



NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
TOURISM MANAGEMENT PROGRAM

**THE IMPACT OF FLIGHT DELAY ON THE TRAVELER'S
NEGATIVE REACTIONS AND LOYALTY**

FARIVAR ATTARINEJAD

MASTER'S THESIS

NICOSIA

2021

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NICOSIA

202

**FARIVAR ATTARINEJAD: THE IMPACT OF FLIGHT DELAY ON THE
TRAVELER'S NEGATIVE REACTIONS AND LOYALTY**

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Tourism and Hospitality Management**

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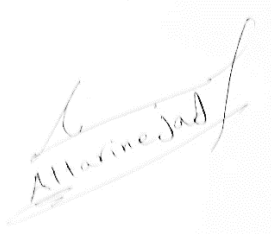
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DECLARATION

I Farivar Attarinejad hereby declare that this dissertation entitled ‘The impact of flight delay on the travelers’ negative reactions and loyalty’ has been prepared myself under the guidance and supervision of ‘Assoc. prof. Dr. Nesrin Menemenci Bahcelerli’ in partial fulfillment of the Near East University, Graduate School of Social Sciences regulations and does not to the best of my knowledge breach any law of Copyrights and has been tested for plagiarism and a copy of the result can be found in the Thesis

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08/10/2021

A handwritten signature in black ink, written in a cursive style, that reads "Farivar Attarinejad". The signature is written on a light-colored, textured background.

Farivar Attarinejad

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Above all, my unlimited thanks and heartfelt love would be dedicated to my dearest family for their loyalty and their great confidence in me. I'm greatly indebted to my mom for giving me a support, encouragement and constant love have sustained me throughout my life. I would like to thank my father for his personal support and great patience at all times.

Eventually, I would like to thank my sisters from all of my heart for their valuable help and support since I was in my early study until now.

DEDICATION

To my family....

ABSTRACT

THE IMPACT OF FLIGHT DELAY ON THE TRAVELERS' NEGATIVE REACTIONS AND LOYALTY

Today, flight delay is one of the most common and familiar words that can occur in any air trip and has a negative effect on passengers, organizations and their manpower. The aim of this study was to determine the effect of service delays on emotional responses and customer behavior. For this purpose, by reviewing the research literature, variables related to the research topic were identified. Then, a survey of people who have experienced service delays was conducted. In general, the obtained data were analyzed using structural equation modeling. According to the results of the analysis, flight delays have a negative effect on emotional reactions as well as a negative effect on acceptance of delays and intention to repurchase and loyalty. In addition, delays in negative word-of-mouth have a positive effect. This study provides a basic knowledge of how airlines develop the appropriate use of the motivational impact of service delays on emotional responses and behavioral goals.

Keywords: Flight delay, customer loyalty, service delay, emotional responses, customer satisfaction

OZ

UÇUŞ GECİKMESİNİN SEYAHATÇİLERİN OLUMSUZ TEPKİLERİ VE SADAKAT ÜZERİNE ETKİSİ

Günümüzde uçuş gecikmesi, herhangi bir hava yolculuğunda ortaya çıkabilecek ve yolcuları, organizasyonları ve insan gücünü olumsuz yönde etkileyen en yaygın ve tanıdık kelimelerden biridir. Bu çalışmanın amacı, hizmet gecikmelerinin duygusal tepkiler ve müşteri davranışları üzerindeki etkisini belirlemektir. Bu amaçla araştırma literatürü taranarak araştırma konusu ile ilgili değişkenler tespit edilmiştir. Ardından hizmet gecikmesi yaşayan kişilere anket uygulanmıştır. Genel olarak elde edilen veriler yapısal eşitlik modellemesi kullanılarak analiz edilmiştir. Analiz sonuçlarına göre, uçuş gecikmelerinin duygusal tepkiler üzerinde olumsuz etkisinin yanı sıra gecikmelerin kabulü, tekrar satın alma niyeti ve sadakat üzerinde olumsuz bir etkisi vardır. Ayrıca olumsuz ağızdan ağza iletişimde yaşanan gecikmeler de olumlu etki yapmaktadır. Bu çalışma, havayollarının hizmet gecikmelerinin duygusal tepkiler ve davranışsal hedefler üzerindeki motivasyonel etkisinin uygun kullanımını nasıl geliştirdiğine dair temel bir bilgi sağlar.

Anahtar Kelimeler: Uçuş gecikmesi, müşteri sadakati, hizmet gecikmesi, duygusal tepkiler, müşteri memnuniyeti

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ABBREVIATIONS

- TRNC: Turkish Republic of North Cyprus
- TC: Turkish citizen
- WWW: World Wide Web

INTRODUCTION AND GENERAL BACKGROUND

Introduction

Flight delay is an ordinary experience for travelers and passengers in airports. It is one of the most common occurrences at airports, and also delays are difference between the estimated time for delivery a service and real time it takes to complete it.

Also flight delay is widely recognized as a critical performance indicator of air transport systems in commercial aviation industry. These delays are considered a waste of time by many today, and no customers enjoy waiting for long periods due to delays (Casado Diaz and Mas Ruíz, 2002). If users recognize their waiting time as long because of a delay in service, they will consider the level of service low, leading to customer dissatisfaction and negative behavioral intentions (Taylor, 1994; Tom and Lucey, 1995; Van Vaerenbergh et al.,2014).

Problem statement

In the airline industry, flight delays are usual. Airline services are not available for reservation; they are provided in a timely manner. As such, a range of issues can lead to delays in service and customers have become used to waiting for the services they require to become available (Sarel and Marmorstein, 1998). Though unexceptional in the airline industry, however, these delays have a direct effect on customers' negative responses and purchase intention and WOM. Improving customer satisfaction and loyalty is important for companies in the airline industry and therefore it is essential to understand the impact of flight delay on passenger

Aim of the Study

The aim of the study is to understand that flight delays have a direct effect on perceptions of negative reactions of the passengers and negative effect on customer's loyalty.

Accordingly, many airlines are striving to reduce service delays (Bielen and Demoulin, 2007).

Significance of the Study

Some studies have been carried out in the areas of the airline industry on service failures and flight delays, but these studies have focused primarily on various factors such as stability, reliability, and customer immunization and service failures. (Folkes et al., 1987; Mikolon et al., 2015; Van Vaerenbergh et al., 2014). There is no sufficient study regarding the negative reactions caused by service failures. In general, studies have tended to be conducted on the assumption that a variety of emotional responses can be represented as a single factor (Price et al., 1995; Taylor and Claxton, 1994; Casado Diaz and Mas Ruíz, 2002). The significance of the study is to fill the gap and concentrate on

specific customers' negative and emotional reactions caused by flight delay in the airports and their loyalty to the airlines accordingly.

Research Questions

In this study, the variables affected by flight delays and behavioral reactions of passengers at the airport were examined with the following questions:

1. How flight delay affects the passengers' reactions toward the airline policies?
2. How the passengers' reactions affect their loyalty to the airlines?
3. How purchase intention and word of mouth is affected by the flight delay?

Research hypothesis

According to the focus of the study, the components of the research were first clarified and then the following hypotheses were proposed to examine the relationship between the variables and their effects:

H01. Flight delay has no significant effect on traveler's anxiety.

H1. Flight delay has a positive and significant effect on traveler's anxiety.

H02. Flight delay has no significant effect on traveler's insecurity.

H2. Flight delay has a positive and significant effect on traveler's insecurity.

H03. Flight delay has no significant effect on traveler's dissatisfaction.

H3. Flight delay has a positive and significant effect on traveler's dissatisfaction.

H04. Traveler's negative reactions have no effect on his/her purchase intention.

H4. Traveler's negative reactions have a negative and significant effect on his/her purchase intention.

H05. Traveler's negative reactions have no effect on his/her word of mouth.

H5. Traveler's negative reactions have a negative and significant effect on his/her word of mouth.

Definition of Key Term

Flight Delay: A flight delay is when an airline flight takes off and/or lands later than its scheduled time. The Federal Aviation Administration (FAA) considers a flight to be delayed when it is 15 minutes later than its scheduled time. A cancellation occurs when the airline does not operate the flight at all for a certain reason.

Anxiety: Anxiety is a normal and often healthy emotion. However, when a person regularly feels disproportionate levels of anxiety, it might become a medical disorder.

Insecurity: Insecurity is a feeling of uncertainty, a lack of confidence or anxiety about yourself.

Customer dissatisfaction: Customer dissatisfaction is a customer who is unhappy with a service manufacturer.

Purchase intention: Purchasing Intention Assesses the decision to purchase a service or product or the strength of a person's intention to perform a particular behavior.

Word of Mouth: WOM is the passing of information from person to person using oral communication, which could be as simple as telling someone the time of day.

CHAPTER 1

LITERATURE REVIEW

1.1 Theoretical review

It is not possible to guarantee error free services, in services organizations. Even the most customer focused firms with the highest level of quality control may not be able to prevent all service failures (Nikbin et al, 2015). Failure, followed by service delays, occurs when service delivery falls short of customer expectations, and sudden accidents are often seen in various parts of the industry, including hospitality, aviation, and tourism. (Hwang et al, 2020; Basso and Pizzutti,2016).

Research entitled “Relationships of Perceived Justice to Service Recovery, Service Failure Attributions, Recovery Satisfaction, and Loyalty in the Context of Airline Travelers”. The results reveal a significant relationship between perceived justice and recovery satisfaction in terms of distributive, procedural, and international justice. Recovery satisfaction had a significant effect on customer loyalty. (Nikbin et al, 2015).

In a survey “What recovery options to offer for loyalty reward program members: Dollars vs. Miles?” Findings show that, when the flight delay is perceived as highly controllable

by the airline company (i.e., scheduling error by flight crews, patronage intention was higher in the 50-dollar discount vs. 2500 bonus mile condition).

Conversely, patronage intention did not differ between the two compensation options when the flight delay was perceived as uncontrollable i.e., inclement weather (Hwang et al, 2020).

In a study entitled “An investigation of service quality, customer satisfaction and loyalty in China's airline market”. In comparison to Hainan Airlines, passengers who travelled with Air China, China Southern and China Eastern were more likely to switch to an alternate carrier, indicating lower levels of brand loyalty. In addition, the frequent flyer programs (FFPs) have been largely a failure for the four major airlines in terms of increasing customer loyalty, as revealed in this study (Jiang & Zhang, 2016).

In a research called “Flight delay prediction for commercial air transport: A deep learning approach”. The proposed method has proven to be highly capable of handling the challenges of large datasets and capturing the key factors influencing delays (Yu et al, 2019).

Research entitled “Analyzing passengers’ emotions following flight delays- a 2011– 2019 case study on SKYTRAX comments”. The results of the user sentiment analysis show that there is a significant and negative correlation between the user's emotions and their flight delay experiences. After flight delay, passengers' attention to the service aspects has increased, while satisfaction with the airport service has dropped dramatically (Song et al, 2020).

In a research called “QUALITY PASSENGER SERVICE IN AIR TRANSPORT AS A FOUNDATION FOR BUILDING LOYALTY TO AIR COMPANIES”. Air carriers need to build an overall strategy to improve services and outline the fundamental reference points of a plan for undertaking specific measures. The main reference point of said plan is a professional management team, as well as the motivation and timely training of highly qualified, responsible and courteous personnel that has an individual

approach to all passengers and satisfies their consumer ideas for quality transportation to the fullest (Tzvetkova, 2020).

In a research called “Factors influencing charter flight departure delay”. The features related to previous flight delay information were considered as being the most influential toward current flight being delayed or not, which is consistent with the propagating effect of flight delays (Fernandes et al, 2020).

Table 1.1: Summary of Key Literature on Service Recovery

| Reference | Main Focus | Theoretical Framework |
|----------------------------|--|--|
| Hwang et al. (2020) | What recovery options to offer for loyalty reward program members: Dollars vs. Miles? | Flight delay, negative word-of-Mouth |
| Nikbin et al. (2015) | Relationships of Perceived Justice to Service Recovery, Service Failure Attributions, Recovery Satisfaction, and Loyalty in the Context of Airline Travelers | flight delay |
| Song et al. (2020) | Analyzing passengers’ emotions following flight delays- a 2011–2019 case study on SKYTRAX comments | flight delay flight delay experiences user's emotions |
| Salamoura & Voxaki. (2020) | IMPROVING AIR PASSENGERS’ EXPERIENCE DURING FLIGHT DISRUPTION: THE CASE OF ENFORCING THE DENIED BOARDING | flight delay financial compensation refund of flight cost |

| | REGULATIONS (DBRs) AT CHIOS AIRPORT “OMIROS” | |
|----------------------------|--|---|
| Fernandes et al. (2020). | Factors influencing charter flight departure delay | Traveler’s anxiety |
| Jiang et al. (2020) | Worry and anger from flight delay: Antecedents and consequences | Negative word-of- mouth, tourists' switching intentions, traveler’s anxiety |
| Tang et al. (2019) | Negative word of mouth about foreign lands: Dimensions of the shared discomforts narrated in travel blogs | Negative word-of-mouth |
| Ahmed et al. (2020) | Loyalty and handling organizational complaints (customer satisfaction): In terms of commercial and economic performance of the aviation industry | Customer satisfaction, Customer loyalty, |
| Brown & Beltramini. (1989) | Consumer complaining and word of mouth activities: field evidence | Negative Word-of- Mouth, flight delay |
| Hussain et al. (2015) | Service quality and customer satisfaction of a UAE-based airline: An empirical investigation | customer satisfaction, Service quality |

Reference: (Research Findings)

1.1.1 Flight delay

Since the past decade, flight delays have captured the attention of the media, scholars, and even regulators across the world. According to the Office of Regional Infrastructure and Development (DIRD) (BITRE, 2018), flight delays in arrivals and departures account for 17.3% and 16% of total arrivals and departures, respectively. Some research also mentions that delays will continue to increase as the population grows and air travel increases. (Mohammadian et al, 2019).

According to the National Civil Aviation Flight Operational Efficiency Rathan et al, 2018 issued by the Civil Aviation Administration of China, the normal rate of civil aviation flights in 2017 is 71.67%, while the total number of flights reaches 5.320 million (CAAC, 2018).

In recent years, with the continuous increase in transport volume, the on-time rate of flights has always fluctuated around 75%. Through research, Xu and Li (2016) report that flight delays are the main cause of most passengers' dissatisfaction.

Because of the openness of social platforms, social application plat-forms have become fertile ground for users to comment (Song et al, 2020).

Researcher investigated flight delays from different perspectives, such as optimization of airport scheduling, airport capacity expansion, facility location, flight change, and flight cancellation. Our survey shows that majority of the prior studies use similar probabilistic models to estimate the probability of flight delays, or in other words, delay distribution of flights (Yu et al, 2019). Also, as it was previously stressed, the propagation effect of delays to the daily airline and airport operation can cause other flights' delay which is difficult to overcome since resources are optimized to reduce delays (Fernandes et al, 2020).

1.1.2 Flight delays are also costly

According to Peterson et al. (2013), a 10 percent reduction in flight delays increases the US net welfare by \$ 17.6 billion (Peterson et al., 2013). Flight delays lead to additional costs for airlines such as aircraft and crew maintenance and jet fuel. Thus, there is a need for initiatives such as updating air traffic control, better runway layout, developing new runways to curb flight delays and increase capacity.

1.2 Personal safety

Satisfaction with safety was more important than satisfaction with service information. Safety is an important indicator to impact positively on passengers' overall mode satisfaction and loyalty, they retain that operators should work to assure passengers of their personal safety. And in general, a variety of behavioral adaptations have been exhibited in times of insecurity, such as traveling at another time, choosing a different route, or a different mode of transportation. This implies that instead of abandoning the trip altogether, commuters would rather switch operators (operator choice) or travel mode (mode choice) of peoples' worries on different means of transport is important to influence on transport and travel behavior as well as attend to passengers' welfare (Sam et al, 2020).

1.3 Traveler's Anxiety

Flight delays affect passengers, causing distress, and consequently undermining the airline brand image. Although airlines attempt to compensate for the delays, travelers are unable to perceive the different services offered by the competition, which does not favor brand loyalty, with travelers often choosing to shift to another airline. Delays have a more emphasized impact on high income managers who frequently need to air travel, with airlines being especially concerned to satisfy this type of travelers. Besides passengers, delays can also cause labor disruption by affecting personnel work period, especially in

the air transportation business, where there is strict legislation regarding flying times and off times (Fernandes et al, 2020).

1.4 Customer satisfaction

Satisfaction as explained by Zeithaml, Parasuraman and Berry (1990) is an attitude, which is formed by the customers' comparison of their pre-purchase expectations and quality of performance with their subjective perceptions of actual performance. The importance of customer evaluations comes from the effect satisfaction has on loyalty. In a study undertaken by Reichheld and Sasser (1990), behavioral loyalty was found to be a direct outcome of customer satisfaction. Veloutsou et al. (2004) similarly found that satisfaction had a direct impact on loyalty and that it even mediated the influence of quality on customer loyalty. Chong et al. (1997) likewise, found customer satisfaction and customer perceptions of service quality to be important determinants of attitudinal loyalty and the relationship between satisfaction and loyalty to be significantly stronger. In a study undertaken by Bontis et al. (2007) satisfaction was found to enhance loyalty and reputation, and lead to strong recommendations as well (Agrawal et al, 2012).

Measuring customer satisfaction in the airline industry is becoming more frequent and relevant.

- First, customer satisfaction measurement programs could improve the communication with the clientele.
- Second, companies may examine whether their services fulfill customers' expectations. Moreover, companies may analyze the impact of specific efforts and actions on the clientele.
- Third, key satisfaction dimensions that should be improved may be identified.

- Fourth, companies could identify their strengths and weaknesses against competition, based on customer perceptions and judgments.
- Finally, companies' personnel may be motivated to increase their productivity given that all improvement efforts promoted on services are evaluated by customers themselves (Lucini et al, 2020).

1.5 Customer Loyalty

A review of available literature on customer loyalty indicates that it is a complex and multidimensional construct having numerous definitions (with no clear consensus on anyone). Some scholars have focused on the behavioral aspects of customer loyalty by defining loyalty as repeat purchasing over a period of time (Griffin, 1996) while also including other indicators such as purchase sequence, probability of purchase, and likelihood of spreading positive word of mouth in their definitions (Bowen & Shoemaker, 2003 and Agrawal et al, 2012)

Customer Loyalty (CL) is an inherent commitment that leads to the reuse or repurchase of a particular service / product, and is typically referred to as the highest level of acceptance of a brand by customer loyalty. Loyal customers buy more and recommend the brand to others. In addition, supportive behavior, as an alternative to this definition, can mix behavior into an additive or an interactive phrase (Osman et al., 2020).

Customer loyalty intention reflects favorable attitudes toward the brand or organization which is the result of the individual's beliefs that the quantity of value received from consuming a product or service is greater than the value of non-consuming (Cheng et al, 2020). Developing and sustaining customer loyalty is the holy grail of business activity (Singh et al. 2012). In the context of services marketing, customer loyalty can be defined as the customer's willingness to build a long-term relationship with a specific brand, and recommend such brand to other people (Iglesias et al, 2020). Loyal customers not only

increase the value of the business, but they also enable it to maintain costs lower than those associated with attracting new customers (Beerli et al, 2004).

Airlines that provide better services than their competitors, earn competitive advantage and able to build a solid foundation for customer loyalty (Curry and Gao, 2012; Jiang & Zhang, 2016).

Broadly, customer loyalty is related to the buyer's high commitment to repay a product on a consistent basis in the future. (Paparoidamis et al, 2019).

Definitions and Models Oliver (1999) defines brand loyalty as:

“a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.” This definition emphasizes the two different aspects of brand loyalty, Chaudhuri and Holbrook (2001) suggest that behavioral or purchase, loyalty consists of repeated purchases of the brand, whereas attitudinal brand loyalty includes a degree of dispositional commitment in terms of some unique value associated with the brand. Hence, an intermediate view of the issue claims that structures are interrelated, but with a different definition of commitment lead to loyalty. Furthermore, commitment is defined as a consumer’s psychological attachment to a service that develops before a customer would be able to determine that their repeat purchase behavior was derived from a sense of loyalty (Luarn & Lin, 2003).

Increasing and maintaining the number of loyal customers is critical to the long- term success of a brand. Definitions of brand loyalty have divided this concept into two distinct dimensions, attitude and behavior. Attitudinal loyalty represents the core position consisting of a commitment to a brand and an expressed commitment to repurchase the brand, while behavioral loyalty refers to consumers' repetitive buying behavior, as shown in patterns of continued support or actual costs. Becomes. Some recent research on

customer loyalty in various services of the shared economy has also provided relevant theoretical foundations.

Loyal customers are willing to pay more for services, express stronger purchasing goals, and resist changing locations. Therefore, customer loyalty is one of the most stable assets of companies (Kandampully ET AL, 2015). Customer loyalty is an important factor in strengthening the stability of a company by retaining existing customers and strengthening relationships. To this end, companies carry out marketing activities to build and maintain relationships and create customer value (Toufaily et al, 2013).

1.5.1 Satisfaction and loyalty

Satisfaction mainly describes a positive psychological state that arises in response to a customer service experience. Satisfaction has been well-researched in consumer services, and many empirical studies have indicated that satisfaction is an antecedent of brand attitude, intention and loyalty. The close association between satisfaction and loyalty has also been confirmed (Wang et al, 2020)

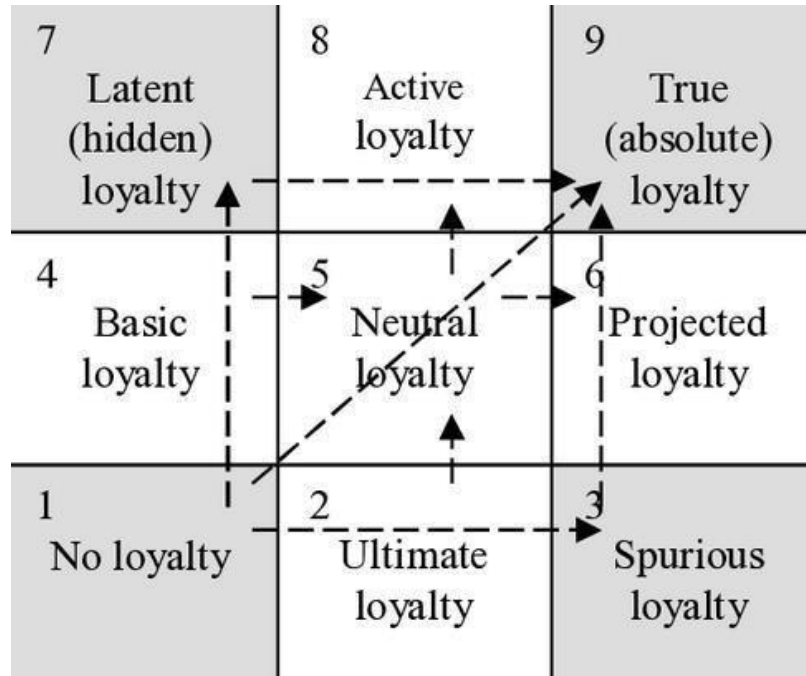
1.5.2 Types of loyalty

Dick and Basso have defined the four modes of loyalty mentioned below:

- Loyalty: A situation in which a consumer is highly dependent on a supplier and has a high repurchase rate per unit time.
- Hidden loyalty: This is a situation in which there may be a deep dependence on a brand, but this may not be accompanied by a high rate of purchase or no purchase at all.
- False loyalty: In this case, there is no positive attitude towards the supplier, but for different reasons, the person is forced to buy the product.

- Lack of loyalty: There is no positive attitude towards the supplier and the purchase rate is low. (Haghighi Kafash, et al, 2011).

Figure 1.1. Elements of two-dimensional loyalty (Haghighi Kafash ET AL, 2011).



1.5.3 Loyalty development stages

Oliver outlines four steps to developing loyalty and distinguishes between them.

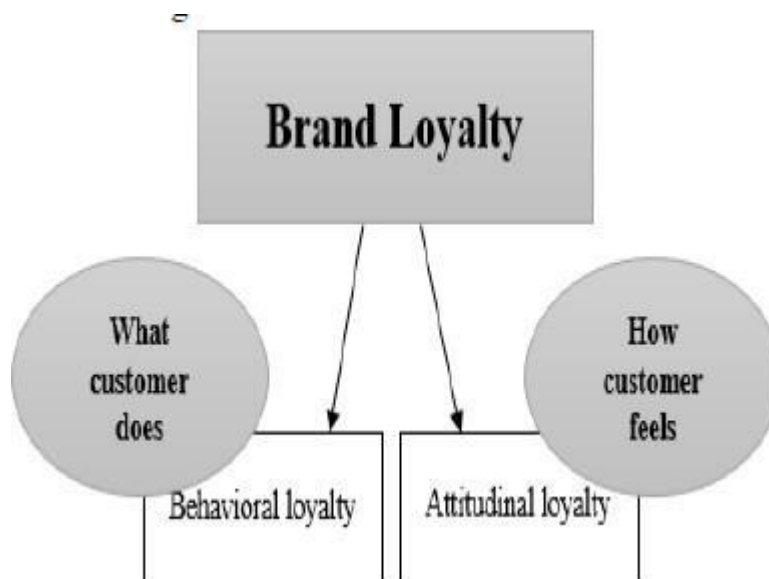
- Cognitive loyalty: In this stage, the available information determines the superiority of one option over other options for the customer. Loyalty in this stage is based on the customer's beliefs. Cognition is gained through prior knowledge or information from a recent customer experience.
- Emotional loyalty: At this level, the attitude towards the organization is based on the satisfaction obtained in previous situations. This stage reflects the joy and happiness of the definition of satisfaction. Commitment at this stage refers to emotional loyalty.

Loyalty at this level is stronger than the previous level, but like the previous level, the issue of changing the source of the customer is raised because the data show that a high percentage of customers who have left the organization claim are satisfied with the organization.

- **Active Loyalty:** The next stage in the development of loyalty is the action stage (intention to behave). As it is influenced by positive emotions. The action implies a commitment to repeat the purchase. This commitment is the customer's intention to repeat the purchase and motivation. Although the customer's intention to repeat the purchase may be predictable and expected, but it may not lead to action.

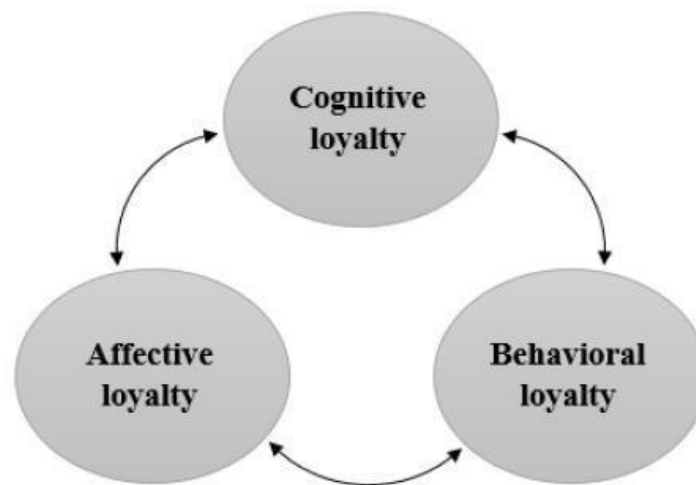
- **Loyalty in Action:** The study of the mechanism by which intentions are translated into action, and is called action control. In the action control sequence, the intention evoked in the action loyalty mode changes to readiness for action. This pattern is associated with an additional desire to overcome barriers to action, and in fact action is the result of achieving the previous three steps. (Zamani Moghaddam & Lahiji, 2012).

Figure 1.2 Elements of two-dimensional loyalty (Taghi Pourian & Bakhsh, 2015).



A two-dimensional notion states that loyalty must be assessed according to behavioral and attitudinal criteria. Although many earlier researchers of loyalty considered repeated purchase as loyalty, recent studies have shown that this repetition does not indicate loyalty sufficiently. The reason is that the customer may simply be inert or indifferent or that the costs of alteration are high due to some conditions. Day (1969) was among the earliest researchers who proposed a two-dimensional concept of loyalty, and believed that it had to be evaluated according to attitudinal criteria together with behavioral ones. Furthermore, Taylor (1981) not only believed that loyalty is an attitudinal construct, but also argued that brand commitment is a representation of a kind of emotional or psychological attachment to the brand which brand loyalty is a behavioral phenomenon. From the standpoint of some researchers, loyalty is what the customer does; that is nothing more or less than repeated (purchase) behavior (Taghi Pourian & Bakhsh, 2015).

Figure 1.3. Three-dimensional brand loyalty (Taghi Pourian & Bakhsh, 2015).



1.6 Purchase intention

Purchase intention is the individual's willingness to purchase goods or services and it can be converted into purchase behavior (Liu et al, 2020). A situation where a consumer

tends to buy a certain product in certain condition. Thus, purchase intention is a complicated process which is usually connected to the attitudes, perceptions, and behavior of purchasers. It is the attitudes and perceptions that consumers have toward a particular product; and the degree to which consumers plan to purchase the product in the future. Marketers believe that the positive attitude and perception that consumers have toward the product can be a key indicator to justify whether or not the product will have the potential to attract consumers. In addition, Ghosh (1990) and Chang and Wildt (1994) stated that consumers' purchase intention is commonly considered as an indicator of actual purchase of consumers as well (Yu et al, 2019). Furthermore, purchase intention refers to desire of one's willingness to purchase something that adds value to them (Khan et al, 2020).

Consumers make many purchasing decisions every day. This consumer decision is made through different stages of social and cognitive processes. Consumer decision- making is defined as the processes involved in problem recognition, research to gather information, evaluate options, purchase decisions, and post- purchase behavior. Intention to buy is one of the steps in purchasing decision that studies the reason for consumer behavior in order to buy a particular brand. The intention of the consumer to buy from a brand is formed not only by the attitude towards that brand, but also by considering a set of brands (Shah et al, 2012).

1.6.1 Loyalty and Purchase intention

Griffin and Herres (2002) discusses the cycle between loyalty and buying behavior through repeated buying behavior, which she considers to be the most critical way to demonstrate loyalty as loyalty always exists at the same time as repeated purchases. Additionally, Shukla (2009) argues that when consumers buy brands to which they are not loyal, they may turn to other brands. However, loyal consumers always tend to purchase the same brands to which they feel closely related as long as the association is not disturbed by the "brand switching factor." At the same time, Shukla's (2009)

empirical study indicates that brand loyalty and purchase intention are significantly related. Pons and Souiden (2009) argue that consumer brand loyalty has a positive impact on buying intentions (Liu et al, 2020).

1.6.2 Intention and Customer Satisfaction

CS has also been identified as a key variable for generating consumer purchase intention towards a service. Though mobile commerce has penetrated everyday life, CS in mobile commerce has rarely been studied because of its short history. As at the initiating stage of mobile commerce, most of the researchers paid attention to the customer's intention to accept electronic commerce, rather than CS in mobile commerce. CS is important for establishing long term customer relationships and to further generates PI (Paiz et al, 2020). PI refers to the probability that an individual will purchase a particular product based on the interaction between customer needs, attitude and perception (Beneke et al., 2016). Purchase intention can be treated as an estimator of consumer behavior (Paiz et al, 2020). It can be considered as consumer's interest to buy specific items (Ariffin et al., 2018). In other words, purchase intention determines the strength of consumer willingness to purchase (Paiz et al, 2020).

1.7 WOM

Word of mouth advertising is seen as a reliable and trustworthy method. Verbal advertising is a way for customers to exchange and disseminate information about services and products throughout the market. Verbal advertising describes as a message about an organization, its credibility and how it performs its activities and services, which is transmitted from one person to another (Balter & Butman, 2005).

Information (either positive or negative) about products and brands (Westbrook1987), research has provided mounting evidence that consumers will engage in WOM communication to showcase their expertise and knowledge. Chen and Lurie (2013), for

example, showed that negative online reviews have greater value than positive ones (Ruvio et al, 2020; Amatulli et al, 2020). preaches based on sentiment extraction would still categorize this type of EWOM as either negative, positive, or neutral, while the content does not merit or require a brand response (Vermeer et al, 2019).

According to Arndt (1967) “WOM can be any oral and personal communication, positive or negative, about a brand, product, service, or organization, in which the receiver of the message perceives the sender to have a noncommercial intention.” In the Arndt definition, word of mouth involves an object such as a brand, product, service, or organization, and the subject uses a personal communication channel to communicate positively or negatively about the object with non-commercial intention. West brook (1987) defined WOM as “all informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers.” More recently, Barreto (2014) defined WOM as an “oral or written communication process, between a sender and an individual or group of receivers, regardless of whether they share the same social network, to share and acquire information, on an informal basis.” All three definitions discussed have treated word of mouth as an informal communication between subjects (e.g., sender and receiver) concerning an object (e.g., products, brands, organizations, or sellers) or an experience (such as ownership or usage) for sharing and acquiring information with non-commercial intent (Verma & Yadav, 2020).

Word of mouth acts as the main element of customer loyalty, they become one of the most important assets participating in the success of companies. Word-of- mouth advertising makes the customer a valuable source of information online and offline for those who value service quality. Loyal customers are word of mouth advertisers to attract friends, family and other potentials to help businesses (Leal et al, 2019).

The phrase "word of mouth" was first coined by William White about 40 years ago in a classic marketing study in Fortune Magazine. Although the study of social networks in sociology has been discussed in detail, it has been considered by marketing researchers in recent years due to its obvious effects on consumer behavior. In the early 1950s,

researchers showed that person-to-person conversations and the exchange of information between people not only affect customers' choice and buying behavior, but also shape consumer expectations. They described verbal advertising as the verbal communication behavior of a particular brand, product, or service among individuals.

Verbal advertising is all informal communication between consumers regarding the ownership, use and features of specific services and products or its vendors. Word of mouth is growing very fast today. One of the common marketing and advertising tools that is also effective in relationship marketing is word of mouth, which is defined as follows: "An activity in which customers transfer marketing information about products and services to another customer" or "the organization's efforts to encourage, facilitate and expand marketing communications among customers." In recent decades, much attention has been paid to the academic and executive aspects of word of mouth.

Recent polls suggest that despite the arrival of new favors and advanced advertising equipment, traditional advertising tools such as radio and television, the press and, more importantly, word of mouth (family, friends). Acquaintances is still the most effective way to advertise goods and services. So these three methods alone play about 80% of the role in the decision of consumers when buying.

Verbal advertising is an informal communication about the characteristics of a business or a service in a community. Influencing other people's opinions has significant benefits for organizations that supply goods and services. Verbal advertising allows a person to influence the evaluation and purchase intentions of similar consumers, both informationally and normatively (Hasan Gholipour et al, 2016).

1.7.1 The effect of word of mouth on attracting people

Marketers try hard to convince customers, but sometimes they are unaware of the fact that customers' conversations with each other will have the greatest impact on product selection. The consumer is much more likely to react to an offer from a trusted friend,

colleague or consultant than to a business message, and this reaction is not limited to gathering information but often leads to buying a product. Consumers trust the credibility of the opinions of their friends, family and acquaintances because these opinions are sincere and without any bias and orientation. The power of influencing the advice of others comes from three key factors: First, how you communicate is an important factor in word of mouth. Many discussions with family or friends lead to their support for certain behaviors. Second, unlike the flow of one-way communications such as commercials, the customer's word of mouth employs a two-way flow. The power of two-way communication stems from the fact that one can ask questions, receive explanations, and pursue useful results. They experience the product or service themselves. Verbal advertising is more important in the final stages of the buying process because it reassures the consumer. Research shows that few people trust what they see, read or hear in commercials. Interestingly, most people trust products or services approved by a family member, friend, or colleague because they are sure that they are not interested in those goods or services. (Noori et al., 2012).

CHAPTER 2

METHODOLOGY

2.1 Research Design and data

This chapter is dedicated to the research method, in which we explain the statistical population, statistical sample, data collection method, data collection tools, as well as the validity and reliability of research data. The basis of any science is its method of cognition, and the validity and value of the laws of any science is based on the method in which the science is used. When the nature, subject, objectives and scope of the research are clear, the decision to conduct the research can be made. In other words, the purpose of choosing a research method is to determine what method helps him to answer research questions more accurately, quickly and easily. (Mirzaei, 2006).

The present research is applied in terms of purpose and survey in terms of descriptive method.

In the present study, the researcher uses a quantitative research method. Participants must be psychologically and socially mature and responsive. After understanding the concept of research and accurate interpretation of the questions, the questions measure all the factors mentioned in the hypothesis.

2.1.1 Statistical population and statistical sample size of research-sampling

Society is the largest set of beings that, at one time, is desirable to us and must have at least one definite attribute. A definite adjective is an adjective that is common to all elements of the statistical community and distinguishes the statistical community from other societies. Most researchers believe that society is all real or hypothetical members that we are interested in generalizing research findings to them (Sarmadi et al., 2015).

The statistical population of the study is the departments of Near East University.

The sampling method was simple random sampling and the data collection tool was a questionnaire.

100 questionnaires will be prepared for participants from male and female students from different departments (Near east university) who will be randomly selected and then grouped separately.

2.1.2 Data collection method

The data collection stage is the beginning of a process during which the researcher collects field and library findings and classifies them inductively and then analyzes them and evaluates his / her hypotheses. Issues and finds the answer to its problem by relying on them, in other words, relying on the collected information, it discovers reality and truth as it is, so the validity of information is very important because unreliable information prevents the discovery of truth and reality. And the problem the researcher wants is not known properly (Hafiz Nia, 2017).

A questionnaire will be prepared to collect data from the sample population. The questionnaire consists of 18 questions:

4 questions measure the flight delay concept by the passengers.

8 questions will assess the qualities of the passengers' reactions toward flight delay.

3 factors that measure the negative reactions of passengers are anxiety, insecurity, and dissatisfaction elements.

6 questions determine the measurement of purchase intention and negative word of mouth.

2.1.3 Materials

To ensure the accuracy and validity of the data collection, I used a questionnaire whose validity and reliability have already been done. The "Study on the Impact of Airline Delay on Emotional Responses and Customer Behavior" scale developed by Jin woo Park, and Nam Yi. Ki (2016) for data collection, were preferred. There are other scales that are related to the literature (5 items measuring the customer's emotional and behavioral reactions during flight delays) are selected because of their reliability, robustness and accuracy.

Before conducting the study, the ethical permission to use the questionnaire was approved by Scientific Research Ethics Committee of NEU University and then distributed among the sample.

2.1.4 Questionnaire

The questionnaire, as one of the most common tools for collecting information in survey research, is a set of objective questions that measure the views, perspectives and insights of a respondent using various scales. After the questionnaire has been prepared and the

selected sample people have been identified, the questionnaire will be distributed (Delaware, 2007).

2.1.5 Questionnaire questions

First you need to identify the variables and then decide on the questions that can measure the variables. When deciding on questionnaire questions, the first issue is to apply the concepts used. Applying basic concepts has a decisive effect on the consequences of research results.

In order to prepare the questions, the questionnaire was consulted from a prominent university professor in this field, and after considering the sum of their opinions and the final questionnaire, it is prepared and distributed among the sample people.

Considering that the measurement scale in this research is 5 Likert scale, in order to measure the research questions, first the Likert scale is scored according to the table below and then in proportion to the number of questions related to each research

| Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-------------------|----------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |

question. Scores will be calculated.

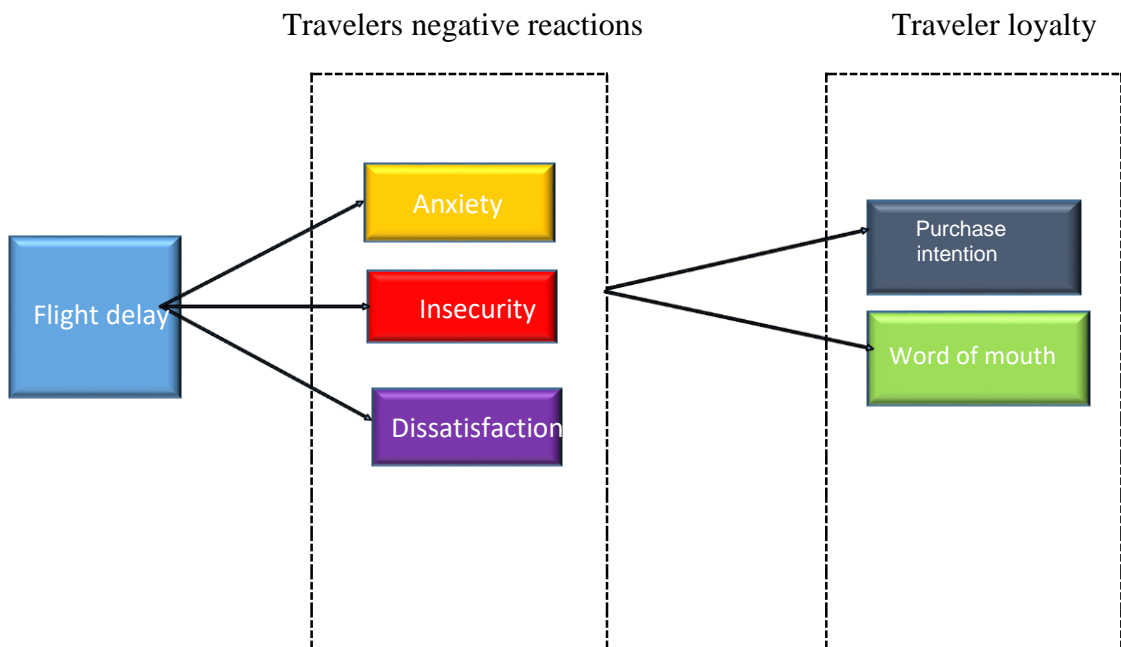
Table 2.1 Likert scale

2.1.6 Questionnaire reliability and validity

Reliability- One of the technical characteristics of a measuring instrument is related to the degree to which the measuring instrument achieves the same results in the same conditions. Cronbach's alpha method was used for the reliability of the questionnaire.

Validity- Means that the instrument selected for measurement has the specifications of the instrument for which it was designed. In the validity of the questionnaire, what is measured must be related to the goal you have achieved, otherwise the end result will not be of particular value. For validity of the questionnaire, the tool "Relative Content Validity Rate (CVR)" has been used.

Figure 2.1 Conceptual model of research



2.1.7 Data Analysis Method

For the analysis of quantitative data, mean scores, descriptive statistics and standard deviation was calculated. The level of traits of negative reactions of passengers in dealing with flight delays and then their loyalty to those airlines was examined.

2.1.8 SPSS Analysis

This software is used for statistical data analysis and data management. This application was originally created for humanities researchers.

Although SPSS data analysis capabilities are in many ways less powerful than statistical software such as SAS and Plus-S, the ease of installation and data entry and analysis capabilities in SPSS make the most of this. The software is used in the field. The main purpose of a statistical software is to use statistical methods to analyze information. In addition to this important goal, the production of charts is a tool for easy and fast transfer of information in these soft wares. But to draw appropriate statistical charts, you can use reporting software such as Excel, which have a special ability to produce a variety of charts.

SPSS has various statistical methods that can be used to analyze data including descriptive statistics, mean, standard deviation, variance, frequency and cross-tabulation.

¹ Social Sciences for Package Statistical

CHAPTER 3

DATA ANALYSIS

3.1 Descriptive statistics

In previous chapters, after introducing and expressing the literature on the subject based on previous research and available sources, a model was presented that shows the relationships between the main concepts of research. Then the research method and data collection method were described. After designing the questionnaire and collecting the answers to the questions, it is necessary that the collected data be defined as statistical variables and the collected answers be coded.

This allows the data to be entered into the Spss software and tested. This chapter consists of two parts. The first part contains demographic characteristics in which a description of the characteristics of the people who constitute the statistical sample of the research is stated. These characteristics and demographic characteristics of the statistical sample can provide a picture of the current situation of the community and can be a great help to generalize the results to the whole community. In the second part, using the answers given by each member of the statistical sample to the questionnaire questions, the research hypotheses are tested and as a result, the theoretical model of the research is tested.

3.2 Description of the research questionnaire:

In this study, a questionnaire was prepared in the form of Google Form. The information was completed through a questionnaire that was created in Google Form and distributed among the students of Near East University, and the respondents responded online. As mentioned, a questionnaire was used to collect research data in the field. The description of the questionnaire questions by variables is given in Table 4-1. The questionnaire of this research consists of two main parts:

- A) General questions: This part of the questionnaire refers to the demographic characteristics of the respondents (gender, age, nationality).
- B) Questions related to the main research variables: This part of the questionnaire includes research variables, which include the variables "Service Delay", "Anger", "Uncertainly", "Acceptability", "Repurchase intention (ticket) " and Measures "Negative word-of-mouth".

Table 3.1 Questionnaire questions by components

| Components | Number | Number of questions |
|------------------------|--------|---------------------|
| Service delay | 4 | 1 to 4 |
| Anger | 2 | 5 to 6 |
| Uncertainly | 2 | 7 to 8 |
| Acceptability | 4 | 9 to 12 |
| Repurchase intention | 3 | 13 to 15 |
| Negative word-of-mouth | 3 | 16 to 18 |

3.2.1 Validity and reliability of the questionnaire

The validity and reliability of the questionnaire means that the tool for measuring the characteristics and features for which the tool is designed, is suitable for measurement. The issue of validity is important because inappropriate measurements make scientific research less valuable. There are several ways to determine the validity of a measure, including the validity of the content of the criteria and the structure. Content validity refers to a sample of questions used in a test that represents a comprehensive set of questions and can be derived from the content of the subject matter. Therefore, the validity of the content ensures that all the dimensions and components that will be able to reflect the intended concept will be present in this version.

good validity and reliability, so researchers can use them with more confidence, but the measuring instruments developed and developed by researchers lack such confidence, and the researcher must ensure their validity and reliability.

3.2.2 Validity of research questionnaire

It is used to evaluate the content validity of experts' opinions about the degree of content coordination of the measurement tool and the purpose of the research. As mentioned in Chapter 3, the validity of the questionnaire and its components have already been examined by the researcher, and in this study, experts were asked to provide the necessary feedback regarding the tool. Therefore, for the questionnaire of the present study, the feedback of the professors of the Department of Tourism was measured. On average, the relative content validity coefficient (CVR) for the whole questionnaire was 0.75, which is an acceptable criterion.

3.2.3 Reliability of research questionnaire

Reliability, which refers to the accuracy, reliability and stability of test results, is a feature of the measurement tool (questionnaire). An indicator called reliability was used to measure reliability. The reliability range is from zero to +1. A reliability coefficient of zero indicates uncertainty and a reliability coefficient indicates complete reliability. Various methods are used to calculate the reliability of measuring instruments. Including: Cronbach's alpha method.

In this study, Cronbach's alpha method was used to estimate the validity of the questionnaire. To obtain the validity coefficient of the questionnaire, Cronbach's alpha coefficient was calculated using computer and SPSS software.

$$r_a = \frac{j}{j-1} \left(1 - \frac{\sum S_j^2}{S^2} \right)$$

J = Number of questionnaires or test subsets

S_j^2 = The variance under the j test

S^2 = The total variance of the test.

Pre-test questionnaire:

The questionnaire is reliable when the Cronbach's alpha value is closer to 1. The Cronbach's alpha coefficient in a small sample (26 questionnaires) for the variables of this research is as follows:

Table 3-2 Cronbach's alpha obtained research variables

| Components | Number of questions | Cronbach's alpha coefficient value |
|--------------------------------|----------------------------|---|
| Service delay | 1 to 4 | 0/855 |
| Anger | 5 to 6 | 0/890 |
| Uncertainly | 7 to 8 | 0/919 |
| Acceptability | 9 to 12 | 0/876 |
| Repurchase intention | 13 to 15 | 0/885 |
| Negative word-of-mouth | 16 to 18 | 0/945 |
| The whole questionnaire | 1 to 18 | 0/883 |

3.3 Descriptive findings

In this study, the collected data related to individual and demographic characteristics, as well as data related to research variables, including the original data, were described by SPSS, By descriptive statistical methods (frequency distribution of data and graphs). The following is analyzed.

3.3.1 Description of individual and demographic characteristics

As mentioned in the previous chapter, in this study, 100 questionnaires were prepared for male and female students (Near East University) who were randomly selected. Frequency

and percentage of questions on gender, age, and nationality and also the use of airplane are shown in the tables.

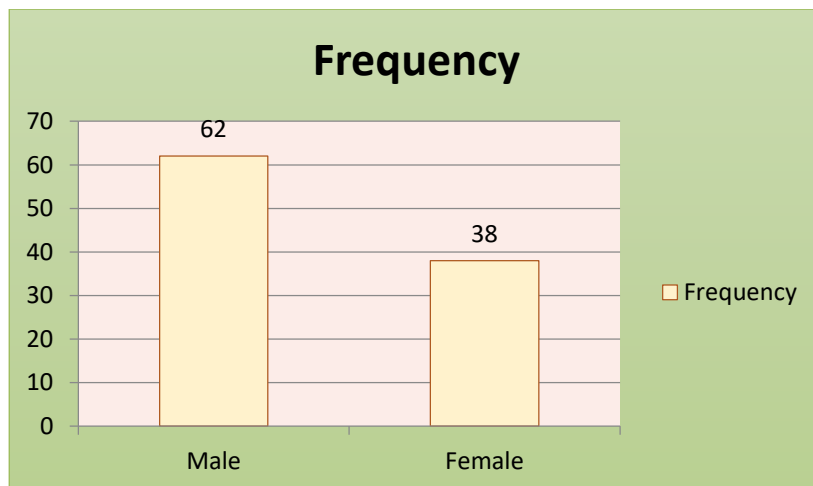
3.3.2 Gender

After data collection, it was observed that 62 people (62%) of the respondents were male and 38 people (38%) were female.

Table 3-3 - Frequency and frequency percentage of gender

| Gender | Frequency | Percentage | Cumulative percentage |
|---------------|-----------|------------|-----------------------|
| Male | 62 | 62 | 62 |
| Female | 38 | 38 | 100 |
| Total | 100 | 100 | |

Figure 3-1: Frequency distribution of respondents' gender



3.3.3 Age

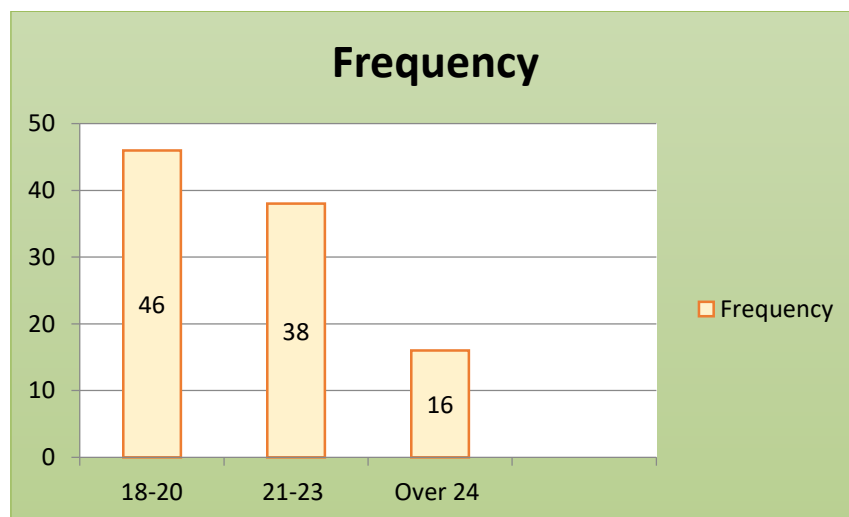
By collecting data, it was observed that the age of the respondents is as follows:

46 people (46%) were 18-20 years old, 38 people (38%) were 21-23 years old, 16 people (16%) were over 24 years old.

Table 3-4 Frequency and frequency percentage of age

| Age | Frequency | Percentage | Cumulative percentage |
|--------------|-----------|------------|-----------------------|
| 18-20 | 46 | 46 | 46 |
| 21-23 | 38 | 38 | 84 |
| 24+ | 16 | 16 | 100 |
| Total | 100 | 100 | |

Figure 3-2: Frequency distribution of respondents' age



3.3.4 Nationality

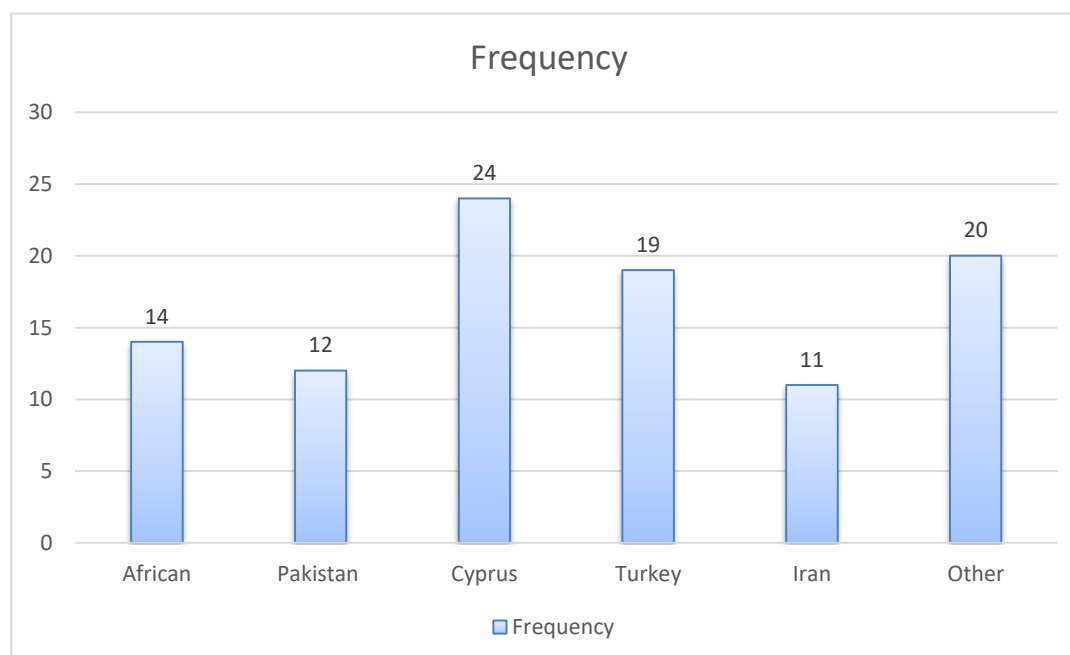
By collecting data, it was observed that the nationality of the respondents is as follows:

14 people (14%) were from Africa, 12 people (12%) from Pakistan, 24 people (24%) from Cyprus, 19 people (19%) from Turkey, 11 people (11%) from Iran and 20 people (20%) from other countries.

Table 3-5 Frequency and frequency percentage of nationality

| Nationality | Frequency | Percentage | Cumulative percentage |
|-----------------|-----------|------------|-----------------------|
| Africa | 14 | 14 | 14 |
| Pakistan | 12 | 12 | 26 |
| Cyprus | 24 | 24 | 50 |
| Turkey | 19 | 19 | 69 |
| Iran | 11 | 11 | 80 |
| Other | 20 | 20 | 100 |
| Total | 100 | 100 | |

Figure 3-3: Frequency distribution of respondents' nationalities



3.3.5 Airplane usage rate

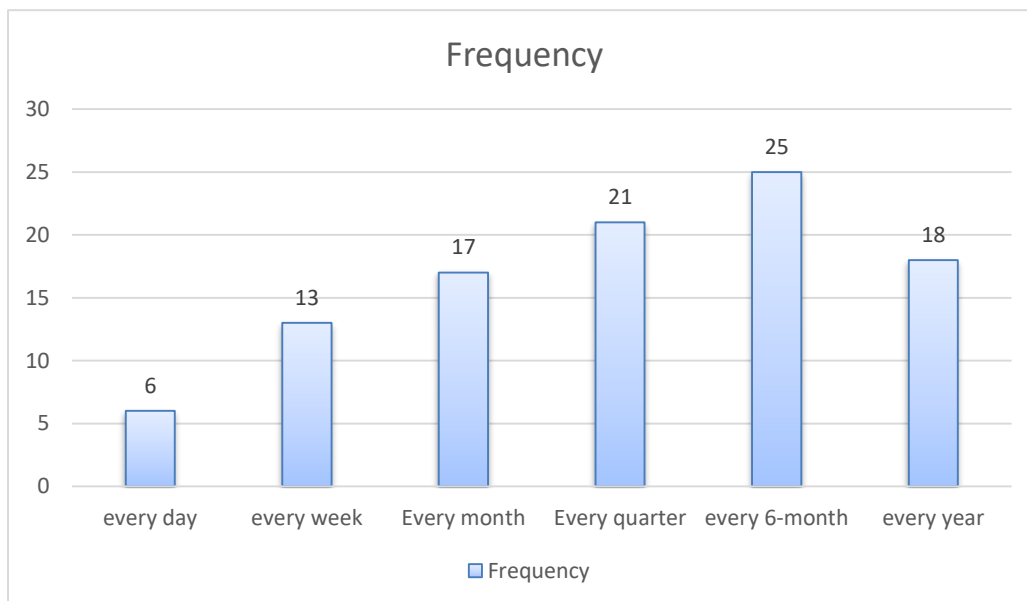
By collecting the data, it was observed that the rate of use of the respondents' airplane is as follows:

6 people (6%) every day, 13 people (13%) every week, 17 people (17%) every month, 21 people (21%) every season, 25 people (25%) every six months, 18 people (18 Percent) each year.

Table 3-6 Frequency and frequency percentage of airplane usage rate

| Airplane usage rate | Frequency | Percentage | Cumulative percentage |
|-------------------------|-----------|------------|-----------------------|
| Everyday | 6 | 6 | 6 |
| every week | 13 | 13 | 19 |
| Each month | 17 | 17 | 36 |
| Every season | 21 | 21 | 57 |
| Every six months | 25 | 25 | 82 |
| every year | 18 | 18 | 100 |
| Total | 100 | 100 | |

Figure 3-4: Frequency distribution of respondents' aircraft usage



3.4 Descriptive indicators of research variables

3.4.1 Service Delay

Table 3-7 Descriptive statistics of service delay

| Criterion | Average | Standard deviation |
|----------------------|---------|--------------------|
| Service Delay | 3/9 | 0/88 |

According to the respondents, the effect of service delay is 3.9, which indicates the "agree" limits.

The obtained value of scatter, or the amount of change in the answers given to the mean (standard deviation) is equal to 0.88.

3.4.2 Anger

The table below shows the criteria for descriptive statistics related to anger.

Table 3-8 Descriptive Statistics of Anger

| Criterion | Average | Standard deviation |
|--------------|---------|--------------------|
| Anger | 4/6 | 0/8 |

According to the respondents, the effect of anger is 4.6, which indicates about "agree". The obtained value of scatter, or the amount of change in the answers given to the mean (standard deviation) is equal to 0.8

3.4.3 Uncertainly

The table below shows the criteria for descriptive statistics related to “Uncertainly”.

Table 3-9 Descriptive Statistics of Uncertainly

| Criterion | Average | Standard deviation |
|--------------------|---------|--------------------|
| Uncertainly | 3/69 | 1/07 |

According to the respondents, the effect of Uncertain on the continuation of the itinerary is 3.69, which indicates the limits of "agree". The obtained value of scatter, or the amount of change in the answers given to the mean (standard deviation) is equal to 1.07.

3.4.4 Acceptability

The table below shows the descriptive statistics criteria for acceptability

Table 3-10 Descriptive Statistics of Acceptability

| Criterion | Average | Standard deviation |
|----------------------|---------|--------------------|
| Acceptability | 4/1 | 0/88 |

According to the respondents, the impact of co-production is 1/4, which indicates the "agree" limits. The obtained value of scatter, or the amount of change in the answers given to the mean (standard deviation) is equal to 0.88.

3.4.5 Repurchase intention (ticket)

The table below shows the criteria of descriptive statistics related to the Repurchase intention (ticket).

Table 3-11 Descriptive statistics of repurchase intention

| Criterion | Average | Standard deviation |
|-----------------------------|---------|--------------------|
| Repurchase intention | 4/1 | 0/87 |

According to the respondents, the impact of the repurchase intention (ticket) is 1/4, which indicates the "agree" limits. The obtained value of scatter, or the amount of change in the answers given to the mean (standard deviation) is equal to 0.87.

3.4.6 Negative word-of-mouth.

The table below shows the criteria for descriptive statistics related to negative word of mouth.

Table 3-12 Descriptive statistics of negative word of mouth

| Criterion | Average | Standard deviation |
|-------------------------------|---------|--------------------|
| Negative word-of-mouth | 3/69 | 1/07 |

According to the respondents, the effect of word of "negative word of mouth" at the cost of 3.69, which indicates the "agree" limits. The obtained value of scatter, or the amount of change in the answers given to the mean (standard deviation) is equal to 1.07.

In the above tables, it shows that the mean values of emotional reactions and customer behavior of travelers toward flight delay developed by Nam-Yi Kim, Jin-Woo Park (2016). The mean values of the respondents' reactions and behaviors for the questions are ranging in between 3.9 and 3.69 where 1 represents strongly disagree, 2 as disagree, 3 as neutral, 4 as agree and 5 as strongly agree. Whereas the standard deviation values ranging between .0/88 and 1.07 suggest that the mean values are not spread out much. From the average values, it can be seen that the participants showed negative emotional reactions to the flight delay and had a negative opinion in accepting the delay and did not intend to buy the ticket again and loyalty as a customer, so they remain active in negative word of mouth.

3.5 Test of research hypotheses

In this part of the research, the effect of flight delays on negative reactions and passenger loyalty has been investigated using the average test of a community.

If we consider the mean parameter of society = μ and the test of hypothesis = 3, then we can decide on hypothesis zero and 1 in statistical population.

Hypothesis 1: Flight delays have a significant positive effect on passenger anxiety.

- 1- There is no significant relationship between flight delay and passenger anxiety. $H_0: \mu \leq 3$
- 2- There is a significant relationship between flight delays and passenger anxiety. $H_1: \mu > 3$

Table 3-13 Single-sample statistics

| | Number | Average | Criterion standard deviation | Criterion standard error |
|-----------------------|--------|---------|------------------------------|--------------------------|
| Anxiety of passengers | 100 | 3/351 | 81/39 | 0/259 |

As can be seen in the table above, the results of descriptive statistics show that the average value of the sample is 3.351 more than the average of 3, which means that Hypothesis H1 is confirmed and Hypothesis H0 is rejected. In other words, there is a significant relationship between flight delays and passenger anxiety.

Hypothesis 2: Flight delays have a significant positive effect on passenger insecurity.

1- There is no significant relationship between flight delays and passenger insecurity.

H0: $\mu \leq 3$

2- There is a significant relationship between flight delays and passenger insecurity.

H1: $\mu > 3$

Table 3-14 Single-sample statistics

| | Number | Average | Criterion standard deviation | Criterion standard error |
|-----------------------------|--------|---------|------------------------------|--------------------------|
| Passenger insecurity | 100 | 4/612 | 0/6532 | 0/208 |

As can be seen in the table above, the results of descriptive statistics show that the average value of the sample is 4.612 higher than the average of 3, which means that Hypothesis H1 is confirmed and Hypothesis H0 is rejected. In other words, there is a significant relationship between flight delays and passenger insecurity.

Hypothesis 3: Flight delays have a significant positive effect on passenger dissatisfaction.

1- There is no significant relationship between flight delay and passenger dissatisfaction.

H0: $\mu \leq 3$

2- There is a significant relationship between flight delays and passenger dissatisfaction.

H1: $\mu > 3$

Table 3-15 Single-sample statistics

| | Number | Average | Criterion standard deviation | Criterion standard error |
|----------------------------------|--------|---------|------------------------------|--------------------------|
| Passenger dissatisfaction | 100 | 3/69 | 0/7177 | 0/228 |

As can be seen in the table above, the results of descriptive statistics showed that the mean value of the sample was 3.69 higher than the desired mean of 3, which means that Hypothesis H1 is confirmed and Hypothesis H0 is rejected. In other words, there is a significant relationship between flight delays and passenger dissatisfaction.

Hypothesis 4: Negative reactions of the traveler have a significant negative effect on his intention to buy.

- 1- There is no significant relationship between the negative reactions of the passenger and his intention to buy. H0: $\mu \leq 3$
- 2- There is a significant relationship between the negative reactions of the passenger and his intention to buy. H1: $\mu > 3$

Table 3-16 Single-sample statistics

| | Number | Average | Criterion standard deviation | Criterion standard error |
|--|--------|---------|------------------------------|--------------------------|
| Purchase intention of a passenger | 100 | 4/11 | 0/7177 | 0/228 |

As you can see in the table, the results of descriptive statistics showed that the average value of the sample was 4.11 more than the average of 3, which means that Hypothesis H0 is rejected and Hypothesis H1 is confirmed. In other words, there is a significant relationship between the negative reactions of the passenger and his intention to buy.

Hypothesis 5: Negative reactions of the traveler have a significant negative effect on negative word of mouth.

- 1- There is no significant relationship between the negative reactions of the passenger and the negative word of mouth. H0: $\mu \leq 3$
- 2- There is a significant relationship between the negative reactions of the passenger and the negative word of mouth. H1: $\mu > 3$

The results of descriptive statistics showed that the mean value of the sample was 4.150 higher than the mean of 3.

Table 3-17 Single-sample statistics

| | Number | Average | Criterion standard deviation | Criterion standard error |
|--|--------|---------|------------------------------|--------------------------|
| Negative word of mouth of the passenger | 100 | 4/1 | 0/7810 | 0/248 |

As can be seen in the table above, the results of descriptive statistics show that the average value of the sample is 4.1 more than the average of 3, which means that Hypothesis H1 is confirmed and Hypothesis H0 is rejected. In other words, there is a

significant relationship between the negative reactions of the passenger and the negative word of mouth.

Table 3-18 Results of the hypothesis verification.

| | | Hypothesis path (direction) | Verification result |
|---|----|---|---------------------|
| | H0 | Flight delay → Passenger anxiety. | Rejected |
| 1 | H1 | Flight delay → Passenger anxiety. | Accepted |
| | H0 | Flight delay → Passenger insecurity | Rejected |
| 2 | H1 | Flight delay → Passenger insecurity | Accepted |
| | H0 | Flight delay → Passenger dissatisfaction | Rejected |
| 3 | H1 | Flight delay → Passenger dissatisfaction | Accepted |
| | H0 | Negative reaction of traveler → purchase intention | Rejected |
| 4 | H1 | Negative reaction of traveler → purchase intention | Accepted |
| | H0 | Negative reaction of traveler → Negative effect on negative word of mouth. | Rejected |
| 5 | H1 | Negative reaction of traveler → Negative effect on negative word of mouth. | Accepted |

3.6 Research limitations:

The researcher has faced many obstacles in the research process. The purpose of presenting them is the correct evaluation of the present dissertation, and considering the present bottlenecks, it is hoped that a general review will be avoided. At the same time, look at the challenges with realism. Some of the obstacles include the following:

- 1- Scarcity of scientific references about the title of research in available references.
- 2- Lack of research records in the field of research in the field under study.
- 3- Lack of familiarity of some of the interviewees with some research variables.
- 4- Due to the Corona epidemic, restricted access to the airport terminal and passengers present at the airport, which also limits the possibility of theorizing the experiences of all passengers, and the information obtained is only due to the conclusions of the samples. Research estimates should therefore be expanded accordingly.

CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The present study investigated the effect of flight delays on negative reactions and passenger loyalty. The present study is presented in five chapters. In the first chapter, the problem, necessity and importance of research, research innovation, scientific and applied research objectives, research questions and hypotheses are explained and the definitions of specialized words and terms used in research are summarized. In the second chapter, while reviewing the literature on the subject of research and theoretical foundations, internal and external records in this field were examined. The third chapter was dedicated to the research methodology and model used in the research. Then, explanations about the population and statistical sample, and the method of analyzing the research data were presented, and the software tools used in the research to analyze the data were introduced. In the fourth chapter, information analysis and testing of research hypotheses by the methods mentioned in the third chapter were performed and the

outputs were presented and analyzed. In the fifth chapter, while summarizing the research topic and research method, the results of the hypothesis test will be analyzed.

Marketing is at a stage where marketers are not just thinking about finding new customers. Nowadays, the goal of demand management marketing is to grow and push the customer to maturity on the ladder of loyalty to organizations. Also customer satisfaction is no longer enough and companies should not be happy with their customer satisfaction, they should make sure that their satisfied customers are also loyal. In this paradigm, the goal is to establish long-term and reciprocal relationships with stakeholders and Most importantly, it retains more customers and loses fewer customers, thus gaining long-term benefits that lead to market share and increase corporate profitability. This study seeks to investigate the effect of flight delays on negative reactions and passenger loyalty.

According to research, the cost of attracting new customers is five times the cost of retaining existing customers, and losing a customer is not just the loss of a salesperson, but beyond that means the loss of all the buying streams that the customer could have done in a lifetime. Cutler, the father of modern marketing science, believes that there are two types of organizations. The first group is those who accept change and the second group is those who are destroyed. As stated by him, a successful transformation is in establishing a desirable and effective relationship with customers, because no business can survive without loyal customers. For this reason, companies were required to go beyond the needs of customers and focus from the grassroots level on building loyalty through long-term relationships.

Loyal customers refer to competing companies only in special cases to meet their needs. Loyal customers also contribute to the financial performance of a company by directly and indirectly influencing customers' buying and non-buying behaviors. Finally, loyal customers are seen as a source of positive word-of-mouth advertising for the company, which is of great value. Positive word-of-mouth advertising increases the likelihood of attracting new customers and turning existing customers into loyal and loyal customers. Loyal customers are much more profitable to the company than repeat customers, and similarly repeat customers are more profitable than casual customers.

No institution today can survive unless it can attract and retain a sufficient number of knowledgeable and discerning customers. Effective customer management is essential for the success of airlines around the world. Also, with the improvement of people's living standards, the demand for air travel is increasing day by day, on the other hand, the competition between airlines has increased significantly compared to the past. The dynamics of economic and competitive forces are constantly changing the relationship between customers and airlines. For this reason, the challenge of identifying factors related to passenger loyalty and passengers' expectations of the same factors and prioritizing passenger demands can be of great help in keeping passengers and creating loyalty in them.

Entirely, the higher passenger satisfaction will make higher passenger loyalty. Any provision of inappropriate services, such as delaying the flight, with negative reactions from passengers, like anger and hesitation in continuing the flight and itinerary, etc., and ultimately leads to passenger complaints, consequently, and lack of loyalty.

What increases the persistence of customer dissatisfaction is not the customer's initial complaint, but the organization's inability or delay in resolving the situation. If the organization is able to show its responsive attitude and value the customer, a negative complaint can strengthen the positive and loyalty of the customer. While customers have more choices, mere satisfaction is less likely to increase their loyalty, as organizations can make their customers happier if they approach their customers and listen to what the customer wants. There is no cost to be happy, a level of service that exceeds the customer's expectations may make the customer happy. Accordingly, airlines seek to reduce service delays.

4.2 Practical recommendations

According to the confirmed hypotheses, the following suggestions can be recommended to the managers of organizations:

- A) Organizations that seek to improve their performance can take appropriate action to remove practical barriers such as service failure. It is also better to use new methods of customer stability, reliability, and security to improve performance among customer persuasion techniques.
- B) Organizations that seek to improve their market performance; They can use the right competitive strategy. Also, to improve market performance, it is better to use customer satisfaction techniques and use them to expand their market.
- C) Since one of the limitations of this research is the lack of familiarity of some users with some technical issues such as technical defects of the aircraft, which is one of the causes of flight delays; Therefore, holding general training courses on this topic for customers, or internally by the organizations themselves can be an important step to support these organizations.

4.3 Future recommendations:

- This study was conducted on the effect of flight delays on negative reactions and passenger loyalty. A study can be conducted on different organizations in terms of number of staff, type of activity and staff structure of "aviation" tourism infrastructure and compare the results with this study.
- Examine the quality standards and models available to assess the status of airline notification systems to increase the performance of the online service business.
- For future research, other factors and the impact of in-service training courses on airline business performance can be examined in more detail.

Structural equation methods can be used to prioritize actions to redefine organizational processes by considering their impact on airline latency.

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APPENDICES

Appendix- A: RESEARCH QUESTIONNAIRE

School of Tourism and Hotel Management

Dear Respondent,

RE: RESEARCH QUESTIONNAIRE

I am a Master Student at the School of Tourism and Hotel Management, Near East University, North Cyprus. I am conducting research on “THE IMPACT OF FLIGHT DELAY ON THE TRAVELER’S NEGATIVE REACTIONS AND LOYALTY’. The attached questionnaire is an important survey designed to assess your response to flight delays and its negative impact on your customer loyalty. May you please answer all the questions carefully? All information you provide will be strictly confidential and used for academic purposes only.

Thanks for your time and support, Farivar

SECTION 1

Personal Info:

Please select as appropriate:

Gender

Male Female Other

Age

18-20 21 - 324 24+

How often do you travel by plane?

Every day Every week Every month Every quarter Every 6-month Every year

SECTION 2

Service Delay: Have your flight/s ever delayed or canceled? No Yes

If yes, please circle a scale 1 to 5 from the following tables:

Strongly Disagree = 1 Disagree = 2 Neutral = 3 Agree = 4 Strongly Agree = 5

| | | | | | | |
|-----------------------------|---|---|---|---|---|---|
| SD1 | The actual waiting time for an airline service was longer than forecasted. | 1 | 2 | 3 | 4 | 5 |
| SD2 | The airline that I used had a longer waiting time than other airlines. | 1 | 2 | 3 | 4 | 5 |
| SD3 | The actual waiting time for an airline service was longer than expected | 1 | 2 | 3 | 4 | 5 |
| SD4 | The waiting time for an airline service was long | 1 | 2 | 3 | 4 | 5 |
| Frustration | | | | | | |
| FR1 | I feel angry when an airline service is delayed. | 1 | 2 | 3 | 4 | 5 |
| FR2 | I feel irritated when an airline service is delayed | 1 | 2 | 3 | 4 | 5 |
| Uncertainty | | | | | | |
| UC1 | I feel uncertain when an airline service is delayed because I do not know when it will take off. | 1 | 2 | 3 | 4 | 5 |
| UC2 | I feel concern when an airline service is delayed. | 1 | 2 | 3 | 4 | 5 |
| Acceptability | | | | | | |
| ACP1 | It is inevitable to wait for an airline service. | 1 | 2 | 3 | 4 | 5 |
| ACP2 | I can wait again to receive an airline service. | 1 | 2 | 3 | 4 | 5 |
| ACP3 | Airlines may inevitably have to make customers wait. | 1 | 2 | 3 | 4 | 5 |
| ACP4 | I can wait again to receive an airline service next time. | 1 | 2 | 3 | 4 | 5 |
| Repurchase intention | | | | | | |
| RI1 | I will continue to use the airline that I used previously even if I experience a service delay from this airline. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|-------------------------------|---|---|---|---|---|---|
| RI2 | I will recommend the corresponding airline even if I experience a service delay. | 1 | 2 | 3 | 4 | 5 |
| RI3 | I will talk positively about the corresponding airline even if I experience a service delay. | 1 | 2 | 3 | 4 | 5 |
| Negative word-of-mouth | | | | | | |
| NVM1 | I will file a complaint to the corresponding airline if I experience a service delay. | 1 | 2 | 2 | 4 | 5 |
| NVM2 | I will not use the corresponding airline again if I experience a service delay. | 1 | 2 | 3 | 4 | 5 |
| NVM | I will talk negatively to my acquaintances about the corresponding airline if I experience a service delay. | 1 | 2 | 3 | 4 | 5 |

Copyright

Nam-Yi Kim a, Jin-Woo Park b, *(2016) “A study on the impact of airline service delays on emotional reactions and customer behavior”

Appendix – B: THESIS PRESENTATION

<https://docs.google.com/presentation/d/1jVVN11ARDX3Ssh15Z2mUceZkvyDtpSta/edit#slide=id.p1>

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**BİLİMSEL ARAŞTIRMALAR ETİK KURULU**

03.05.2021

Dear Farivar Attarinejad

Your application titled “**The impact of flight delay on the travelers’ negative reactions and loyalty**” with the application number NEU/SS/2021/897 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Note:If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.