IBN HALDUN UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF AIR TRANSPORT MANAGEMENT

MASTER THESIS

IMPACT OF FLIGHT DELAYS ON PASSENGER'S PURCHASE INTENTIONS: THE CASE OF ZANZIBAR AIRPORT

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THESIS SUPERVISOR
PROF. ALİ OSMAN KUŞAKCI

İSTANBUL, 2024

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by
JUMA ALI SULEIMAN

A thesis submitted to the School of Graduate Studies in partial fulfillment of the requirements for the degree of Master of Science Air Transport Management

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İSTANBUL, 2024

APPROVAL PAGE

This is to certify that we have read this thesis and that, in our opinion, it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science in Air Transport Management.

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ACADEMIC HONESTY ATTESTATION

I hereby declare that all information in this document has been obtained and presented by academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ÖZ

UÇUŞ GECİKMELERİNİN YOLCULARIN SATIN ALMA NİYETLERİNE ETKİSİ: ZANZİBAR HAVALİMANI ÖRNEĞİ

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Uçuş gecikmeleri, hava yolculuğunda sık karşılaşılan aksaklıklar olup yolcuların çeşitli tepkilerine ve havayolu şirketleri açısından ciddi sonuçlara yol açmaktadır. Havacılık sektörü, müşteri memnuniyetini ve sadakatini artırmak için bu etkileri anlamaya çalışmaktadır. Bu çalışma Zanzibar havaalanına odaklayarak, uçuş gecikmelerinin yolcuların havayolu hizmetlerini yeniden satın alma niyetlerini nasıl etkilediğini araştırarak, havayolu yönetiminin gecikmeleri ele alma biçimi ile müşteri davranışı arasındaki etkileşimi ele almaktadır. Çalışma şu temel araştırma sorularını yanıtlamayı amaçlamaktadır: Uçuş gecikmeleri yolcuların havayollarına yönelik satın alma niyetlerini nasıl etkiler? Yolcuların kontrol atıflarının gecikmelere verdikleri duygusal tepkiyi şekillendirmedeki rolü nedir? Havayollarının hizmet kurtarma çabaları yolcu memnuniyetini ve öfkesini nasıl etkiler?

Nicel bir yaklaşım benimseyen bu çalışma, gecikme atfı, hizmet kurtarma, öfke, memnuniyet ve belirtilen yeniden satın alma niyetlerine ilişkin yolcu algıları hakkında veri toplamak için Likert ölçeği kullanan anket tabanlı bir tasarım kullanmaktadır. Anket, Zanzibar havaalanından seyahat eden ve yakın zamanda gecikme yaşayan farklı yolcu gruplarını hedefleyerek geniş bir perspektif ve deneyim yelpazesini yakalamayı amaçlamaktadır.

Çalışma, bir hizmetten duyulan memnuniyetin satın alma niyetleriyle olumlu yönde

ilişkili olmasına rağmen, gecikmelerin olumsuz etkilerini hafifletmek için yeterli bir faktör olmadığını ortaya koymuştur. Araştırma, öfkenin satın alma niyetleri ve gecikmeler üzerinde algılanan kontrol arasındaki ilişkideki önemli aracı işlevini doğrulamıştır. Bu sonuç, hoş olmayan duyguların tüketici sadakati üzerindeki zararlı etkilerini gösteren diğer çalışmalarla tutarlıdır. Tazminat ve özür dileme gibi hizmetleri kurtarma çabaları yolcu memnuniyeti üzerinde olumlu bir etkiye sahipken, öfkeyi azaltma ve satın alma niyetlerini geri kazanma konusunda daha az etkili olmuştur.

Anahtar Kelimeler: Havayolu Hizmet Kurtarma, Satın Alma Niyeti, Uçuş Gecikmesi, Yolcu Memnuniyeti**,** Zanzibar Havaalanı.

ABSTRACT

IMPACT OF FLIGHT DELAYS ON PASSENGER'S PURCHASE INTENTIONS: THE CASE OF ZANZIBAR AIRPORT

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Flight delays are common disruptions in air travel, invoking a wide array of responses and consequences for passengers. The aviation industry seeks to understand these impacts to improve customer satisfaction and retention. Focusing on the Zanzibar Airport, this study investigates how flight delays affect passengers' intentions to repurchase airline services, addressing the interplay between airline management of delays and customer behavior.

The primary research questions in this study seek to answer the following: How do flight delays impact passengers' purchase intentions toward airlines? What is the role of passengers' control attributions in shaping their emotional response to delays? How do airline's service recovery efforts affect passenger satisfaction and anger?

By leveraging a quantitative approach, this study employs a survey-based design using a Likert scale to collect data on passengers' perceptions of delay attribution, service recovery, anger, satisfaction and stated repurchase intentions. The survey targeted a diverse group of passengers who traveled at Zanzibar Airport and who have recently experienced delays, capturing broad perspectives and experiences.

The study found that, although satisfaction with a service is positively correlated with purchase intentions, it is not a sufficient factor to mitigate the harmful effects of delays.

The research validated the important mediating function of anger in the connection between purchase intentions and perceived control over delays. This result is consistent with other studies that show the harmful effects of unpleasant emotions on consumer loyalty. Although efforts to recover services, such as compensation and an apology, had a positive impact on passenger satisfaction, they had less effect on reducing anger and restoring purchase intentions.

Keywords: Airline Service Recovery, Flight Delay, Passenger Satisfaction, Purchase Intention, Zanzibar Airport.

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LIST OF SYMBOLS AND ABBREVIATIONS

AC	Attribution Control
AN	Anger
APEC	Asia-Pacific Economic Cooperation
AVE	Average Value Extracted
CBSEM	Covariance Based Structural Equation Modeling
CFA	Confirmatory Factor Analysis
CR	Composite Reliability
EAC	European Aviation Club
EU	European Union
FAA	Federal Aviation Administration
FSNC	Full-Service Network Carriers
IIASL	International Institute of Air and Space Law
KLM	Royal Dutch Airlines
LCC	Low Cost Carrier
PLSEM	Partial Least Squares Structural Equation Modeling
SR	Service Recovery
TPB	Theory of Planned Behavior
ZAA	Zanzibar Airport Authority
ZNZ	Zanzibar
α	Cronbatch Alpha
β	The Coefficient of the Construct

CHAPTER I

INTRODUCTION

An archipelago known for its immaculate beaches and lively culture, Zanzibar (ZNZ) is mostly dependent on tourism. Zanzibar Airport was selected for the case study. The airport is on Unguja Island, one of the two major islands in the Zanzibar archipelago. This archipelago is made up of a fusion of civilizations, and it attracts many tourists each year with its historical legends, sun and sand beaches, traditional sailing dhows, carved wooden door chests, and clove fragrances. (Anderson, 2013). Zanzibar is regarded as a global hub for promotion of fishing and diving tourism. The tourism sector on these islands is expanding quickly, averaging 4% yearly growth, and they welcome 135,000 visitors on average each year. (Anderson, 2013).

Because of this reliance, Abeid Amani Karume International Airport as the country's leading aviation gateway must run well. This dependence emphasizes the efficient operation of its primary aviation gateway, Abeid Amani Karume International Airport. The airport has recently expanded to accommodate the growing number of tourists. However, it operates near its capacity, particularly during peak seasons. The airport serves the major cities in East Africa, Europe, and the Middle East and can accommodate approximately two million passengers. It was formerly known as Zanzibar International Airport or Kisauni Airport. In 2010, the name was changed to honor the island's first president, Abeid Amani Karume. This limited capacity increases vulnerability to disruptions, making flight delays a critical concern for the island's economy and visitor experience (ZAA annual report, 2023).

Besides domestic airlines, more than ten international airlines are flying to ZNZ, linking the archipelago to essential centers in Europe, the Middle East, and Africa. The major operators with daily flights are Turkish Airlines, Ethiopia Airlines, Oman Air, Fly Dubai, Qatar Airways, and Kenya Airlines, while other airlines such as KLM, Air France, and Discover Condo operate in Zanzibar with multiple frequencies in a week.

Depending on various foreign carriers complicates flight operations and emphasizes the necessity of concerted efforts to handle delays efficiently (ZAA annual report, 2023). The airport currently has not officially established a transit facility for transit passengers. However, approximately 200,000 transit passengers travel to the airport every year. The airlines that provide scheduled and unscheduled service at Zanzibar Airport are shown in Table 1.1 and 1.2 respectively.

Table 1.1. Airlines Providing Scheduled Services to ZNZ, 2023

International Airlines	Hub Airport	International Airlines	Hub Airport	Domestic Airlines	Hub Airport
Air Tanzania	Dar Es Salaam	Air France	Paris	Coastal Aviation	Zanzibar
Condor	Frankfurt	Euro Wings	Frankfurt		
Ethiopian Airlines	Addis Ababa	KLM	Amsterdam	Zan Air	Zanzibar
Edelweiss Air	Zurich	Turkish Airlines	Istanbul	Flight link	Dar Es Salaam
Fly Safar	Cape Town	FlyDubai	Dubai	Auric Air	Zanzibar
Safari link Aviation	Nairobi	Oman Air	Muscat	Precision Air	Zanzibar
Kenya Airways	Nairobi	Flight link	Dar Es Salaam	Unity Air	Zanzibar
Qatar Airways	Doha	Precision Air	Zanzibar	As Salaam Air	Zanzibar
Uganda Airlines	Entebbe	Discover Airlines	Frankfurt	Air Tanzania	Dar Es Salaam

Source: Zanzibar Airport Authority, 2023

Table 1.2. Airlines Providing Unscheduled Services to ZNZ, 2023

International Airlines	Hub Airport	Domestic Airlines	Hub Airport	Domestic Airlines	Hub Airport
Enter Air	Warsaw	Air Excel	Arusha	Jambo Aviation	Dar Es Salaam
Neos	Rome and Milano	My fly Aviation	Zanzibar	Shine Aviation	Dar Es Salaam
HiSky	Bucharest	Fly Zanzibar	Zanzibar	Safari Plus	Dar Es Salaam
Smart wings	Prague	Tropical Air	Zanzibar	Tanapa	Arusha
Sky Up Airlines	Kyiv	Pelican Aviation	Dar Es Salaam	Tanzan Air	Dar Es Salaam
European Air Charter	Sofia	Regional Air	Arusha		
Lot Polish	Warsaw	Safar Air Link	Dar Es Salaam		

Source: Zanzibar Airport Authority, 2023

Table 1.3. Passenger and Cargo Performance Indicator, 2023

	Per Year	Per Month	Per Day
Total Aircraft Movements	58,971	4914	161
Total Passengers	1,940,548	161712	5,317
Total Capacity of the Airport	2,000,000	167000	5,480
Total Cargo (in and out) tons	3,773.01	314.4	10.3
Current use by Humanitarian Flights	N/A		

Source: Zanzibar Airport Authority, 2023, 2023

At a global level, **a**ir travel plays a pivotal role in modern transportation by connecting individuals, businesses, and nations. However, flight delays are becoming an increasingly common issue that can significantly affect the airline industry and its customers (Ball et al. 2010). **A**djustments made to air traffic control protocols in the 1960s gave airlines more leverage. Before the jet age, controllers regulated excess traffic by gradually feeding planes onto the runways and stacking them over the airports where they arrived (Heppenheimer & Heppenheimer, 1995). Nevertheless, jetliners would not be able to use this because their low stack speeds result in high fuel consumption. Alternatively, flow control would have observed that these planes remained on the ground at the airports where they were leaving until there was space for them. The long hours spent circling in stacks would simply be replaced by equally long hours in departure lounges, waiting for new takeoff times for their significantly delayed flights, where passengers might not even notice the difference (Heppenheimer & Heppenheimer, 1995).

As air travel demand grows, so does the impact of flight delays. The Federal Aviation Administration has noted that such delays lead to an annual cost exceeding $3 billion for commercial airlines. In addition, the Bureau of Transportation Statistics reported a cumulative arrival delay of 860,646 hours in 2016. The consequences of flight delays are expected to become more severe in the future due to increasing air traffic congestion, the growth in commercial airline operations and an increase in the number of passengers flying each year. These delays are likely to continue because of factors such as weather and unpredictable flight maintenance (Kalliguddi & Leboulluec, 2017).

Recent research indicates that flight delays have a discernible impact on consumer behavior, often resulting in negative word of mouth and reduced passenger demand (Kim & Park, 2016). Furthermore, the economic weight of delays is substantial, influencing not only passenger welfare but also airfares and airlines' financial health (Li et al., 2021). These disruptions echo the industry, culminating in direct and indirect costs that can reach billions of dollars, affecting airlines and passengers separately (Anupkumar, 2023). The emotional and psychological consequences for travelers subjected to delays are equally significant, altering satisfaction levels and loyalty intentions. In the era of information accessibility, passengers are more aware of and

responsive to delayed information, which further influences their travel decisions (Britto et al., 2012).

As we highlight the complexities associated with flight delays, we aim to develop a comprehensive understanding of strategies to minimize their occurrence and adverse effects. This study will contribute to the impact of flight delays by observing the relationship between different constructs such as service recovery, attribution control, emotional response and consumer satisfaction within the aviation industry influence the behavioral patterns of airline customers (Li et al., 2021) mainly for areas with identical or similar characteristics and geographical location with Zanzibar. The impact of flight delays is multifaceted, and this study makes a substantive addition to the understanding of these impacts, suggesting pathways toward more resilient and passenger-friendly air travel (Li et al., 2021).

To understand the impact of flight delays on passenger experience comprehensively, it is crucial to consider the insights provided by existing studies. Flight delays not only inconvenience travelers but also prompt a broader examination of the airline's service quality and its responsiveness to disrupted passengers (Britto et al., 2012). For instance, observed that delays in flights on a specific route tend to decrease passenger demand and increase airfares, underlining the significant economic and experience-related costs incurred by both airlines and their customers (Ferrer et al., 2012). When passengers face delays, they often endure financial repercussions and emotional strain and may even alter their future travel habits as a response. Delays can result in a ripple effect in the airline industry, with an impact that extends beyond immediate inconvenience. The influence of these delays on consumer behavior and airline decisions is significant, pushing airlines to adjust their schedules and leading to increased operational costs. Moreover, passengers' access to delayed information through numerous online sources influences their travel decisions (Britto et al. 2012). This relationship highlights the importance of transparent and timely communication from airlines to mitigate negative passenger experiences and maintain customer loyalty.

Regarding welfare, according to Britto et al. (2012), the econometric estimates derived from research indicate that flight delays lead to a reduction in both customers and

airlines. The impact on airlines' welfare is expected to be three times larger than that on customers' welfare (Britto et al., 2012). Thus, it is evident that the impact of flight delays extends well beyond the tarmac, affecting airline reputation, passenger loyalty, and the financial health of the carriers. Addressing these issues demands a strategic approach from airlines in terms of scheduling, customer service, and investment in delay-mitigation practices. Overall, flight delays have a profound impact on passenger experience, leading to decreased demand, higher airfares, and reduced welfare for consumers and producers in the airline industry (Britto et al., 2012). In addition to inconveniencing travelers, flight delays prompt a broader examination of an airline's quality of service and responsiveness to disrupted passengers. Flight delays result in significant financial losses for both airlines and passengers. Billions of dollars can be lost financially because of flight delays, which raises expenses for both airlines and travelers. Furthermore, passenger experience during aircraft delays is significantly affected by these delays (Ferrer et al., 2012).

1.1. Problem Statement

The airline industry is essential to the global transportation network because it connects distant territories and promotes economic growth. Nevertheless, the persistent issue of flight delays presents a burden leading to considerable interruptions and financial setbacks for carriers, travelers, and airport operators (Anupkumar 2023).

According to the Federal Aviation Administration (FAA) report, in 2019, flight delays impacted nearly 20% of flights in the US, resulting in an estimated $32.9 billion in costs for airlines, airports, and passengers. Flight disruptions have substantial financial implications that reverberate throughout the broader economic landscape and not just within the aviation sector. These delays can result in a reduction in productivity and an increase in expenses for both airlines and passengers. For example, research by the National Center for APEC in 2019 indicated that in the Asia-Pacific area, the economic toll of flight delays amounted to approximately $13 billion owing to diminished productivity and heightened costs related to travel (Anupkumar, 2023).

The problem statement in this research is to ascertain the impact of flight delays on passengers, including behavioral consequences, economic implications, and passenger

experience during delays. This research will focus on understanding the influence of flight delays on passenger emotions, repurchase intention, and perceptions of airlines (Ferrer et al., 2012).

Upon completion of the research, the findings will be analyzed to discern patterns and correlations between various factors and the impact of flight delays. The analysis will reveal the direct and indirect influence of different constructs that flight delays have on passenger behavior and loyalty and the effectiveness of current mitigation strategies.

1.2. Research Questions

The objective of this research is to address the primary questions, which are, how do flight delays impact passengers' purchase intentions toward airlines? What is the role of passengers' control attributions in shaping their emotional responses to delays? How do service recovery efforts by airlines affect passengers' satisfaction and anger? Additionally, how do these emotional responses and service satisfaction of the passengers mediate the relationship between perceived airline performance/service recovery and subsequent purchase intentions?

To examine and investigate the impact of flight delays on passenger purchase intentions, the study focuses on the unique context of Zanzibar, a tourism-dependent archipelago in the Indian Ocean. Zanzibar's primary airport, Abeid Amani Karume International Airport, operates near its capacity of 2 million passengers annually, particularly during peak seasons. With over ten airlines connecting the islands to global destinations, ensuring timely flight operations is crucial for the island's economy and the satisfaction of its visitors.

1.3. Contributions

This study explore**s** the impact of flight delays on passengers and examine**s** their influence on travel decisions, airline operations, and customer satisfaction. It employs a quantitative survey approach to gain insights into the emotional and psychological effects of flight delays on passengers and their perceptions of airline responsiveness

and customer service during these delays (Anupkumar, 2023). Furthermore, the study also examines the current mitigation strategies to address flight delays and evaluate their effectiveness in minimizing passenger dissatisfaction. Additionally, this study explores the correlation between flight delays and passenger behavior, including reduced air demand due to service satisfaction and emotional response during delays.

CHAPTER II

LITERATURE REVIEW

2.1. The Concept of Flight Delays

Flight delay is a significant issue in the airline industry (Kalliguddi & Leboulluec, 2017). It had been a major concern in the aviation industry, negatively affecting both customer satisfaction and airline operations (Kim & Park, 2016). This review explores the multifaceted implications of flight delays by synthesizing findings from the existing literature. The concept of flight delays is a critical and complex issue within the air transportation system that affects all stakeholders, including airlines, airports, and passengers (Carvalho et al., 2021). Flight delays are typically understood as the period during which a flight is late or postponed and are represented by the difference between scheduled and actual departure or arrival times (Carvalho et al., 2021). The causes of flight delays can be diverse, ranging from inclement weather, technical problems with aircraft, air traffic congestion, and factors such as operational delays or security issues at airports (Carvalho et al., 2021). These delays can occur at the point of departure, en route, or upon arrival, each with different ramifications for the passengers and operators. The impact of flight delays has direct economic consequences for both airlines and passengers. Airlines may face penalties, fines, and additional operational costs, such as crew and aircraft retention, whereas passengers incur extra costs associated with rearranging travel plans (Carvalho et al., 2021; Zámková et al., 2017). There is also an environmental cost due to the increased fuel consumption and gas emissions (Carvalho et al., 2021). From a customer perspective, delays can lead to increased uncertainty, necessitating travelers to plan longer trips to ensure on-time arrival. Such disruptions can lead to emotional and psychological stress, reduced customer satisfaction, and shifts in consumer loyalty and travel preferences (Carvalho et al. 2021; Asfe et al. 2014).

Delay propagation is another concept that refers to how delays in one part of the system can cause subsequent delays throughout the airline network, thereby impacting

multiple subsequent flights (Hsu et al., 2014). Analytical approaches that examine extra costs and process delays highlight the ripple effect of flight delays on interconnected systems (Asfe et al., 2014). Various control strategies have been proposed to address and mitigate these impacts, including setting scheduled times for process completion, increasing service counters, and prioritizing services for emergent flights (Asfe et al., 2014). In summary, flight delays are a significant challenge for air transportation systems with far-reaching implications. Understanding these delays, their causes and their effects is crucial for their development.

2.2. The Perspectives on Flight Delay

The perspectives on flight delays in academic research cover operational, economic, psychological, and customer service aspects, each offering a different lens through which the impact of delays can be understood and addressed.

From an operational research perspective, multi-echelon inventory management in supply chains with uncertain demand and lead times is analogous to airlines' challenges. Because optimizing inventory requires strategic planning for uncertainty, airlines must consider the uncertain nature of demand and lead times caused by flight delays. This ensures effective resource utilization and service-level maintenance (Caballero et al., 2020).

Economic perspectives focus on the direct costs of airlines and the indirect costs to passengers. Airlines face potential fines, additional operational costs for crew and aircraft retention, and penalties for delay. Passengers incur costs such as additional travel arrangements and potential lost productivity. Wen et al. (2019) examine how airlines can address significant flight delays, indicating that offering compensation and upgrades can influence customer choice in disruptive situations.

From a social and psychological standpoint, flight delays can cause stress and anxiety among passengers, thereby affecting their overall travel satisfaction. Attarinejad's (2021) research underscores the negative emotional reactions and loyalty issues stemming from delays. Passenger behavior and repurchase intentions can be adversely affected, with delays potentially increasing negative word of mouth.

Effective communication is critical in examining customer service. Policies for managing flight delays and disruptions can directly affect passenger satisfaction. For example, collaborating with other airlines to arrange alternate travel or offer transparent compensation and support policies can help alleviate travelers' stress and improve their perception of the airline (Wen et al., 2019).

Addressing flight delays requires a comprehensive approach that accounts for their multifaceted impacts. Adopting modeling techniques for operational efficiency, improving customer service strategies, and understanding passenger psychology are integral to managing the repercussions of flight delays in the air travel industry.

On February 17, 2005, EU Regulation 261/2004 on denied boarding, flight delays, and cancellations came into force, replacing an earlier regulation of the year 1991. Approximately seven years later, on June 14–15, 2012, the International Institute of Air and Space Law of Leiden University (IIASL) and the European Aviation Club (EAC) jointly arranged a symposium that declared Regulation 261 the most litigated piece of EU air transport legislation in history (Haanappel, 2013).

Fundamentally, when disruptions occur in air travel, such as denied boarding, involuntary changes to class of service, delays, or cancellations, passengers are entitled to specific EU rights that are directly enforceable in national courts. Air travelers might be eligible for care and assistance, including food, beverages, phone calls, and accommodations, as well as options for ticket reimbursement or alternate travel arrangements. Furthermore, they may be entitled to financial compensation of up to £600 per individual. Nevertheless, if customers receive sufficient prior notice or if the delay or cancellation results from unanticipated circumstances that are not prevented by all reasonable measures, the airlines' liability to reimburse may be reduced. In addition, at the start of their trip, and in the case of any disruptions, travelers have the right to obtain accurate and comprehensive information about their rights (Drake, 2020).

2.3. Delays and Their Impacts

In air travel, flight delays are not simply an occasional inconvenience but a systemic issue with widespread repercussions that touch upon economic, psychological, and social aspects. The implications of such disruptions extend beyond immediate ones, affecting an array of stakeholders within the aviation industry (Britto et al., 2012; Victor, 2010). This study explores the associated impact of flight delays on passengers, emphasizing three broad areas: economic, psychological, and social ramifications.

2.3.1. Economic Impacts

Flight delays impose significant economic costs on many fronts. Airlines incur an array of additional expenses, such as extra crew, fuel, aircraft, and maintenance costs) (Anupkumar, 2023). According to the National Center of Excellence in Aviation Operations Research, airlines bore a cumulative expense of $8.3 billion in 2007 owing to flight delays. Passengers are also involved in the economic burden through lost opportunities for business productivity and leisure, amounting to $16.7 billion in wasted time in the same year (Anupkumar, 2023). Additionally, a Federal Aviation Administration study indicated that flight delays cost the US economy approximately $32.9 billion annually through both direct and indirect costs, such as lost revenue from missed connections and decreased airport tourism (Anupkumar, 2023).

2.3.2. Psychological Impacts

The impact of flight delays goes beyond just economics. Research indicates that passengers experience significant emotional distress, characterized by heightened stress and anxiety levels (Attarinejad, 2021). The unpredictability associated with delays fosters a sense of helplessness and frustration among travelers, which can lead to a decrease in overall travel satisfaction and loyalty to an airline (Anupkumar 2023).

The psychological toll of flight delays also affects business travelers, whose productive hours are curtailed, leading to inefficiencies and heightened operational costs for organizations reliant on air travel (Anupkumar 2023; Victor, 2010).

2.3.3. Social Impacts

Flight delays have a disruptive influence on personal and professional lives (Victor, 2010). They can lead to missed personal engagements, disrupted business meetings, and condensed time with loved ones, all of which contribute to the social costs of inefficient aviation systems (Asfe et al., 2014). The ripple effect on interpersonal relations and professional commitments highlights the broader societal impact of flight delays, which extends well beyond the immediate inconveniences experienced at airports (Efthymiou et al., 2018).

As detailed in this examination, the impact of flight delays is extensive, cutting across the economic, psychological, and social facets of passenger experience. Such disruptions necessitate rigorous scrutiny and effective mitigation strategies by airlines and regulatory bodies to uphold the integrity of air travel (Britto et al., 2012). Understanding and addressing the root causes and effects of these delays are critical for enhancing industry efficiency and passenger satisfaction (Heikkilä, 2002).

2.4. Flight Delays and Customer Satisfaction

Passenger satisfaction with airline services is a crucial measure of the quality of the travel experience provided by airlines. It involves passengers' evaluation of the service they receive during their journey, including pre-flight, in-flight, and post-flight interactions (Efthymiou et al., 2018). This concept encompasses how passengers feel about their journey, from the booking process to the flight itself, including on-time performance, quality of service, seating comfort, in-flight entertainment, staff behavior, and the handling of luggage (Efthymiou et al., 2018). Academic literature on this topic often highlights the multifaceted nature of airline service satisfaction and considers various service dimensions, such as comfort, convenience, safety, price, and punctuality.

For example, a study on British Airways' performance at Heathrow Airport, as investigated by Marina Efthymiou, Eric Tchouamou Njoya, Pak Lam Lo, and others, provided insights into how on-time performance shapes satisfaction levels. This revealed that passengers may have specific expectations when flying from a congested

airport, such as Heathrow, where delays are somewhat anticipated. As such, slight delays in departure may not significantly affect satisfaction because passengers have already factored this possibility into their travel plans. Consequently, this adjusted expectation helps British Airways maintain customer satisfaction by managing on-time arrival performance despite departure delays (Efthymiou et al., 2018).

Another example is provided in full-service network carriers (FSNC) versus low-cost carriers (LCCs). The study mentioned that LCC passengers might have lower expectations regarding specific amenities or services due to the lower prices they pay and tend to be more tolerant of issues such as delays. By contrast, FSNC passengers usually expect a higher level of service across the board. Thus, for LCCs, the competitive price may be a more significant driver of satisfaction, whereas for FSNCs, comprehensive service quality, including punctuality, is essential (Efthymiou et al., 2018).

These examples illustrate that passenger satisfaction is not just about meeting basic expectations but also about managing and sometimes exceeding those expectations strategically. Airlines can influence passenger satisfaction by understanding their customer base and tailoring their services accordingly, recognizing that different passenger segments may prioritize other aspects of the travel experience (Efthymiou et al., 2018).

It also highlights that service recovery plays a significant role; airlines that actively communicate with passengers during delays, provide accurate information and make efforts to mitigate the inconvenience (e.g., through vouchers, rebooking on the next available flights) can maintain higher levels of customer satisfaction despite disruptions. Effective service recovery can turn a potentially negative experience into a demonstration of an airline's commitment to customer care, which can have a lasting positive impact on passenger satisfaction (Efthymiou et al., 2018).

2.5. Flight Delays and Passenger Decision-making before Booking

Passenger decision-making before booking is a complex process that integrates various factors that influence the choice of airlines (Buaphiban, 2015). Passengers

consider multiple attributes when making flight-booking decisions, such as price, flight schedule, airline reputation, past experiences, and the value of frequent flyer programs (Proussaloglou & Koppelman, 1999).

The study "Airline seat management with the rejection-for-possible-upgrade decision" by Peng-Sheng (2001) provides insights into how fare class availability and the potential for upgrades can influence the decision-making process.

In service disruptions, passengers may weigh the risks of delays or cancellations. For example, a study by Montlaur and Delgado (2017) titled "Flight and Passenger Delay Assignment Optimization Strategies" explores the implications of potential delays on passenger satisfaction and decision-making. The strategic management of delays by airlines can influence passengers' booking choices as they may prioritize punctuality and reliability.

Additionally, passengers may consider airlines' policies and contingency plans for handling delays when making their decisions. The study "Preferences for alternative travel arrangements in case of significant flight delays: Evidence from choice experiments with prospect theory" reveals that passengers' preferences for delay mitigation options, such as compensation, alternate flights or additional services are significant. Airlines that offer more favorable and transparent policies for such scenarios might be more attractive to potential passengers (Wen et al., 2019).

Overall, the decision-making process before booking is essential as it is based on experience or perceived value from the airlines, and passengers assess a combination of factors related to the potential value they will receive and the risks involved in their travel. Airlines that understand and address these factors transparently in their offerings can influence potential passengers better during their decision-making process before booking a flight.

The literature presents a clear consensus on the adverse effects of flight delays, which extend beyond the inconveniences experienced during travel. Delays impose substantial economic costs, diminish customer loyalty, and influence broader airline

operational strategies. These studies underscore the importance of developing practical mitigation approaches to minimize the impact of flight delays on aviation ecosystems.

2.6. Passenger Purchase Intentions

Marketers and organizations must comprehend the purchase intentions of their customers. A consumer's expressed or inferred likelihood of engaging in a purchasing behavior is reflected in their purchase intention (Nursyirwan & Ardaninggar, 2020). According to Chen et al. (2020), it measures a consumer's "tendency to buy a specific brand or product" and is a valuable indicator of their actual purchasing behavior. Purchase intention, according to Kotler (Nursyirwan & Ardaninggar, 2020), is a behavioral reaction to an item that indicates a desire to make a purchase.

2.7. Factors Influencing Purchase Intentions

Numerous factors contribute to the formation of purchase intentions. These can be broadly categorized into internal and external factors.

2.7.1. Internal Factors

These include psychological and demographic variables. Attitudes and Beliefs: According to Chen et al. (2020), consumers develop attitudes about products and brands based on their perceptions and beliefs(Chen et al., 2020). Stronger buying intentions are frequently correlated with positive attitudes (Maxham III, 2001).

Perceived Value: Purchase decisions are heavily influenced by the perceived costs and benefits. Consumers who believe that a product is valuable are more likely to plan to buy it (Ferrand et al., 2010). Past Experiences: Purchase intentions can rise, and brand loyalty can be fostered by prior favorable encounters with a product or brand. On the other hand, negative experiences may discourage future purchases (Moreira et al., 2017).

2.7.2. External Factors

These encompass situational and marketing-related influences. Social Influences: A buyer's intentions can be affected by the advice of friends, family, and social groups. Customers frequently look at their social networks for approval (Morwitz et al., 2007).

Marketing Stimuli: By influencing consumer attitudes and perceptions, advertising, promotions, and other marketing initiatives can directly impact purchase intentions (Song et al., 2016). Economic Conditions: Regarding to durable products, factors such as income levels and price variations can impact consumers' intention to buy (Morwitz et al., 2007).

2.8. The Significance of Purchase Intentions in Air Travel

Understanding passenger purchase intentions is critical in the fiercely competitive airline sector (Hussain, 2016). For long-term success, recurring business and excellent word-of-mouth skills are essential. (Barreda et al., 2015). Service quality is an important area of focus for airlines since it directly affects customer satisfaction and behavioral intentions (Kim et al., 2013).

2.9. Flight Delays as Service Failures

According to Efthymiou et al. (2018), flight delays are a significant service failure in the air travel experience (Efthymiou et al., 2018). They annoy people, interfere with travel arrangements, and frequently produce negative feelings (Kim & Park, 2016). Studies have consistently demonstrated that poor service has a detrimental effect on client loyalty and satisfaction (Ferrer et al., 2012).

2.10. Impact on Emotional Response and Behavioral Intention

Flight delays, unfavorable emotional reactions, and ensuing behavioral intentions are all strongly correlated (Xu et al., 2021). According to Kim and Park (2016), travelers who encounter delays are more likely to experience frustration, anger, and anxiety. Consequently, they are less likely to use the airline again or refer others to it (Kim &

Park, 2016). This is consistent with research findings from 2016 on how airline service delays affect customers' behavior and emotional responses, which indicates that for airlines to create successful service recovery plans, they must first comprehend the emotional impact of delays (Kim & Park, 2016).

2.11. The Role of Delay Severity and Frequency

Passenger perceptions and intentions are significantly influenced by the degree and frequency of flight delays (Wen & Chi, 2013). According to a study on the behavioral effects of frequent flight delays, the detrimental effects of delays on future travel behavior increase with the number of occurrences, especially for members of frequent flyer programs. This emphasizes how crucial it is to reduce delays' frequency and length (Ferrer et al., 2012).

2.12. Moderating Factors

Although there is generally a negative correlation between flight delays and purchasing intentions, there are several moderating factors.

Airline Response and Communication: Proactive service recovery measures, such as providing reimbursement or substitute travel plans, combined with effective communication can lessen the adverse effects of delays (Kim & Park, 2016).

Passenger characteristics: Owing to the nature of their trips, business travelers, for example, may be less tolerant of delays than leisure travelers (Rhoden, 2010).

2.13. Long-term Impact on Travel Preferences

Long-term changes in a passenger's travel preferences may result from recurring unpleasant encounters caused by flight delays. Travelers may decide to forego specific airlines or routes notorious for delays in favor of those that they believe are more dependable (Ferrer et al., 2012). This emphasizes the importance of airlines dealing with the underlying reasons for delays and allocating resources to initiatives that improve their on-time performance.

CHAPTER III

UNDERSTANDING PASSENGER PURCHASE INTENTIONS IN THE CONTEXT OF FLIGHT DELAYS

In today's highly competitive airline industry, maintaining customer loyalty and satisfaction is essential for long-term success (David, 2013). Although cost, route network, and brand recognition are important in drawing customer attention, the practical reality of flight delays makes it challenging to sustain favorable consumer impressions (Lubbe & Victor, 2012). Passenger satisfaction can be significantly impacted by flight delays frequently viewed as service failures. This may cause negative emotions, disrupt traveling plans, and ultimately affect to make future purchases (Ferrer et al., 2012). Airlines must comprehend the complex relationship between flight delays and passenger purchase intentions to minimize adverse effects, implement efficient service recovery plans, and cultivate enduring customer loyalty (Wen & Chi, 2013).

This chapter explores the idea of purchasing intentions, with an emphasis on how flight delays affect them in the airline business. It attempts to provide a comprehensive framework for understanding the elements that influence passengers' decision-making once travel plans are disrupted. It does this by drawing on known consumer behavior theories and empirical evidence.

The chapter will first describe and expound upon buying intentions, highlighting its applicability to the aviation sector. Subsequently, it examines well-known theoretical models to examine how flight delays affect consumers' intentions to make purchases, including the Theory of Planned Behavior and the Service Recovery Paradox (Ajzen, 2011). It also explores the particular characteristics of flight delays, such as their length, frequency, and reason, and how these aspects affect passengers' perceptions and ensuing purchasing decisions. It describes how airline reaction tactics, such as

compensation, communication, and alternate travel plans, can help reduce the negative effects and increase purchase intention.

Finally, the chapter addresses how passenger attributes, such as psychographics and demographics, modify the association between flight delays and purchase intentions. The objective of this chapter is to provide airlines with the knowledge and insights they need to manage the difficulties caused by flight delays and cultivate good customer relations by offering a comprehensive understanding of these intricate dynamics.

3.1. Conceptualizing Purchase Intentions

Purchase intention, a well-established construct in consumer behavior research, reflects a consumer's "subjective probability that he or she will engage in a particular behavior" (Ajzen, 2002). It represents a cognitive state of readiness or predisposition to engage in a specific purchasing action, in this case, purchasing another plane ticket from a specific airline (Ordun, 2015). Purchase intention is a strong indicator of future behavior, although it does not ensure that a purchase is made (Young & Kim, 2004). Understanding passenger buying intentions is important for the airline business for several reasons (Yeoh & Chan, 2011). First, it offers information on repeat business and client loyalty which are critical for long-term profitability (Kumar & Shah, 2004). Second, it enables airlines to assess how well their marketing campaigns, service provisions and especially how they handle service interruptions like flight delays are effectively working (Kumar & Shah, 2004). Airlines may improve customer retention and reduce unfavorable perceptions by creating tailored interventions based on their understanding of how delays affect purchase intentions (Wen & Chi, 2013).

3.2. Distinguishing between Behavioral Intentions and Actual Behavior

Acknowledging the difference between intention and actual conduct is crucial, even though purchasing intentions provide insightful information about consumer behavior (Carrington et al., 2010). It is highlighted that several factors may impact the realization of purchasing intentions, resulting in a discrepancy between planned and actual behavior (Sun & Morwitz, 2010). These elements may consist of:

Situational intervening factors: Even with well-laid plans, unforeseen circumstances, such as personal emergencies or trip cancellations, might influence consumer behavior.

Competitive offerings: Passengers may be persuaded to change their minds from their original plans by alluring offers or offering better services from other airlines.

Time-lapse: The longer the time between when someone is measured and when they make a purchase, the more likely their intentions will be altered. (Sun & Morwitz, 2010).

Consequently, even though the study's primary goal is to comprehend passengers' buying intentions following flight delays, it also recognizes that these intentions may not always correspond to real repurchase behavior.

3.3. Theoretical Frameworks for Analyzing Purchase Intentions

This section explores the theoretical foundations of purchase intentions using well-established models from the literature on consumer behavior to offer a framework for comprehending the potential effects of flight delays on passenger choices (Pan & Truong, 2018). The Theory of Planned Behavior (Ajzen, 2011), Cognitive Dissonance Theory (Telci et al., 2011), and Service Recovery Paradox (Kau & Wan-Yiun Loh, 2006) are the three main hypotheses that will be discussed.

3.3.1. Theory of Planned Behavior (TPB)

According to the Theory of Planned Behavior, the closest precursor to actual activity is behavioral intention. The TPB states that three major factors influence intention.

Attitudes: A person's general assessment of engaging in the behavior (e.g., favorable or unfavorable sentiments regarding repurchasing from the airline).

Subjective Norms: The belief that one is under societal pressure to participate in a particular conduct (e.g., relatives or friends who encourage or dissuade traveling on the airline).

Perceived Behavioral Control: The person's confidence in their capacity to carry out the behavior (e.g., financial resources available and accessible to substitute flights) (Ajzen, 2011).

Regarding to flight delays, the TPB implies that a delay may hurt passengers' perceptions of the airline and could reduce their propensity to make a purchase (Ajzen, 2011). For example, dissatisfaction and annoyance brought on by delays could result in unfavorable attitudes toward the airline and lower chances of repurchasing (Casado & Más, 2002; Li et al., 2021). Likewise, travelers perceived behavioral control may be lowered if they see the delay as an indication of inadequate airline management or a lack of control, which could further affect their intentions (Taylor, 1994).

3.3.2. Cognitive Dissonance Theory

Based on the study by Telci et al. (2011) Cognitive Dissonance Theory suggests that people should try to maintain consistency in their attitudes, behaviors, and beliefs. People are motivated to lessen the psychological pain they experience when contradictions develop because they cause cognitive dissonance.

When a passenger's unpleasant experience with a delay conflicts with their positive pre-existing perceptions of an airline (e.g., reliability, good service), they may suffer dissonance in flight delays (Kumar & Shah, 2004). To reduce this dissonance, passengers might:

Change their attitude: They could minimize how serious the delay is or explain it as an inevitable occurrence.

Seek consonant information: To balance bad experiences, they can highlight the airline's advantages or prior successes.

Change their behavior: They might decide not to travel with the airline in the future, which would connect their actions with their bad experiences and lessen dissonance (De Vos & Singleton, 2020).

After a flight delay, the effects of cognitive dissonance on purchase intention can be complicated. However, some customers may be able to manage their dissonance by changing their mindset or looking for more information, which will allow them to retain their favorable opinion of the airline and their intention to make another purchase (Edwards, 2011). Others, however, could feel such strong dissonance that they decide not to fly with the airline again (Heuven & Bakker, 2003).

3.3.3. Service Recovery Paradox

According to the Service Recovery Paradox, when a service failure is successfully recovered from, customer satisfaction and loyalty can rise even more than they would have if the breakdown had never happened (Kau & Wan, 2006). This paradox emphasizes how crucial efficient service recovery is to reduce the detrimental effects of service outages, including aircraft delays (Van et al., 2019).

The service recovery paradox in the context of flight delays implies that airlines can respond to interruptions in a way that not only restores but possibly even improves customer satisfaction (Kau & Wan, 2006). Key elements of effective service recovery in this context might include:

Timely and transparent communication: Providing prompt and clear information to passengers regarding the reason for the delay and its anticipated duration.

Sincere apologies and empathy: Expressing real concern for the safety and well-being of passengers while acknowledging the inconvenience caused.

Tangible compensation: Giving coupons, miles, or other rewards according to how severe the delay was.

Proactive problem-solving: Providing other travel plans, help with rescheduling, or access to amenities while the trip is delayed are examples of proactive problem-solving (Etuk et al., 2023).

Airlines can transform a bad experience into a great one by surpassing what passengers expect during service outages. This can increase customer loyalty and encourage them to purchase (Hien et al., 2024).

These theoretical frameworks offer a useful prism to view the intricate connection between traveler purchase intentions and flight delays. Airlines can better understand how to reduce the adverse effects of delays and cultivate strong customer connections by considering the interplay of attitudes, subjective norms, perceived behavioral control, cognitive dissonance and the opportunity for service recovery.

3.4. Predictive Power of Purchase Intention

While purchase intentions are valuable predictors of buying behavior, the correlation between intention and actual purchase is not always perfect (Morwitz et al., 2007). Several factors can influence the gap between intention and action, including intervening variables, competitive offerings, time delay, external factors and impulsive buying (Morwitz et al., 2007).

Intervening Variables: Even the most sincere purchase intentions can be derailed by unforeseen events, such as job loss or family emergencies, which can have a substantial impact on a consumer's financial security (Morwitz et al., 2007).

Competitive Offerings: Customers may be persuaded to change their minds about their initial plans to buy through a competitor's clever marketing strategies, alluring product introductions, or alluring incentives (Morwitz et al., 2007).

Time Delay: Intentions are more likely to change as time elapsed between the measurement of purchasing intention and the real buying opportunity increases. This is especially important for those products impacted by trends or short lifecycles (Morwitz et al., 2007).

External Factors: Consumer confidence and spending patterns can be impacted by economic changes, political unrest, or unforeseen events such as natural disasters, which can ultimately affect purchase decisions (Morwitz et al., 2007).

Impulsive Buying: Not every purchase is planned. Customers usually disregard their previous purchase intentions in favor of impulsive purchases motivated by feelings, convenience, or enticing in-store displays (Jamieson and Bass, 1989).

3.5. Enhancing the Predictive Power of Purchase Intentions

The following tactics can be used to increase the precision of purchase intentions as predictors of purchasing behavior:

Specificity: To better understand consumer preferences, measure intentions for particular brands, goods, and periods (Morwitz et al., 2007).

Contextual Relevance: To represent real decision-making processes more accurately, capture purchase intentions within authentic purchasing contexts, such as Internet browsing or in-store encounters (Maity & Dass, 2014).

Behavioral Data: To provide a more comprehensive picture of customer behavior, we combine purchase intention data with observable behavioral data, such as past purchases, social media activity, and website surfing history (Maity & Dass, 2014).

Predictive Modeling: Create predictive models that consider a variety of elements impacting the relationship between purchase intentions and the usage of machine learning algorithms and statistical approaches (Azad et al., 2023).

Businesses may improve the predictive accuracy of purchase intentions and make better decisions regarding product development, marketing, and inventory management by recognizing the limitations of purchase intentions and proposing methods to improve them.

CHAPTER IV

METHODOLOGY AND APPLICATION

This chapter is dedicated to the research method and data analysis, in which we explain the statistical population, statistical sample, data collection method, data collection tools, validity and reliability of research data, and discuss the hypothesis results. This study was conducted at Abeid Amani Karume International Airport, where customers of different airlines operated at Zanzibar Airport participated in the survey distributed randomly. Based on the model formulated, survey questionnaire data obtained from the traveling customers of airline companies operating in the airline industry, especially at Zanzibar Airport will reveal the effect of flight delays on passengers' purchase intention. Accordingly, the model of the research is presented in Figure 4.1 as follows:

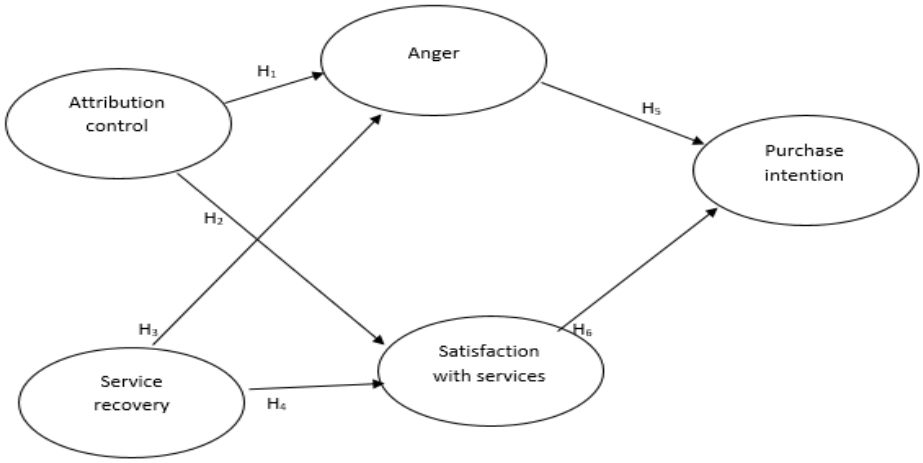

Figure 4.1. Model of the Research

4.1. Data Collection Method and Tools

In this research, Convenience sampling was employed in this study because it is a fast, affordable, and practical method. The researchers used only participants who are currently available. (Lammers & Badia, 2005). Convenience sampling can be

illustrated using several examples. In airports and shopping centers, people are chosen as they pass by and are interviewed about issues, candidates, or other things. (Lammers & Badia, 2005). As the study was conducted at the Zanzibar airport, the study used convenient sampling to collect the requested data from different airline customers by distributing the survey randomly to the respondents. The process of gathering data starts with the data collection stage, in which the researcher gathers results from the field and libraries, classifies them using inductive reasoning, analyzes them, and assesses their hypotheses. (Attarinejad 2021). A questionnaire survey approach was employed in this study to gather data. The initial section of the survey contained the participants' demographic data, such as their gender, age, marital status, level of education, reason for flying, and mode of transportation.

4.2. Description of the Research Questionnaire

The information was completed through a questionnaire that was created in Google Form and distributed among the different airline customers who travel at Zanzibar airport, and the respondents responded online. The questionnaire of this research consists of two main parts:

Table 4.1. Components of the Research Variables

Components	Number of questions	Cronbach's alpha Coefficient value
Attribution control	4	0.714
Service Recovery	4	0.718
Anger	4	0.701
Satisfaction with service	5	0.796
Purchase intention	5	0.773

General questions: This part of the questionnaire was designed to collect the demographic data and other characteristics of the respondents; these include gender, marital status, age, educational status, purpose of travel, and delay experience in their travel.

Questions related to the main research variables: as seen in Table 4.1, this part of the questionnaire includes research variables, which include the variables "Attribution control", "Service Recovery", "Anger", "Satisfaction with service" and "Purchase intention".

4.3. Descriptive Findings and Statistical Methods Used in the Study

In this study, the collected data related to individual and demographic characteristics, as well as data related to research variables, were analyzed by the SPSS program. By applying descriptive analysis, the demographic and other characteristics of the respondents are presented in both frequency distributions of tables and graphs. İn addition to descriptive analysis, by applying the SmartPLS analysis program, confirmatory factor analysis on each construct, correlation analysis, reliability analysis, and regression analysis were performed.

4.4. Description of Individual and Demographic Characteristics

In this study, a total of 304 respondents from different airline customers participated in the questionnaire conducted at the Zanzibar airport and data collected for each demographic from all participants were collectively evaluated and presented in both percentages and frequency table as described below.

In this study, after data collection, it was observed that 52.0% of respondents were male, and 48.0% were female as shown in Table 4.2 below. Based on the data, it can be concluded that the distribution of gender in the sample is relatively balanced, which is important for ensuring the research findings on customer satisfaction are applicable across different demographics. This balance allows the study to examine if there are gender-specific trends in experiencing and reacting to flight delays.

Table 4.2. Gender Frequency of the Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	158	52.0	52.0	52.0
	Female	146	48.0	48.0	100.0
	Total	304	100.0	100.0	

In this study, from the data collected, it was observed that 63.5% of the respondents were single and 36.5% were married as shown in Table 4.3 below.

Table 4.3. Marital Status of the Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	193	63.5	63.5	63.5
	Married	111	36.5	36.5	100.0
	Total	304	100.0	100.0	

As shown in Table 4.4, it was observed that at least 16.8% of respondents from different educational statuses had participated in the study which makes the questionnaire reliable by reducing the biases in data collection. The educational background of passengers varies from high school to postgraduate levels, which might suggest differences in the expectations and satisfaction levels of passengers with differing levels of education. The variety in educational status enables an analysis of its influence on passengers' perceptions and reactions to flight delays.

Table 4.4. Educational Status of the Participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High school/Equivalent	59	19.4	19.4	19.4
	Diploma	51	16.8	16.8	36.2
	Undergraduate	135	44.4	44.4	80.6
	Postgraduate	59	19.4	19.4	100.0
	Total	304	100.0	100.0	

Figure 4.2 reveals that visiting family and friends was the most common travel purpose (38.8%), followed by leisure tourism (23.0%), education (19.7%), and business (18.4%). This diversity in travel purposes has significant implications for how delays affect customer satisfaction. For example, business travelers prioritize punctuality because of their strict schedules, whereas leisure travelers may be more flexible. Understanding these varying needs allows airlines to tailor customer service strategies to different passenger groups, enhancing their overall travel experience.

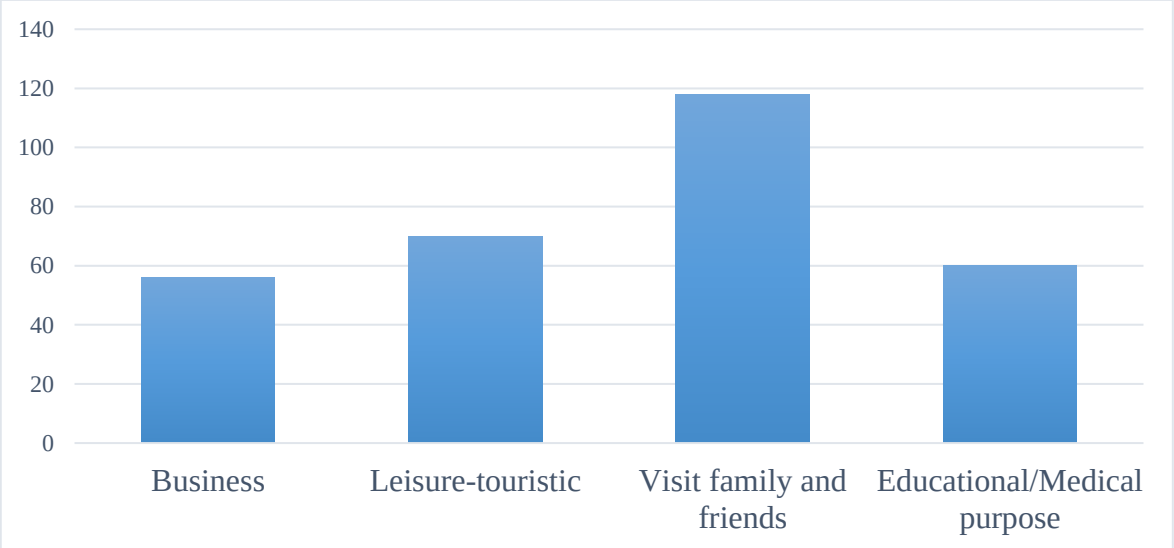

Figure 4.2. Frequency Distribution of Respondents' Travel Purpose

The age of the respondents is as follows. Of the 304 respondents, 33.2% were 18-25 years old, 44.1% were 26-34 years old and 22.7% were 35 and above years old as seen in Table 4.5 below.

Table 4.5. Frequency and Frequency Percentage of Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 years	101	33.2	33.2	33.2
	25-34 years	134	44.1	44.1	77.3
	34 and above	69	22.7	22.7	100.0
	Total	304	100.0	100.0	

As seen in Table 4.6, 76.3% of the respondents had been experiencing flight delays in their travel, in comparison 14.5% of the respondents were not sure about experiencing a delay and only 9.2% had not experienced flight delays.

Table 4.6. Frequency of Flight Delay Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	232	76.3	76.3	76.3
	No	28	9.2	9.2	85.5
	Maybe	44	14.5	14.5	100.0
	Total	304	100.0	100.0	

Collectively, these data points illuminate essential aspects of traveler demographics and behaviors that are essential to understanding customer satisfaction in flight delays. By correlating this data with feedback from passengers about their experiences with delays, the research can identify key factors that contribute to or detract from customer satisfaction.

The importance of the data lies in its potential to indicate trends and relationships that can inform airlines and airport authorities on areas where improvements can be made to mitigate the impact of delays. For instance, frequent travelers might benefit from dedicated services to expedite their journey when delays occur, or educational campaigns might be developed to inform passengers about their rights and the reasons behind delays, potentially improving satisfaction despite the inconvenience. The data set cultivates a foundation for a nuanced analysis that considers the diverse spectrum of air travelers essential for refining the customer experience and enhancing the aviation industry's response to flight delays.

4.5. SmartLPS Analysis

In the social sciences and behavioral fields, structural equation modeling with partial least squares estimation (PLS-SEM) is an excellent way to assess the relationships between constructs (or factors, components, latent variables, unobserved variables, subscales, etc.) (Bido & Silva, 2019). PLS-SEM is particularly suited to field knowledge, the nature of problems, and data obtained from human social relations because of its "flexibility" and capacity to estimate complicated models with multiple constructs, variables, and causal linkages between constructs (arrows), as well as formative models. (Bido & Silva, 2019).

It is advised to perform the two-step analysis in the covariance-based structural equation modeling. Initially, the measurement model is evaluated using the confirmatory factor analysis (CFA) model, in which all latent variables are connected. Subsequently, another model with structural relations (hypotheses) was included. This method is not advised in the context of PLS-SEM since the algorithm is "partial." (Bido & Silva, 2019). Owing to its user-friendliness, compared to command-line-based competitors, it has a more intuitive graphical interface, making it simpler to learn and use, especially for new users (SmartPLS, 2024). In addition, reporting and visualization of the Smart-PLS can make it easier to understand and share results by offering thorough reports and eye-catching diagrams (Hair et al., 2019).

4.5.1. Measurement Model Analysis

The questionnaire's validity and reliability indicate that it is a suitable tool for measuring the characteristics and features for which the tool is designed and is ideal for measurement (Attarinejad, 2021). In this study, the Smart-PLS analysis technique was used to measure the validity and reliability of the construct using different indicators. The validity of the data was tested and measured by observing the Average Value Extracted (AVE) of the constructs, discriminant validity, and convergent validity, where the cross-loading and Fornell & Larcker analysis were performed. The reliability of the model constructs was tested and measured by observing the composite reliability (CR) and Cronbatch's Alpha value.

4.5.2. Validity Analysis

The degree to which a concept is precisely quantified in a quantitative study is known as its validity (Heale & Twycross, 2015). The significance of validity lies in the fact that improper measurements lead to scientifically less valuable research (Attarinejad, 2021). A measure's validity can be ascertained in several ways, such as by examining the validity of the criteria's content and structure. One way to measure the validity of the questionnaires is by performing discriminant validity, convergent validity and AVE analysis. As a result, the construct validity guarantees that this version has all the dimensions and elements necessary to accurately convey the desired idea (Attarinejad, 2021).

4.5.3. Convergent Validity

The average variance extracted (AVE) of the chosen values between 0 and 1 is convergent validity. A result of 0.5 or higher is acceptable. According to Nitzl (2010) and Ringle & Spreen (2007), at least 50% of the indicators explain the construct. The AVE values for each variable are displayed in Table 4.7 and every variable satisfies the criteria.

Table 4.7. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)
Attribution Control	0.537
Service Recovery	0.542
Anger	0.527
Satisfaction with Services	0.550
Purchase Intention	0.523

4.5.4. Discriminant Validity

Discriminant validity analysis was performed to ascertain how the tested constructs distinguished themselves from the remaining components. This analysis can determine the number of elements representing a single construct and the degree of correlation between the two constructs. (Kamis et al., 2020). This study applies two tests to measure discriminant validity:

i. Cross Loading
ii. Fornell & Larcker

4.5.4.1. Cross Loading

According to Hair et al. (2016), the loading value of the construct must be greater than that of all other constructs. It is each predictor's subjective freedom to the latent variable. These criteria can help lessen the likelihood of multicollinearity among latent variables by recommending that the latent variable's Average Variance Extracted (AVE) value should be higher than the values of the other variables. (Kamis et al., 2020).

Table 4.8. Finding of Discriminant Validity-Cross Loading Analysis

	AC	AN	PI	SR	SS
AC2	0.709	0.392	0.431	0.301	0.354
AC3	0.770	0.398	0.356	0.273	0.551
AC4	0.669	0.348	0.315	0.421	0.304
AC5	0.777	0.407	0.356	0.323	0.422
AN2	0.406	0.794	0.551	0.298	0.373
AN4	0.295	0.635	0.453	0.212	0.351
AN5	0.402	0.801	0.823	0.266	0.343
AN6	0.431	0.654	0.396	0.252	0.555
PI1	0.423	0.582	0.694	0.287	0.309
PI2	0.372	0.500	0.733	0.133	0.365
PI3	0.280	0.421	0.661	0.143	0.359
PI4	0.289	0.482	0.687	0.215	0.369
PI5	0.402	0.801	0.823	0.266	0.343
SR1	0.354	0.271	0.259	0.741	0.212
SR2	0.346	0.251	0.209	0.782	0.366
SR4	0.303	0.243	0.201	0.700	0.248
SR6	0.288	0.282	0.216	0.719	0.237
SS1	0.380	0.484	0.354	0.257	0.704
SS3	0.563	0.368	0.364	0.294	0.764
SS4	0.418	0.337	0.328	0.240	0.746
SS5	0.395	0.379	0.353	0.255	0.759
SS6	0.325	0.449	0.360	0.319	0.733

Discriminant validity is difficult if the loading value for one construct is greater than that for the other. The findings demonstrated that an item's cross-loading value within a particular construct was higher than the loading value for a different construct. The results showed the importance of cross-loading, which supports the measurement model construct validity.

From Table 4.8, it can be observed that only one indicator crossed on AN2- AN shows insignificance, and due to the high importance and effect on the other constructs, the statement is considered for the analysis. To improve the validity of the construct some of the indicators were eliminated from the construct. The eliminated indicators include AC1 from attribution control, AN1 and AN3 from anger, SR2 and SR5 from service recovery and SS2 from satisfaction with service.

4.5.4.2. Fornell & Larcker

By using this analytical technique, the highest value in any column or row is compared to the highest correlation value of any other construct by comparing the value of the AVE square root with the construct correlation value. This approach is predicated on the idea that latent variables for some latent variables should explain the higher construct more than the lower constructs. (Kamis et al., 2020). Table 4.9 shows the Fornell & Larcker of each construct after some indicators that did not meet the outer loading conditions were eliminated.

Table 4.9. The Finding of Fornell & Larcker's Analysis

	AC	AN	PI	SR	SS
AC	0.733				
AN	0.527	0.725			
PI	0.496	0.803	0.722		
SR	0.438	0.354	0.299	0.736	
SS	0.571	0.540	0.474	0.368	0.742

4.5.5. Reliability Analysis

A technical feature of a measuring instrument is its reliability, which is the extent to which the instrument produces consistent findings under the same circumstances (Attarinejad 2021). Reliability is the degree to which a scale measures the desired attribute properly, as well as the productivity and continuity of the scale (Sahin et al., 2021). A measurement tool's homogeneity, consistency, and suitability for assessing

the formation under examination are all revealed by its reliability. The Cronbach's alpha (α) approach is used to examine if the items in Likert-type additive scales are consistent. The variables are deemed reliable if their Cronbach's alpha (α) coefficient is more significant than 0.700 (Sahin et al., 2021).

The scales used in the study had alpha values over 0.700. A coefficient of determination alpha greater than 0.700 signifies the dependability of the variables. The accepted level of reliability for the questionnaire's composite reliability is 0.7 and above. (Kamis et al., 2020). As can be seen from the table below, the Cronbach Alpha Coefficient value and Composite Reliability values are at the accepted level for each contract.

Table 4.10. Reliability Analysis of Scales

Variable	Number of Questions	Cronbach Alpha coefficient value	Composite reliability (CR)
Attribution Control	4	0.714	0.727
Service Recovery	4	0.718	0.726
Anger	4	0.701	0.735
Satisfaction with Services	5	0.796	0.821
Purchase Intention	5	0.773	0.825

4.6. Structural Model Assessment

Researchers can concurrently estimate and analyze complex correlations between several independent and dependent variables using structural equation modeling or SEM. The concepts described are typically not observable; instead, they are implicitly assessed using a range of indicators. When estimating relationships, SEM considers measurement errors in observable variables. Consequently, this method produces a more precise measurement of the theoretical concepts of interest (Hair et al., 2021).

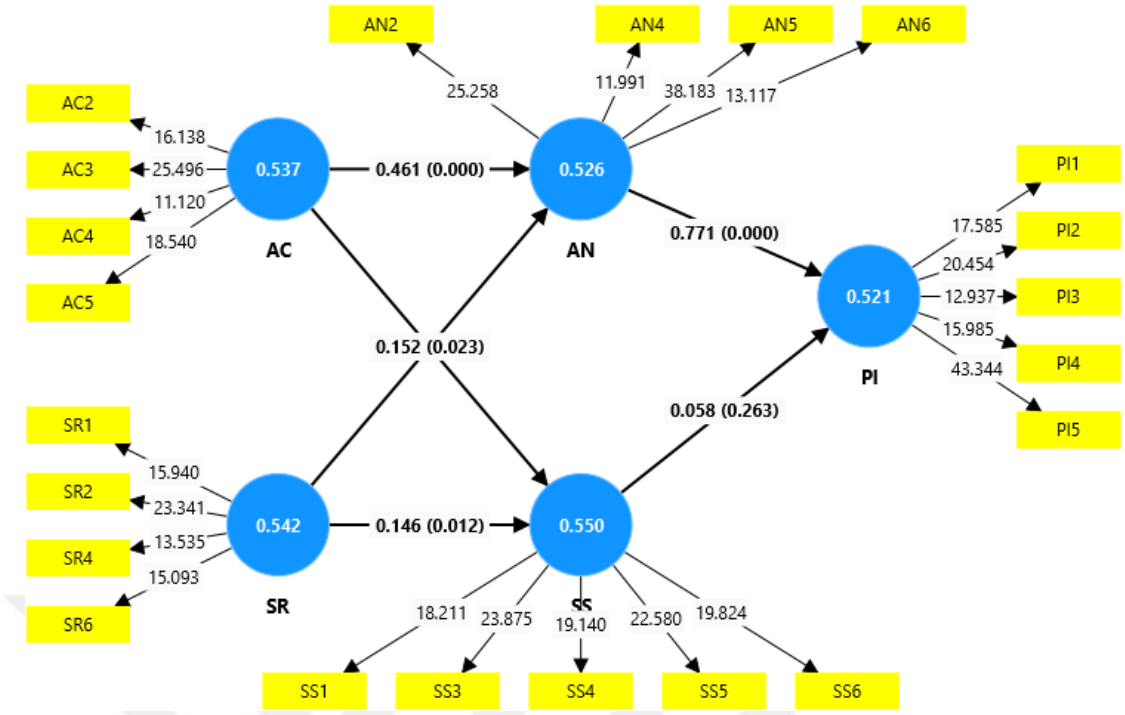

Figure 4.3. PLS-SEM Structural Model of the Study

In practice, two widely used techniques dominate SEM: partial least-squares SEM (PLS-SEM, also known as PLS path modeling) and covariance-based SEM (CBSEM). The main purpose of CB-SEM is to validate (or invalidate) ideas and the underlying. According to Jöreskog and Wold (2021), PLS is a "causal–predictive" method of SEM that concentrates on elucidating the variation in the model's dependent variables..

There are three main things in the structural model. Path models are diagrams that show the variable correlations and hypotheses examined when SEM is utilized. Constructs, also known as latent variables cannot be measured directly. They are shown as circles or ovals in the route models. The variables that contain raw data and are directly measured are indicators, items, or manifest variables. In the path models, they appear as rectangles. As seen below in Figure 4.3, the relationships between constructions and their designated indicators are represented by arrows.

PLS-SEM arrows typically have a single head to indicate directional relationships. Strong theoretical support exists for the idea that single-headed arrows depict predicted correlations that can be interpreted as causal connections (Hair et al., 2021).

There are two components of the PLS path model. First, we present a structural model that connects constructs (ovals or circles). In the context of PLS-SEM, this model is called the inner model. The linkages were also displayed using the structural model (routes) that connect constructs. Second, In PLS-SEM, the measurement models of the constructs, also known as the outer models, depict the relationships between the constructs and indicator variables (rectangles) (Hair et al., 2021).

4.7. Regression Analysis

By using a mathematical model, the relationship between a dependent variable and the independent variable or variables assumed to affect the dependent variable was explained using regression analysis. (Sahin et al., 2021). This method of analysis shows the extent to which the independent variables account for the change in the dependent variable (Sahin et al., 2021). The following are the considerations that must be taken into account in this analysis (Sahin et al., 2021):

- There should be less than 0.05 significance between variables.
- The value of t ought to be more significant than or equal to +2000, roughly.
- The β coefficient should be approximately (-) or (+) 200 and above.

If these prerequisites are satisfied, the R^2 value is examined for the analysis. The R^2 score indicates how well the independent variables in the model measure the dependent variables. (Sahin et al., 2021). By taking into consideration these conditions the following hypothesis is established in this research.

H1: Anger mediates the relationship between Control attribution and purchase intention.
H2: Control attribution is positively related to satisfaction.
H3: Service recovery is negatively related to anger.
H4: Service recovery positively influences satisfaction with services.
H5: Anger will be negatively related to purchase intention.
H6: Satisfaction mediates the relationship between service recovery and purchase intention.

4.8. Test of Research Hypotheses

H1: Anger mediates the relationship between Control attribution and purchase intention.

As seen in Table 4.11 the results of the mediation analysis reveal that anger does indeed significantly and positively mediate the relationship between control attribution and purchase intention.

This is evidenced by the following: Beta value = 0.355: This indicates a positive and substantial mediating effect of anger. T-value = 7.223: The high t-value suggests the mediating effect is statistically significant. P < 0.05: This confirms the statistical significance of the mediating effect, exceeding the typical threshold for significance.

Based on these findings, we can confidently conclude that hypothesis H1 is supported. Anger plays a significant role in explaining how passengers' perceived control over flight delays influences their subsequent purchase intentions. Specifically, higher levels of perceived control over delays are associated with lower levels of anger, which in turn, are associated with more favorable purchase intentions.

Table 4.11. Bootstrapping Analysis for H1

Relationship	Original sample (O)	Sample mean (M)	T statistics (|O/STDEV|)	P values
AC -> AN -> PI	0.355	0.356	7.223	0.000

H2: Control attribution is positively related to satisfaction.

Table 4.12 presents the results for the direct effect of control attribution on satisfaction with services. The findings demonstrate a significant positive relationship between these two variables, as evidenced by the following:

Beta value = 0.507: This indicates a substantial positive effect of control attribution on satisfaction. T-value = 8.567: The high t-value strongly suggests that this relationship is statistically significant. P < 0.05: With a p-value below the conventional threshold, we can confidently confirm the statistical significance of the positive relationship.

The results provide strong support for hypothesis H2. Passengers who perceive a higher level of control over flight delays tend to report greater satisfaction with the airline's services. This highlights the importance for airlines to not only focus on service recovery efforts but also on enhancing passengers' sense of control during disruptions.

Table 4.12. Bootstrapping Analysis for H2

Relationship	Original sample (O)	Sample mean (M)	T statistics (|O/STDEV|)	P values
AC -> SS	0.507	0.508	8.567	0.000

H3: Service recovery is negatively related to anger.

This hypothesis predicts that as service recovery efforts increase, anger in passengers should decrease. From Table 4.13, the results of Beta value = 0.152 indicate a positive relationship, meaning that as service recovery increases, anger also increases slightly. T-value = 2.281: While this suggests the relationship is statistically significant as P-value = 0.023, the value is indeed below the 0.05 threshold which indicates the significant relationship between these variables. However, it was expected that when service recovery increases, anger will decrease owing to the immediate service recovery and alternative travel arrangements offered to passengers during flight disruptions. Due to the nature of the hypothesis formulated, it can be concluded that H3 was not supported, as the relationship between the two variables was not negative.
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Table 4.13. Bootstrapping Analysis for H3

Relationship	Original sample (O)	Sample mean (M)	T statistics (|O/STDEV|)	P values
SR -> AN	0.152	0.156	2.281	0.023

H4: Service recovery positively influences satisfaction with services.

As seen from Table 4.14, it confirms hypothesis H4, revealing a statistically significant positive relationship between service recovery and satisfaction with services (β = 0.146, t = 2.504, p = 0.012). This indicates that increased service recovery efforts are directly associated with higher levels of customer satisfaction. İt can be concluded that the hypothesis H4 was supported.

Table 4.14. Bootstrapping Analysis for H4

Relationship	Original sample (O)	Sample mean (M)	T statistics (|O/STDEV|)	P values
SR -> SS	0.146	0.151	2.504	0.012

H5: Anger will be negatively related to purchase intention.

H5 describes the direct effect between Anger and Purchase intention. From Table 4.15, the result revealed a positive effect between Anger and Purchase intention as the p-value met the significance criteria. The significance where Beta value = 0.839, t-value = 4.658, and $p<0.05$ implies that the H5 is significantly and positively supported. In this case, it was expected that the negative influence of anger on purchase intention. However, the results revealed a positive relationship between these two variables which does not reflect the reality in daily life. This discrepancy resulted from the questions set during survey preparation not negatively confirming the survey questions, therefore they could not support the nature of the hypothesis formulated.

However, due to the lack of travel alternatives in Zanzibar as few airlines operate internationally, the passengers have no choice in their travel and they have to book with the same airlines again to go to their destinations regardless of flight delays they had experienced before with the same airlines.

Table 4.15. Bootstrapping Analysis for H5

Relationship	Original sample (O)	Sample mean (M)	T statistics (|O/STDEV|)	P values
AN -> PI	0.771	0.773	21.698	0.000

H6: Satisfaction mediates the relationship between service recovery and purchase intention.

H6 evaluates whether satisfaction mediates between Service recovery and Purchase intentions. From Table 4.16, it can be observed that the beta value is -0.014: This implies that the effect of service recovery on purchase intention through satisfaction is minimal and negative.

T-value = 0.384: This is very close to zero, indicating a weak effect and P-value = 0.701: This is much larger than 0.05, confirming the non-significance. This result suggests that service satisfaction has a non-significant mediation effect between Service recovery and Purchase intention. Therefore, it can be concluded that the H6 was not supported.

Table 4.16. Bootstrapping Analysis for H6

Relationship	Original sample (O)	Sample mean (M)	T statistics (|O/STDEV|)	P values
SR -> SS -> PI	0.008	0.009	0.956	0.339

Table 4.17. Significance Testing Results of the Structural Model Path Coefficients

Relationship	Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	Signifi-cance	P values
AC -> AN -> PI	H1	0.355	0.356	0.049	7.223	**	0.000
AC -> SS	H2	0.507	0.508	0.059	8.567	**	0.000
SR -> AN	H3	0.152	0.156	0.067	2.281	**	0.023
SR -> SS	H4	0.146	0.151	0.058	2.504	**	0.012
AN -> PI	H5	0.771	0.773	0.036	21.698	**	0.000
SR -> SS -> PI	H6	0.008	0.009	0.009	0.956	****	0.339

From Table 4.17, ** indicates that the hypothesis was supported whereas *** means that the hypothesis was not supported.

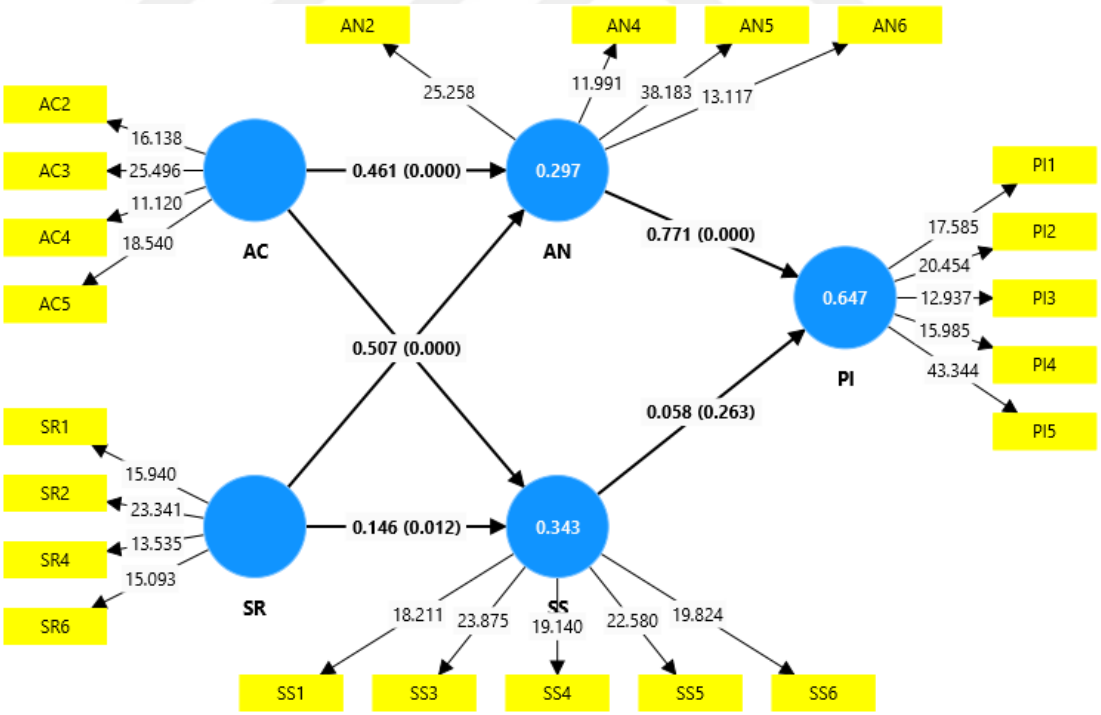

Figure 4.4. Results of the Structural Model in Bootstrapping

Values outside the parentheses are standardized structural coefficients (betas), the values within the parentheses are p-values, the ones in blue balls are R-square values, and the ones shown on each indicator of the construct are t-values.

Table 4.18. Research Hypotheses and Results

	HYPOTHESES	**RESULT**
H1	Anger mediates the relationship between Control attribution and purchase intention	Supported
H2	Control attribution is positively related to satisfaction	Supported
H3	Service recovery is negatively related to anger	Supported
H4	Service recovery positively influences satisfaction with services	Supported
H5	Anger will be negatively related to purchase intention	Not supported
H6	Satisfaction mediates the relationship between service recovery and purchase intention	Not supported

4.9. Limitations of the Research

Although this study offers insightful information about the connection between flight delays and passenger behavior, it must be acknowledged that it has shortcomings that suggest areas for further investigation.

Geographical and Airline Scope: The data for the study was only collected from international airline customers who had traveled via Abeid Amani International Airport in Zanzibar. To improve the findings of the study for the whole aviation sector, future studies should broaden the scope to include a greater variety of airlines and geographical regions.

Cross-sectional data that recorded passenger perceptions and intentions at a certain moment in time were used in this study. Studies that follow passenger behavior over

several flights and delays, known as longitudinal research, may offer more sophisticated insights into ways loyalty and perceptions change over time.

Data collection method: In this study, only questionnaire surveys were used to collect data; multi-method data collection helps cover a wide range of information that cannot be gathered by a particular method.

The study was conducted at Zanzibar airport, the findings may not fully reflect the dynamic pattern of the airline industry where the competition increases and demand patterns change over time.

CHAPTER V

CONCLUSION AND RECOMMENDATION

This study investigated the impact of flight delays on passenger purchase intentions and explored several behavioral patterns of passengers associated with flight disruptions. It was conducted at Abeid Aman Karume International Airport in Zanzibar and presented in five chapters. In the first chapter, the effect of flight delays and its associated cost to both passengers and airline companies, the necessity and importance of research, problem statement, and research questions. The study began by recognizing the widespread problem of examining delays and emphasizing the importance of air travel in today's linked world. The chapter emphasizes the various effects of delays, from financial strain on airlines to the psychological harm they cause to travelers. This paved the way for realizing how important it is to examine the relationship between delays and passengers' intent to make purchases. The concept of flight delays and its perspective, the impact of flight delays, economic, psychological, and social impacts, flight delays and customer satisfaction, flight delays and passenger decision-making prior to booking and purchase intentions and its associated factors were explained in Chapter Two.

The third chapter was dedicated to purchase intention in the context of flight delays. The research methodology and model used in this research, data completion, analysis techniques, and testing of research hypotheses are described in Chapter Four. Then, explanations about the population and statistical sample and the method of analyzing the research data are presented, and the software tools SPSS and SmartPLS are used in the research to analyze the data introduced. To improve the sample research results, data from various airline customers with flights at Zanzibar Airport were gathered. A questionnaire was administered to randomly selected airline passengers who agreed to participate in the study. A total of 304 participants took part in the survey, and data were gathered within one month.

Selecting the best statistical models for data analysis is difficult. PLS-SEM analysis was employed in this study to obtain the results in the fourth chapter.

Two validity tests, discriminant validity and convergent validity analysis, were run. Cronbach-alpha analysis and composite reliability were used in the reliability analysis.

The study's conclusions eliminated a few items based on Composite Reliability (CR) values, which must be greater than 0.7, and the Average Value Extracted (AVE) for each construct, which must be greater than 0.5 (Kamis et al., 2020). This result made it abundantly evident that the study's items, including the ones that have been eliminated, possess sufficient validity and reliability to meet the test criteria, which gauge all facets, sub-constructs, and research consent. (Kamis et al., 2020). This study used five main constructs which are attribution control, service recovery, anger, satisfaction with the service, and purchase intention, based on these five constructs six hypotheses were formulated and tested using the SmartPLS analysis. The demographic data and other characteristics of the respondents were analyzed by using SPSS analysis and presented in both tables and charts.

Compared with the previous studies, the key findings of this study can be discussed as follows.

Anger as a potent Mediator: The research validated the important mediating function of anger in the connection between purchase intentions and perceived control over delays. This result is consistent with other studies that show the harmful effects of unpleasant emotions on consumer loyalty (Li et al., 2021). Travelers who were particularly angry about delays they blamed on the airline (e.g., bad scheduling) were much less likely to make another purchase.

Service Recovery: Although efforts to recover services, such as compensation and an apology, had a positive impact on passenger satisfaction, they had less of an impact on reducing anger and restoring purchase intentions. This implies that airlines need to address the psychological effects of delays in a way that goes beyond transactional recovery techniques. This result is consistent with earlier studies that highlighted the

value of sympathetic communication and emotional work in service rehabilitation (Wirtz & Mattila, 2004).

The study found that, although satisfaction with a service is positively correlated with purchase intentions, it is not a sufficient factor to mitigate the harmful effects of delays. This emphasizes how airlines should treat customer happiness as a starting point rather than a guarantee of continued patronage. Meeting and even surpassing customers' expectations is essential for building real relationships with them that will endure poor service. Regarding the results obtained from the analysis, the following key findings are observed related to Zanzibar.

5.1. Zanzibar's Distinctive Characteristics and Study Findings

The generalizability of research findings on "the impact of flight delays on purchase intentions" is contingent upon the specific setting in which the study was conducted. Zanzibar offers a distinctive case study because it is an island resort mostly dependent on tourism and has certain infrastructure constraints. Due to this reason, the findings of this study could be applied to limited areas with similar geographic locations as Zanzibar.

Economy Dependent on Tourism: Zanzibar's economy is mainly dependent on tourism, which generates over 51% of the archipelago's GDP. (Anderson, 2013). With 73,468 foreign tourists in January 2024, Zanzibar saw a 6.8% increase from the 68,813 visitors recorded in January 2023 and a 4.7% increase from the 70,186 visitors recorded in the previous month (Tourism Statistical Release, Jan, 2024). Travelers' itineraries are directly affected by flight delays, which may result in unhappiness, unfavorable ratings, and a lower chance of returning. This sensitivity makes the effects of flight delays more economically significant than in places with more diverse economies.

Restricted airlines and flight options: Abeid Amani Karume International Airport is the primary hub for Zanzibar's transportation needs. The impact of flight delays is worsened by the absence of alternatives, which gives passengers fewer options and may cause further delays in their travel schedules.

Cultural Context: Zanzibar has a distinct culture, distinguished by its friendliness and carefree vibe. Flight delays can conflict with this image, especially if are handled poorly, resulting in a negative impression of the place and its residents.

Within the operational setting of Zanzibar Airport, the function of anger as a mediator in the relationship between perceived control over flight delays and passenger purchase intentions is noteworthy. Even minor disruptions to airline operations can have a significant impact on passengers because of restrictions in infrastructure and passenger capacity. These infrastructure limitations make it more difficult for airlines to handle disruptions efficiently, leading to service delays that aggravate customers. The lack of easily accessible service recovery solutions, including alternative travel plans or on-site lodging, is the cause of this increase in anger, which worsens the effect on purchase intention.

While providing compensation and an apology can help passengers at Zanzibar Airport feel more satisfied following a delayed trip, these service recovery measures do not seem to be as successful in calming down passengers or making them want to fly with that airline again. This implies that offering transactional treatment alone is insufficient.

This is very important for Zanzibar Airport for the following reasons.

Elevated Expectations: Due to Zanzibar's popularity as a travel destination, visitors frequently have hopes for a hassle-free and delightful journey. Flight delays can produce a sharp contrast to these expectations, which can amplify anger and irritation mainly when they are not well managed.

Limited Infrastructure: Because ZNZ is a smaller airport, it does not have as many resources or the ability to deal with major disruptions. The efficiency of service recovery initiatives may be hampered by limited options for accommodation, rebooking or basic amenities.

Emotional Impact: Passengers may experience heightened negative feelings as a result of feeling abandoned and powerless in the face of delays if prompt and satisfactory

remedies are not provided. These profound psychological effects might not be resolved by a straightforward apology or payment.

As a result, airlines using the Zanzibar Airport must do more than follow standard service recovery protocols. They ought to think about the following operational steps:

Acknowledge and Validate Emotions: Teach employees to sympathize with angry customers and accept the inconvenience. Anger can be significantly reduced by taking a real and sympathetic stance.

Offer Clear and Timely Communication: Educate travelers about the reason for the delay, its anticipated length, and their options. Transparency can lessen the emotions of powerlessness by managing expectations and lowering ambiguity.

Provide Experiential Recovery: If feasible, give passengers perks such as free Wi-Fi, airport lounge access, or coupons for food and drink to make the most of their time during the wait. This shows the consideration above and beyond mere payments.

Airlines may promote a more positive perception even under challenging circumstances by attending to the emotional and psychological effects of delays. This will ultimately safeguard their brand image and promote return travel to Zanzibar.

5.2. Contribution to Zanzibar Airport Management

To mitigate, improve customer satisfaction, and reduce the impact of these flight disruptions on airline customers experienced at Zanzibar airport, the following are actionable insights that this study provides to the Zanzibar Airport Authority.

Proactive Communication: It is critical to have reliable communication systems in place that can promptly and accurately notify travelers about delays. This can help control expectations, lessen ambiguity, and enable itinerary modifications.

Enhanced Service Recovery: It is critical to create successful, culturally aware service recovery plans that go above and beyond mere recompense. This could include

providing comfortable waiting areas, prioritizing rebooking on alternate flights, and providing a local experience.

Infrastructure Investment: Reducing the frequency and length of delays can be achieved by investing in airport infrastructure to expand capacity, boost operational effectiveness, and improve weather resilience.

Cultural Sensitivity Training: Giving airport employees this training will enable them to deal with irate customers in a compassionate and understanding manner, hence reducing unpleasant situations.

5.3. Recommendations for the Aviation Industry

The study's conclusions lead to the following suggestions for airlines to improve passenger loyalty and lessen the adverse effects of flight delays:

Proactive and open communication: Place effective communication plans that deliver precise and timely information about delays, including their reason and anticipated duration. Managing passenger attributions and mitigating annoyance and dissatisfaction can be facilitated by transparency regarding circumstances, both inside and without the airline's control.

Empathy-driven Service Recovery: Service Motivated by Empathy Recovery: Make emotional healing your top priority and go beyond transactional recompense. Teach front-line employees to react to passenger annoyances with compassion and understanding. Express regret, give concise explanations, and give staff members the freedom to customize small gestures that show you genuinely care about the passenger's experience.

Empowerment and Control Restoration: To re-establish a sense of agency in passengers, and provide choices whenever feasible. These could be different flight schedules, lounge access, food coupons, or the choice to disembark and wait in a more comfortable location.

Data-Driven Insights for Proactive Mitigation: Utilize data analytics to spot trends and anticipate any delays. This enables anticipatory rebooking alternatives, proactive passenger communication, and efficient resource allocation to reduce interruptions in airlines' operations, which can have a significant effect on both airlines' customers and companies.

5.4. Future Research Directions

Even if the current research offers insightful information about the connection between flight delays and passengers' intent to make purchases, there are a few areas that still need to be looked into further:

The role of technology: The function of technology is to examine how technology, like predictive analytics and real-time flight monitoring applications, can lessen the detrimental effects of delays on passenger perceptions and intentions (Li et al., 2021).

Cultural differences: Examining cultural differences in how passengers react to aircraft delays and how well various service recovery tactics work.

The impact of airline ancillary revenue strategies: This examines the potential effects on passengers' ability to tolerate delays caused by the growing frequency of additional costs for things like baggage, seat preference, and other services (Szathmary, 2014).

Passengers are more sensitive to and aware of delayed information in an age of information accessibility, which further affects their travel choices (Britto et al., 2012). As we draw attention to the intricacies involved in flight delays, our objective is to create a thorough grasp of methods to reduce their frequency and unfavorable consequences.

The airline sector faces significant difficulties in the form of flight delays, which have a considerable impact on passenger purchase intention and overall satisfaction (Law et al., 2022). In an increasingly competitive market, airlines may create proactive tactics to reduce disruptions, improve service recovery efforts, and ultimately strengthen customer loyalty by comprehending the elements that influence passenger perceptions and the long-term effects of delays.

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APPENDIXES

THE QUESTIONAIRE USED IN THE RESEARCH

DEMOGRAPHIC QUESTIONS

1. What is your gender?
    - Male
    - Female
2. Marital status
    - Single
    - Married
3. Educational status
    - High school/Equivalence
    - Diploma
    - Undergraduate
    - Postgraduate
4. What is your age
    - 18-24 years
    - 25-34 years
    - 34 and above
5. What is your purpose of travelling?
    - Business
    - Leisure-touristic
    - Visit family and friends
    - Educational/Medical purpose
6. Have you ever experience a flight delay
    - Yes
    - No
    - Maybe

ATTRIBUTION CONTROL

7. The cause of the flight delay was controllable
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
8. The cause of the flight delay was preventable
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
9. The cause of the flight delay was avoidable
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
10. I believe airlines could have full control of delay if they provide frequent update on flight status
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
11. How much do you agree that the effective response of the airlines and compensation positively affect your flight delay perception?
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree

SERVICE RECOVERY

12. I did expect the airline to act quickly if I encountered a delay
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
13. For my situation I had high expectations that the airline would take action to deal
    - with the delay
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
14. I expected the airline to do everything in its power to solve the delay problem
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
15. I am satisfied with the procedure and resources used to resolve the delay problem
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
16. I am satisfied with the outcome of the service recovery process
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree

- Strongly agree

17. In my opinion the airline provided a satisfactory solution to my flight delay
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree

ANGER

18. How is your emotional response when you experience flight delays?
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
19. I feel angry when an airline service is delayed.
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
20. I feel better when the airlines provide me compensation and alternative services during flight delays
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
21. I maintain my level of anger regardless of the airline's service efforts toward delays.
    - Strongly disagree
    - Disagree
    - Neutral

- Agree
- Strongly agree

22. My anger towards flight delays is reduced when I get fair compensation and alternative services.
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
23. The level of my anger towards an airline after a delay does not affect my future purchase decisions
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree

SATISFACTION

24. The airline provided a favorable solution for me.
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
25. Overall, I am pleased with the service experience with the airline
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
26. As a whole I am happy with the airline
    - Strongly disagree
    - Disagree

- Neutral
- Agree
- Strongly agree

27. Globally I am satisfied with the services received from the airline
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
28. I am very satisfied with how the airline is handling the flight delay.
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
29. The airline provided service recovery that met my needs.
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree

PURCHASE INTENTION

30. I will recommend the corresponding airline even if I experience a service delay
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
31. I will take a flight of the same airline company next time.
    - Strongly disagree
    - Disagree

- Neutral
- Agree
- Strongly agree

32. I am more likely to choose this airline from now on
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
33. I want to fly again with the same airline
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree
34. It will be my first choice to fly with the same airline for my next trip.
    - Strongly disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly agree

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