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ADVANCES IN GLOBAL SERVICES AND RETAIL MANAGEMENT

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## Are You Afraid to Travel During COVID-19?

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### Abstract

COVID-19, which is a new type of coronavirus disease, has affected the whole world in a very short time, hundreds of thousands of people to die and the physical and mental health of billions of people to deteriorate. It was determined that people's understanding of the holiday has been changed significantly during the pandemic period. Under normal conditions, the economic and social preferences of consumers are in the forefront in making travel decisions, whereas it is understood that psychological preferences became more evident in pandemic periods. It is aimed to reveal the relationship between tourists' travel concerns and intentions to travel during the COVID-19 pandemic period. In order to test the hypotheses of the study, quantitative research method was used in the field research. The application was made online due to pandemic conditions and it reached 410 people. Frequency, percentage, standard deviation, factor analysis, correlation and regression analyze were used in the study. According to the results of this study, it has been found that there are significant relationships between fear of COVID-19, travel anxiety and travel intention. Furthermore, as a result of the regression analysis, it was determined that travel anxiety has an effect on travel intention.

**Keywords:** COVID-19 fear, travel anxiety, intention to travel

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### Introduction

Pandemics refer to infectious and epidemic diseases that spread to very wide geographies, sometimes to a continent or even to the whole globe, causing diseases and deaths for humans or animals. From the past to the present, people around the world have faced a series of epidemics that have negatively affected both societies and economies. One of them is the “Coronavirus” epidemic with the common name “2019-nCoV”. Coronavirus is a single-chain, positive polarity, and RNA virus that was seen in late December in Wuhan, China at the seafood and animal market in a person with symptoms of fever, cough and shortness of breath and which was announced on January 13, 2020 as COVID-19 (new coronavirus) outbreak (Ministry of Health COVID-19 Guide, 2020: 5). Since 26 March 2020, there have been 123 million cases and 2.72

million confirmed coronavirus disease (COVID-19) related deaths worldwide (World Health Organization, 2021).

As the number of virus cases and deaths increased, drastic measures to control the spread of the disease have spread to various parts of the world. This has rapidly changed daily life. COVID-19 has affected every aspects of daily life quickly and deeply, from the way people work, live, shop, socialize and plan for the future. During the pandemic, governments implemented mandatory measures to control the infection, such as travel restrictions, banning public events, closing schools, quarantine and isolation measures (Yalçın, 2020).

This study presents some hypotheses about the potential impact of the COVID-19 pandemic on travel anxiety and intention to travel. This perspective is supported by the following information. First, literature was reviewed. Later, studies on the subject were included and the hypotheses established afterwards were tested. In the last section, discussions and suggestions to stakeholders are included.

## **Literature Review**

### ***COVID-19 Fear***

The concept of emotion is difficult to define. Because it is difficult to observe how emotion develops, is created and expressed. Emotions include a series of component processes that include subjective emotions, expressive motor behavior, physiological stimulation, cognitive evaluation, and behavioral disposition. Fear is an unpleasant emotional state triggered by the detection of threatening stimuli (De Hoog et.al., 2008). Apaydin (2016) defines fear as a basic motive that everyone can experience and an emotional reaction to a real or perceptual danger that suddenly arises.

In order for a disease to be defined as epidemic, it must be seen in a certain human population within a certain period of time and the disease should have more effect than expected compared to previous experiences. Finally, the pandemic is derived from the ancient Greek word "Pan", which means all, and "demos", which means people. Unlike endemia and epidemics, the pandemic means a disease that spreads and takes effect on the surface of a continent or even the entire world (Ataç and Uçar, 2006).

COVID-19 has created a complex, ever-evolving and changing situation in the world. In addition to the fear that people will lose their life or their relatives', this leads to fears of not being able to reach health institutions, fear of food shortages, fear of being infected at any time (Bicer et al., 2020) or infecting someone else, fear of being unemployed, etc. Such fears threaten people's physical health and lives, increase stress levels and trigger a wide range of psychological problems such as anxiety and depression (Pakpour and Griffiths, 2020). In addition, having confusing information about COVID-19 causes people to be more concerned. It is emphasized that the psychological effects of the COVID-19 pandemic are quite large and therefore it is important to evaluate such fears (Pakpour and Griffiths, 2020).

### ***Travel Anxiety***

Anxiety is expressed as a state of restlessness that occurs with some physical and cognitive symptoms related to possible failures, misfortunes or danger (Kierkegaard, 1980). Anxiety is an emotional response to stress, potential risks or real risks in general. Anxiety is known as the feeling of uneasiness and always stands out as an existing component of human psychology (Kingsbury et.al., 2012). Gudykunst and Hammer (1988) described anxiety as fear of negative consequences. McIntyre and Roggenbuck described anxiety broadly to include the feeling of being nervous, anxious, stressed, vulnerable, disturbed, scared or panicked.

Traveling to any destination involves risk and uncertainty; therefore, people evaluate the characteristics of products or a destination, possible negative consequences, various factors such as necessity and values. But people have different evaluations about many products. For example, some people may find a destination scary and dangerous, while others may find the same destination fun and exciting. Outbreaks are one of the factors that affect and limit travel behavior. In a study, Nazneen et al. (2020) found that COVID-19 greatly affects tourists' perceptions of hygiene and safety and travel decisions and causes concern for tourists, as well as reducing people's travel plans over the next 12 months.

### ***Intention to Travel***

Intention is sometimes more effective than behavior to comprehend the human mind (Jang et al., 2002). Travel intention is a phenomenon that arises as a result of travelers acting on various motives, allowing them to visit and see various destinations as a consequence of these motivations. Travel motivation is an effective predictor of tourist behavior because what is in the minds of visitors significantly affects their future travel (Horng et al., 2012). Intent is one of the most important identifiers of behavior and can cause actual behavior (Hsu and Crotts, 2006). In the context of tourism, the intention to travel is defined as the opportunity to travel anywhere at any time (Baker and Crompton, 2000).

In fact, destinations deemed unsafe are not preferred by potential passengers due to risk concerns. For example, when media communication tools continuously report terrorist attacks or an outbreak of a disease and related deaths in a particular destination, it provokes fear and anxiety that leads to no bookings and cancellations to that destination and intense feeling of discontent, sadness or frustration caused by the COVID-19 pandemic can discourage a person from traveling (Reisinger and Mavondo, 2005).

### ***Related Studies***

Reactions to an outbreak often affect people's anxiety levels and travel intentions. In 2009, for example, during the growing prevalence of H1N1, the Australian Government initiated a series of procedures for inbound and outbound passengers. Leggat, Brown, and Speare found that more than half of Queensland travelers were concerned about the outbreak and did not delay their travel, even though they showed H1N1-like symptoms (Leggat et.al., 2010). Lee et al. (2012) found that perceptions associated with H1N1 were not a significant strain of travel intentions. However, Reisinger and Mavondo (2005) determined that the perception of a disease is an important indicator of changing travel patterns. In 2021, Zenker, Braun and Gyimothy developed

the Pandemic (COVID-19) Travel Anxiety Scale (PATs), which measures the personal concerns of travelers (and non-travelers) to investigate changes in tourist thoughts and travel behavior caused by the pandemic. This scale is an easy-to-use 5- item scale that measures the level of anxiety caused by the pandemic. Travel Anxiety Scale (PATs) has proven its suitability and reliability in two different studies and two different cultural contexts.

Zhang et al. (2021) analyzed changes in local travel behavior from various population groups in Hong Kong between January and March 2020 using smart card data from the Mass Transit Railway Corporation (MTRC) system. As a result of the research, it was determined that due to the pandemic, local travel volume decreased by 43% on weekdays and by 49% on Saturdays and 59% on Sundays. It was concluded that the local travel volumes of adults, children, students and seniors decreased by 42%, 86%, 73% and 48%, respectively.

Reisinger and Mavondo (2005) studied risk perceptions and psychographic dimensions of travel anxiety. In an empirical study conducted after 9/11, they found a strong relation between perceptions of travel risk, travel anxiety and travel options. They also concluded that travel anxiety levels and perceived security affect international travel intentions.

Zheng, Luo and Ritchie (2021) investigated what triggers the public fear of travel and how people increase self-protection, coping and resilience in relation to travel in their study titled “Afraid to travel after COVID-19? Self-protection, coping and resilience against pandemic travel fear”. Using quota sampling, 1208 participants were surveyed in China. According to the results of this study, it was determined that the severity of the threat and sensitivity to the threat can cause “fear of travel”, which leads to the motivation for protection and protective travel behaviors after the outbreak.

Aydin and Doğan (2020) evaluated the impact of coronavirus Pandemic on tourist consumer behavior and tourism in Turkey in their study, which examined the changing decisions and behavior of tourist consumers and changes in the tourism sector in the new period in Turkey after COVID-19 and predicted the future.

In Cetinkaya et al. (2020), tourist travel risk perception and hygiene safety perception were evaluated in the COVID-19 process in Turkey. Within the scope of the survey, 1152 people participated in the study and found that the arithmetic average values of tourists regarding travel risk perceptions and hygiene safety perceptions with the COVID-19 pandemic were high and these perceptions did not change according to demographic data.

## **Methods**

The purpose of research, empirical model, sample, data collection will be discussed.

### ***The Purpose of the Research***

The COVID-19 pandemic not only worries people, but also scares people. Therefore, it is important to understand how this epidemic affects people's mental health. Although the desire to travel is closely related to an individual's emotional state, tourism researchers have often paid little attention to research on people's emotions. Some recent research has found how emotions can affect people's behavior. Emotion, therefore, can affect how people decide where to go and



their behavior. Fear is a basic emotion. Therefore, fear of epidemics affects people's travel behavior (Luo and Lam, 2020). In the literature, researchers examined the overall impact of COVID-19 on tourism. No study has been found on the intention to travel involving the psychological effects of COVID-19. Therefore, this study was prepared to investigate the relationship between COVID-19 fear, travel anxiety, and intention to travel for people living in Turkey who have the opportunity to travel.

### ***Empirical Model***

#### *COVID-19 Fear and Intention to Travel*

The COVID-19 pandemic carries great risk and uncertainty both for general consumers and for touristic consumers. According to Bauer (1960), consumers in general make decisions under certain conditions of risk and uncertainty, but this is often bearable. From a tourism point of view, although travel decisions carry certain risks in the normal pre-COVID-19 period (financial risk, physical risk, social risk and health risk) (Quintal, Lee and Soutar, 2010), it is considered that the perceived risk today is much higher and the health risk associated with COVID-19 is almost impossible to tolerate. The covid-19 pandemic and pandemic nature have caused widespread anxiety and fear (Ahorsu et al. 2020) and forced people to make changes in their behavior.

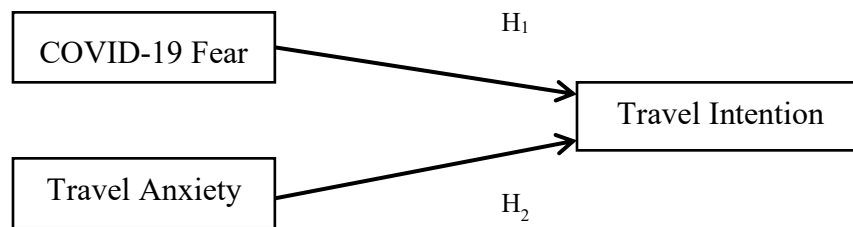
It shapes people's perceptions, attitudes, intentions, interests and ideas about objects, behaviors and events (Oliver, 1997). One of the important areas affected is the tendency of individuals to travel because individuals may shape their intention to travel due to an increased risk of disease or health (Lee et al., 2012; Sridhar et al., 2016; Yang et al., 2020). Passengers who perceive Risk may cancel, change their travel plans or seek additional information to carry out their travel plans (Reisinger & Mavondo, 2005).

- H<sub>1</sub>: Fear of COVID-19 adversely affects the intention to travel among the Turkish people.

#### *Travel Anxiety and Intention to Travel*

It is inevitable that positive or negative, sudden, unexpected changes in people's lives, habits, raise feelings of fear and anxiety. In the historical process, epidemics, wars, natural disasters have emerged as important causes of anxiety. According to Gudykunst and Hammer (1988), anxiety is an emotional element that means "fear of negative consequences". Tourism research has found that lack of safety and security causes anxiety, fear and discomfort, resulting in the avoidance of the intention to travel and visit (Sönmez and Graefe, 1999; Poon and Adams, 2000; Hem, Iversen and Nysveen 2002; Hung and Petrick, 2010; Lai, Li and Harrill 2013; Artuger, 2015). Larsen, Brun and Qgaard (2009) developed a scale to measure tourist anxiety and associated it with the intention to travel. The authors concluded that tourist anxiety is negatively related to travel intentions. In other words, it is known that factors such as perceived risk, anxiety and safety have significant effects in shaping travel intentions (Reisinger and Mavondo, 2005).

- H<sub>2</sub>: Travel anxiety negatively affects the intention to travel among the Turkish people.

**Figure 1.** Research model**Sample**

In Turkey, the Ministry of Health takes serious measures and conducts practices by meeting with all stakeholders. It is planned to prevent the spread of the virus by imposing travel restrictions within Turkey, from abroad to Turkey and by applying quarantines. This study investigates whether the fear experienced during COVID-19 has an impact on travel anxiety and intention to travel. Due to the pandemic, many people have developed fear of COVID-19 and people have had to make some changes in their lives. Among these changes is the phenomenon of traveling, which is a natural need of man. In this context, the population of the research is made up of people living in Turkey who have the opportunity to travel. The questionnaire form was used as data collection technique in the research.

**Data Collection**

The questionnaire used in the research consists of four parts. The survey will use the COVID-19 fear scale consisting of 8 items, the COVID-19 travel anxiety scale consisting of 7 items and the travel intention scale consisting of 3 items, which measure the personal fears of potential tourists. In the study, the COVID-19 fear scale used by Luo and Lam (2020) in their study and the travel anxiety scale and travel intention scale used by Zenker, Braun, Szilvia Gyimothy (2021) were used. The other part of the scale is the section with demographic questions. In this section, gender, age, marital status, occupation, education status and income status are asked respectively.

The data obtained in the study were analyzed with SPSS program. Reliability analyses were carried out in order to test the measurement feature of the scales used within the scope of the research. In addition, frequency and percentage analysis, arithmetic mean and standard deviation values for participation rates in expressions were looked at to obtain demographic information about participants. In addition, it was decided whether the statements were understood by looking at the results of the factor analysis. Correlation and regression analyses were used to determine whether there was any relationship and effect between the variables determined.

**Findings**

The distribution of normality was first examined in order to analyze the data obtained through the survey. Factor analysis, validity and reliability tests were performed to reveal the measurement quality and validity of the data set used in the research, and then the frequency and percentages of demographic information and the general averages of the expressions in the survey were obtained. In addition, correlation analysis was performed to determine the severity of the fear experienced in the COVID-19 process, the relationship between travel anxiety and

travel intention, and regression analysis was performed to determine the level of impact of variables.

### ***Reliability Analysis***

Skewness and Kurtosis values were calculated to determine whether the data obtained in this study showed normal distribution. It is stated that the Skewness and Kurtosis values must be between -1.5 and +1.5 in order for the data to be distributed normally (Tabachnick and Fidell, 2013). Since the variables in our analysis are among these values, we can assume that our data is normally distributed.

Within this research, reliability analysis was carried out on the scales of COVID-19 fear, travel anxiety and intention to travel. Accordingly, the reliability coefficient of the COVID- 19 scale is Alpha ( $\alpha$ ) = 0.86; reliability coefficient of travel anxiety, Alpha ( $\alpha$ ) = 0.92; the reliability coefficient of the intention to travel is Alpha ( $\alpha$ ) = 0.84. According to these results, it can be said that the reliability level of the survey used as a data collection tool in the research is high (Karagoz, 2019). Table 1 shows the results of reliability analysis.

**Table 1.** Reliability Coefficients of the Scales

Scales and dimensions	Cronbach's Alpha	(N)
COVID- 19 Fear	0.86	7
Travel Anxiety	0.92	8
Intention to Travel	0.84	3

### ***Factor Analysis***

“Factor analysis is used to moderate the structure and dimensions of the hidden variable underlying them, made by measurements performed using a large number of variables” (İslamoğlu and Almiaçık, 2014). Factors that make up the scale were determined by the results of the explanatory factor analysis. The first of the values examined in explanatory factor analysis are the Kaiser- Meyer-Olkin sample adequacy measure (KMO) and Barlett Sphere test results, which are used to determine whether the sample being examined is suitable for factor analysis. The KMO value varies from 0 to 1, and is asked to approach 1. The Barlett’s test is to test whether the relationships in the correlation matrix are sufficient to perform factor analysis. The fact that this test result is significant ( $p < 0.05$ ) means that the matrix formed by the relationships between variables is significant for factor analysis and that factor analysis can be performed (Gürbüz and Şahin, 2018).

According to the results of the Kaiser-Meyer-Olkin (KMO) and Barlett Sphere Test for the COVID-19 Fear Scale, the KMO value for the scale was calculated as ,834. This value shows that the sample adequacy of the research is at a “good” level for factor analysis. In addition, when the results of the Bartlett sphere test were examined, it was seen that the square value obtained was significant ( $\chi^2(10) = 1016,686; p < 0.05$ ). As a result of the analysis, it is seen that the factor loads of the items are collected in a single dimension. Therefore, no items have been removed from the scale. Table 2 shows the single factor and the factor loads of each expression for this factor.

**Table 2.** Explanatory Factor Analysis Results of COVID-19 Fear Scale

Component Matrix <sup>a</sup>	Component
COV_FEAR3	,843
COV_FEAR4	,723
COV_FEAR5	,783
COV_FEAR6	,832
COV_FEAR7	,865

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

According to the results of the Kaiser-Meyer-Olkin (KMO) and Barlett Sphere Test for the Travel Anxiety Scale, the KMO value for the scale was calculated as ,925. This value shows that the sample adequacy of the research is at a “very good” level for factor analysis. In addition, when the results of the Bartlett sphere test were examined, it was seen that the square value obtained was significant. ( $\chi^2(28) = 2178,445$ ;  $p < 0.05$ ). Accordingly, it has been accepted that the data comes from the normal multivariate distribution. In line with these findings, explanatory factor analysis was applied to the data. Table 3 shows the single factor and the factor loads of each expression belonging to this factor. As a result of the analysis, it is seen that the factor loads of the items are collected in a single dimension. Therefore, no items have been removed from the scale.

**Table 3.** Explanatory Factor Analysis Results of Travel Anxiety Scale

Component Matrix <sup>a</sup>	Component
T_ANX1	,832
T_ANX2	,819
T_ANX3	,795
T_ANX4	,823
T_ANX5	,630
T_ANX6	,874
T_ANX7	,845
T_ANX8	,828

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

According to the KMO and Barlett test results of the Travel Intent Scale in Table 4, the KMO value was calculated as 0.729. For good factor analysis, KMO value is preferred to be more than 0.80. However, a KMO value above 0.60 or 0.50 can also be accepted (Alpar, 2014). The KMO value for the Travel Intent Scale is calculated as 0.729. This value indicates that the sample adequacy of the research is "moderate" for factor analysis. Barlett testi sonucu ise anlamlı çıkmıştır. According to the results of exploratory factor analysis, the scale of the intention to travel is collected in one dimension. Therefore, no item has been removed from the dataset.

**Table 4.** Explanatory Factor Analysis Results of Travel Intent Scale

Component Matrix <sup>a</sup>	Component
TRAVELINT_1	,870
TRAVELINT_2	,872
TRAVELINT_3	,874

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

### Demographics

Demographic characteristics of the participants in the study are revealed in detail in Table 5 accordingly, 61.7% (n = 253) of the participants were women and 38.3% (n = 157) were men. Considering the distribution of the participants by age, 53.2% (n:218) were in the 18-25 age

range, 31.2% (n = 128) in the 26-35 age range, and 12.2% (n = 50) were between 36-45 years old, and 3.4% (n = 14) were 46 years old and over. 70.2% (n = 288) of the respondents were single and 29.8% (n = 122) were married. In addition, 50.2% (n = 206) of the participants were students, 24.11% were (n:99) public sector employees, 16.8% (n = 69) were private sector employees, 4.6% (n = 19) did not work in any job, 3.2% (n:13) worked in other sectors and 1% (n = 4) were retired. In addition, 47.1% (n = 193) of the participants have associate degree, 25.1% (n = 103) of them have undergraduate degree, 21.5% (n = 88) of them have graduate degree, 5.4% (n = 22) are high school graduates and 1% (n = 4) are primary school graduates. Considering the income levels of the people participating in the study, 40.5% (n = 166) had an income of 2000 TL or less, 30.2% (n = 124) had an income of 5000 TL and above, 15.1% (n = 62) had an income between 2001-3000 TL, 8% (n = 33) had an income between 3001-4000 TL, and 6.1% (n = 25) had an income between 4001-5000 TL.

**Table 5. Demographics**

	Frequency (N)	Percent (%)
<b>Gender</b>		
Female	253	61,7
Male	157	38,3
<b>Age</b>		
18-25	218	53,2
26-35	128	31,2
36-45	50	12,2
46 ve üzeri	14	3,4
<b>Marital status</b>		
Married	122	29,8
Single	288	70,2
<b>Job</b>		
Student	206	50,2
Public Sector	99	24,1
Special Sector	69	16,8
Retired	4	1,0
Unemployed	19	4,6
Other	13	3,2
<b>Education status</b>		
Primary Education	4	1,0
High School	22	5,4
Associate Degree	193	47,1
Graduate Degree	103	25,1
Post- graduate Degree	88	21,5
<b>Income</b>		
Less or equal to 2000 TL	166	40,5
2001-3000	62	15,1
3001-4000	33	8,0
4001-5000	25	6,1
5001 TL and more	124	30,2
<b>Total</b>	410	100

### *Descriptive Statistics for Variables of COVID-19 Fear, Travel Anxiety and Intention to Travel*

The arithmetic means and standard deviation values for travel anxiety, fear of COVID-19 and travel intention are detailed in Table 6. When the responses of the participants regarding travel anxiety are examined, high averages are seen ( $\bar{x} = 4.09$ ;  $sd = 0.95$ ). Accordingly, the participants stated that they participated in the statements such as “COVID-19 causes me to think about taking precautions before traveling” ( $\bar{x} = 4.39$ ,  $sd = 1.02$ ), I am concerned about traveling to crowded places due to COVID-19” ( $\bar{x} = 4.15$ ,  $sd = 1.19$ ).

When looking at the responses of participants regarding COVID-19 fear, low averages are seen ( $\bar{x} = 2.93$ ;  $sd = 0.97$ ). It has been determined that there is low participation in the following

opinions: I cannot sleep because I am worried about getting COVID-19 ( $\bar{x} = 1.79$ ,  $sd = 1.18$ ), my hands sweat when I think about COVID-19 ( $\bar{x} = 2.03$ ,  $sd = 1.29$ ). When looking at the averages of the travel intention variable, high averages are seen ( $\bar{x} = 3.41$ ;  $sd = 1.19$ ). It can be said that the participants mostly participated in the phrase “I will continue to plan for my future travels” ( $\bar{x} = 3.68$ ,  $sd = 1.29$ ).

**Table 6.** Arithmetic Average and Standard Deviation Values for Variables Intention to Travel, COVID-19 Fear, Travel Anxiety

	Mean ( $\bar{x}$ )	(SD)
<b>COVID-19 FEAR</b>	2,93	0,97
I am most afraid of the novel coronavirus	4,16	1,209
It makes me uncomfortable to think about novel coronavirus	3,79	1,338
My hands become sweaty when I think about COVID-19	2,03	1,29
I am afraid of losing my life because of COVID-19	3,33	1,47
When watching news and stories about novel coronavirus on social media or any other media (i.e., TV, Radio), I become nervous or anxious	3,33	1,33
I cannot sleep because I am worried about getting the novel coronavirus	1,79	1,18
My heart races or palpitates when I think about getting COVID-19	2,14	1,32
<b>TRAVEL ANXIETY</b>	4,09	0,95
I am anxious to travel to crowded destinations due to COVID-19.	4,15	1,19
COVID-19 makes me worry a lot about my normal ways of travelling.	4,05	1,19
COVID-19 makes me think a lot about taking precautionary measures before travelling	4,39	1,02
Avoiding people when I travel is frequently on my mind due to COVID-19	4,18	1,12
It makes me uncomfortable to think about COVID-19 while planning my vacation	3,93	1,38
I am afraid to risk my life when I travel, because of COVID-19.	4,12	1,14
When watching news about COVID-19, I become nervous or anxious in regards to travel	3,92	1,24
I do not feel safe to travel due to COVID-19.	4,01	1,17
<b>Intention to Travel</b>	3,41	1,19
Whenever I have a chance to travel, I will	3,54	1,37
I will do my best to improve my ability to travel	3,03	1,42
I will keep on gathering travel-related information in the future	3,68	1,29

Scale: 1 = I strongly disagree, 2 = I disagree, 3 = neither agree nor disagree, 4 = I agree, 5 = I strongly agree

### ***Correlation Analysis Results Regarding the Relationships Between Variables***

“Correlation analysis is an analysis technique to determine the severity of the relationship or dependence between two variables measured at the interval and ratio level. In order for this test to yield reliable results, the data must have metric properties. The relationship that is tried to be measured in correlation analysis relates to the linear part of the relationship between variables. The correlation coefficient calculated as a result of correlation analysis is indicated by  $r$  and can take values between  $-1$  and  $+1$ . The coefficient  $+1$  indicates that there is an excellent linear relationship between the two variables (the value  $x$  increases by one unit, while the  $y$  value increases by one unit), while the coefficient  $-1$  means that there is an excellent relationship between variables, but the direction of the relationship is inverse (the  $y$  value decreases while the  $x$  value increases). If the coefficient is zero, it means that there is no open/visible relationship between the two variables. There are various types of correlation calculations. Pearson's correlation was used within the scope of the study and it is one of the parametric tests and requires measurement at the minimum interval level” (Altunışık et al., 2012).

The results of the correlation analysis, which reveals the severity and direction of the relationship between participants' fear of COVID-19, travel anxiety and intentions to travel, are given in Table 7. In the correlation analysis, it was determined that there were meaningful relationships between COVID-19 fear, travel anxiety and intention to travel. The direction of the relationship between travel anxiety and intention to travel is negative. According to the finding, it is possible to say that as travel anxiety increases, the intention to travel will decrease. The direction of the

relationship between the fear of COVID-19 and the intention to travel is also negative ( $r = -0,162$ ,  $p = ,000 < 0,05$ ). This means that as participants become more fearful of COVID-19, their intention to travel decreases.

**Table 7.** Correlation Coefficients for Intention to Travel and Travel Anxiety, COVID-19 Fear

		(1)	(2)	(3)
<b>COVID-19 FEAR</b> (1)	Pearson's correlation	1	,559**	-,162**
	Sig. (2-uçlu)		,000	,001
	N		410	410
<b>TRAVEL ANXIETY</b> (2)	Pearson's correlation	,559**	1	-,252**
	Sig. (2-uçlu)	,000		,000
	N	410		410
<b>INTENTION TO TRAVEL</b> (3)	Pearson's correlation	-,162**	-,252**	1
	Sig. (2-uçlu)	,001	,000	
	N	410	410	410

### *Regression Analysis Results and Hypothesis Tests Applied for Relationships Between Variables*

Regression analysis is a mathematical model description of the relationship between a dependent variable and an argument that are supposed to have an effect on the dependent variable (Ural and Kılıç, 2013). At this stage, the results of the regression analysis to support the findings obtained as a result of correlation analysis and to test the previously determined hypotheses within the research will be included in Table 8. Here, fear of COVID-19 and travel anxiety are independent variables, while the tendency to travel is dependent variable. The model describes 6% of its intention to purchase (Adjusted R<sup>2</sup>). In other words, the fear of COVID-19 and travel anxiety explain 6% of the change in the intention to travel. According to Table 8, travel anxiety negatively affects the intention to travel. However, it can be said that the fear of covid 19 has no effect on the intention to travel.

**Table 8.** Multiple Regression Analysis on Fear of COVID-19, Travel Anxiety and Travel Intention

INDEPENDENT VARIABLES	BETA	T	SİG. (P)	TOLERANCE	VIF
COVID-19 FEAR	-,038	-,533	,595	,687	1,455
TRAVEL ANXIETY	-,293	-4,060	,000	,687	1,455
F		13,962			
R		,253			
R <sup>2</sup>		,064			
Adjusted R <sup>2</sup>		,060			
Durbin-Watson		1,913			

\* The value is significant at the 0.05 level \*\* The value is significant at the 0.01 level

### **Conclusions**

This study was prepared to investigate the relationship between COVID-19 fear, travel anxiety, and intention to travel for people living in Turkey who have the opportunity to travel. For this purpose, COVID-19 fear, travel anxiety and intention to travel are explained. In this context, the population of research is made up of people living in Turkey who have the opportunity to travel. Then a survey was conducted for people living in different provinces of Turkey who had the opportunity to go on holiday before. As a result of the analyses, it was determined that the participants were mostly women, usually single and students between the ages of 18 and 25. In addition, it has been achieved that they have associate degree education level and income of 2000 TL or less.

Looking at the averages of statements regarding travel anxiety, fear of COVID-19 and intention to travel, it was determined that participants agreed most in “I am concerned about traveling to crowded places due to COVID-19”, and “I will continue to plan for my travels in the future”. However, it can be said that participation in the statements “I cannot sleep because I am worried about getting COVID-19” and “My hands sweat when I think about COVID-19” are low.

In the correlation analysis, it was determined that there were meaningful relationships between COVID-19 fear, travel anxiety and intention to travel. The direction of the relationship between the intention to travel and the fear of COVID-19 is negative. This means that as participants become more fearful of COVID-19, their intention to travel decrease. This result is similar to the findings of the study of Das and Tiwari (2020) and Lua and Lam (2020). Covid-19 is an epidemic that is effective worldwide and still remains up-to-date. Therefore, it is expected that people will make changes in their travel behavior after such an epidemic.

The direction of the relationship between travel anxiety and intention to travel is negative. According to the finding, it is possible to say that as travel anxiety increases, the intention to travel will decrease. A similar conclusion was found in the study of Larsen, Brun and Qgaard (2009). These researchers developed a scale to measure tourist anxiety and linked it to the intention to travel. The authors conclude that tourist anxiety is negatively associated with travel intent. In line with all these results, a number of recommendations were made for businesses, destinations and researchers. A similar study by Menegaki (2020) emphasized that in order for people to tend to travel again, the knowledge that it is safe to travel should be accepted and people should be encouraged to buy tourist products.

As a result of the research, it is seen that the fear of COVID-19 and travel anxiety explained the intention to travel by 6%. In other words, fear of COVID-19 and travel anxiety explain 6% of the change in travel intention. The first research hypothesis aims to test the effect of fear in the COVID-19 process on individuals' intention to travel. As a result of the regression analysis, it is seen that the hypothesis is not supported. Another hypothesis was developed to determine the effect of travel anxiety on the intention to travel. As a result of the analyses, it is seen that the hypothesis is supported.

Studies measuring the impact of COVID-19 fear and travel anxiety on the intention to travel have been found to be quite few. The study reveals the relationships between COVID-19, travel anxiety and intention to travel, and contributes to the literature due to the lack of such a study in our country. Due to the effect of travel anxiety on travel, it has been established that it is necessary to identify the factors that cause travel anxiety in individuals, to take measures in these matters and to make arrangements.

Tourists will pay particular attention to hygiene, cleanliness and COVID-19 measures (social distance, mask use of the employee, temperature measurement at the entrance, limitation of the number of people who will receive services inside, disinfection process and certification) in the coming period. Therefore, businesses in accommodation, food and beverage, travel, transport and entertainment sectors should fully implement COVID-19 measures, including hygiene and cleanliness as a priority, and take these considerations into account in the production of services. In the wake of the COVID-19 crisis, nature-based travel options may be encouraged for longer holidays and even short weekend trips



Measures for the COVID-19 pandemic must be taken by businesses as well as destinations. After the outbreak, there may be a surplus of demand, especially in many destinations. Therefore, in order for tourists to feel safe, it is necessary to strictly check whether COVID-19 measures are implemented throughout the destination. In addition, measures such as measuring temperature at the entry and exit points of the area, and limiting the number of people in crowded areas, can also be taken in the future.

This study was carried out only on the people living in Turkey. In the future, it is recommended that researchers study this issue across different regions, destinations or countries. The research was conducted between 01-14 April 2021, during the period of stay at home and restrictions. It is possible to have different results in case of different sample numbers and periods. New research may be able to compare between the period in which the pandemic was active and the period in which it ended.

Finally, it is necessary to focus on the limitations of the current research. The first limitation of the study relates to the way data is collected. The survey was conducted in an online environment due to social distance, and all responses were obtained in an online environment. For this reason, the data obtained in the study is limited to individuals who have internet access or know how to use a computer. It also did not address the fear of COVID-19, travel anxiety, and whether their intention to travel differed significantly based on demographic characteristics. In future studies, it is thought that it will be useful to determine differences according to demographic criteria.

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