on Planes? National Geographic. 28 August 2020. Available online: <https://www.nationalgeographic.com/travel/article/how-clean-is-the-air-on-your-airplane-coronavirus-cvd> (accessed on 3 September 2021).
35. Pombal, R.; Hosegood, I.; Powell, D. Risk of COVID-19 during air travel. *JAMA J. Am. Med. Assoc.* **2020**, *324*, 1798. [CrossRef] [PubMed]
36. Sharun, K.; Tiwari, R.; Natesan, S.; Yattoo, M.I.; Malik, Y.S.; Dhama, K. International travel during the COVID-19 pandemic: Implications and risks associated with ‘travel bubbles’. *J. Travel Med.* **2021**, *27*, taaa184. [CrossRef]
37. Details about Travel Requirements. Centers for Disease Control and Prevention. 25 October 2021. Available online: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html> (accessed on 25 September 2021).
38. Lewis, R.C.; Booms, B.H. The marketing aspects of service quality. In *Emerging Perspectives in Service Marketing*; Berry, L.L., Shostack, G., Upah, G., Eds.; American Marketing Association: Chicago, IL, USA, 1983; pp. 99–107.
39. Caruana, A. Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *Eur. J. Mark.* **2002**, *36*, 811–828. [CrossRef]
40. Kotler, P.; Keller, K. *Marketing Management*; Prentice Hall: Upper Saddle River, NJ, USA, 2012.
41. Cheng, B.; Rashid, M.Z.A. Service quality and the mediating effect of corporate image on the relationship between customer satisfaction and customer loyalty in the Malaysian hotel industry. *Gadjah Mada Int. J. Bus.* **2013**, *15*, 99–112. [CrossRef]
42. Park, J.; Robertson, R.; Wu, C. Investigating the effects of airline service quality on airline image and passengers’ future behavioural intentions: Findings from Australian international air passengers. *J. Tour. Stud.* **2005**, *16*, 2–11.
43. Jan, M.T.; Abdullah, K.; Smail, M.H. Antecedents of loyalty in the airline industry of Malaysia: An examination of Higher-Order measurement model. In Proceedings of the 3rd Asia-Pacific Business Research Conference, Kuala Lumpur, Malaysia, 25–26 February 2013; pp. 1–14.
44. Lovelock, C.; Wirtz, J. *Services Marketing: People, Technology, Strategy*; Prentice Hall: Boston, MA, USA, 2010.
45. Sandada, M.; Matibiri, B. An investigation into the impact of service quality, frequent flier programs and safety perception on satisfaction and customer loyalty in the airline industry in Southern Africa. *South East Eur. J. Econ. Bus.* **2016**, *11*, 41–53. [CrossRef]
46. Bielecki, M.; Patel, D.; Hinkelbein, J.; Komorowski, M.; Kester, J.; Ebrahim, S.; Rodriguez-Morales, A.J.; Memish, Z.A.; Schlagenhauf, P. Air travel and COVID-19 prevention in the pandemic and peri-pandemic period: A narrative review. *Travel Med. Infect. Dis.* **2021**, *39*, 101915. [CrossRef]
47. Sharp, B.; Sharp, A. Loyalty programs and their impact on repeat-purchase loyalty patterns. *Int. J. Res. Mark.* **1997**, *14*, 473–486. [CrossRef]
48. Peacock, L. Keep Them Coming Back: 7 Innovative Customer Loyalty Programs (and How to Start Yours). Shopify. 2021. Available online: <https://www.shopify.com/blog/loyalty-program> (accessed on 15 October 2021).
49. Lewis, M. The influence of loyalty programs and short-term promotions on customer retention. *J. Mark. Res.* **2004**, *41*, 281–292. [CrossRef]
50. Hess, S.; Adler, T.; Polak, J.W. Modelling airport and airline choice behaviour with the use of stated preference survey data. *Transp. Res. Part E Logist. Transp. Rev.* **2007**, *43*, 221–233. [CrossRef]
51. Lederman, M. Do enhancements to loyalty programs affect demand? The impact of international frequent flyer partnerships on domestic airline demand. *Rand. J. Econ.* **2007**, *38*, 1134–1158. [CrossRef]
52. Carlsson, F.; Löfgren, Å. Airline choice, switching costs and frequent flyer programmes. *Appl. Econ.* **2006**, *38*, 1469–1475. [CrossRef]
53. Liu, Y. The long-term impact of loyalty programs on consumer purchase behavior and loyalty. *J. Mark.* **2007**, *71*, 19–35. [CrossRef]
54. Limberger, P.F.; Pereira, L.A.; Pereira, T. The impact of customer involvement in airline loyalty programs: A multi-group analysis. *Tour. Manag. Stud.* **2021**, *17*, 37–49. [CrossRef]
55. Kim, S.; Jang, J.; Kim, I. The role of passengers’ involvement in cause related marketing: Moderated mediation effects of brand attitude and brand consciousness in the airline industry. *Int. J. Sustain. Transp.* **2022**, *16*, 585–596. [CrossRef]
56. Hennessey, S.M.; Yun, D.; MacDonald, R. Determinants of travel intentions to a neighboring destination. *Travel Tour. Res. Assoc. Adv. Tour. Res. Glob.* **2016**, *16*, 1617370.
57. Lepp, A.; Gibson, H. Sensation seeking and tourism: Tourist role, perception of risk and destination choice. *Tour. Manag.* **2008**, *29*, 740–750. [CrossRef]
58. Koo, C.; Joun, Y.; Han, H.; Chung, N. A structural model for destination travel intention as a media exposure: Belief-desire-intention model perspective. *Int. J. Contemp. Hosp. Manag.* **2016**, *28*, 1338–1360. [CrossRef]
59. Orîndaru, A.; Popescu, M.; Alexoaei, A.P.; Căescu, Ş.; Florescu, M.S.; Orzan, A. Tourism in a post-COVID-19 era: Sustainable strategies for Industry’s recovery. *Sustainability* **2021**, *13*, 6781. [CrossRef]
60. Peric, G.; Dramićanin, S.; Conić, M. The impact of Serbian tourists’ risk perception on their travel intentions during the COVID-19 pandemic. *Eur. J. Tour. Res.* **2021**, *27*, 2705. [CrossRef]
61. Briliana, V. Consumer satisfaction on airline passenger loyalty: Antecedents and outcomes. *Int. J. Bus. Econ. Law* **2018**, *16*, 1–9.
62. Namukasa, J. The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry. *TQM J.* **2013**, *25*, 520–532. [CrossRef]

63. Hair, J.F.; Hult GT, M.; Ringle, C.M.; Sarstedt, M.; Danks, N.P.; Ray, S. *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*; Springer International Publishing AG: Cham, Switzerland, 2021.
64. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [[CrossRef](#)]
65. Doll, K. Why Do People Take Part in Risky Behavior? *eCounseling*. 2021. Available online: <https://www.e-counseling.com/addictions/why-do-people-take-part-in-risky-behavior/> (accessed on 5 October 2021).
66. Herman, A.M.; Critchley, H.D.; Duka, T. Risk-taking and impulsivity: The role of mood states and interoception. *Front. Psychol.* **2018**, *9*, 1625. [[CrossRef](#)]
67. Bryan, A.; Rocheleau, C.A.; Robbins, R.N.; Hutchinson, K.E. Condom use among high-risk adolescents: Testing the influence of alcohol use on the relationship of cognitive correlates of behavior. *Health Psychol. Off. J. Div. Health Psychol. Am. Psychol. Assoc.* **2005**, *24*, 133–142. [[CrossRef](#)]
68. Deepa, M.V.; Jayaraman, K. Scale measurements for airline service quality to secure passenger confidence in air travel. *Qual. Manag. J.* **2017**, *24*, 31–50. [[CrossRef](#)]
69. DiMeglio, D. Press Release Travel 2020–2021. American Customer Satisfaction Index. 2021. Available online: <https://www.theacsi.org/news-and-resources/press-releases/press-2021/press-release-travel-2020-2021> (accessed on 5 October 2021).

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.