# THE IMPACT OF THE COVID-19 OUTBREAK ON LOCAL TOURIST BEHAVIOR IN ANTALYA, TURKEY

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#### Abstract

The purpose of this article is to inquire about potential consumer behavior of individuals to participate in domestic tourism activities in Turkey when the COVID-19 outbreak is over. In other words, it is aimed to anticipate the effects of the pandemic on consumer behaviors of local Turkish tourists in the upcoming periods. A survey was conducted over 426 local tourists accommodating in Antalya and previously involved in domestic tourism activities. The research data were analyzed via Structural Equation Modeling (SEM). The most important and fundamental finding concluded in the current study is that respondents will attach greater importance to the hygiene and safety of tourist attractions and public recreational areas after the COVID-19 outbreak. In addition, it is observed that people's considerations about the dimensions of "general impact", "attitude and preference", "hygiene and safety" differ on the basis of demographical characteristics.

Key words: COVID-19 outbreak, pandemic, local tourist, tourist behavior

### **INTRODUCTION**

Emerging in December, 2019 and called as novel coronavirus, COVID-19 has spread across the world in a very short while and turned into a pandemic. Precautions taken with the purpose of preventing the spread of the virus have necessitated long or short-term quarantine practices. These practices were aimed to minimize human mobility and prevent the emergence of pandemic situation. The interruption of human mobility has affected a wide range of sectors; however, it has created a deep influence on the tourism industry due to suspension of tourist mobility. Tourist mobility in March, 2020 in Turkey has decreased by 53% [25] compared to the same period of the previous year. This process which affects human beings severely is expected to cause some changes in tourism demand. For this reason, it is of great importance to conduct studies to explore and understand new tourist perspective so as to

ensure tourism sustainability in postpandemic period. With this idea in mind, the present study aims to measure post-pandemic behaviors of potential tourists to be involved in domestic tourism activities in Turkey.

COVID-19, called novel coronavirus and turned into a pandemic in the world in a very short while, has not only brought the life into a standstill but also affected several sectors such as agriculture, tourism, construction, and health in particular. Since the tourism industry is based on the mobility of human beings, it is one of the top sectors which have been adversely affected by the pandemic. It is assumed that attitudes and behaviors of people around the world might be different when the pandemic is overcome. In the light of this assumption, the main aim of this research is to examine the post-pandemic consumer behaviors of local tourists to be involved in domestic tourism activities. As a primary step, an in-depth literature review was conducted within the scope of the study.

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Then, information about the COVID-19 process and tourist behavior was provided. In the practical stage of the research, a survey was applied to local tourists in Antalya, and the results were analyzed.

Background information: The COVID-19 pandemic

Coronaviruses are a family of viruses that cause illnesses ranging from the common cold Middle East Respiratory Syndrome to (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). COVID-19 was identified for the first time in late December in Wuhan, China as a result of the examination of a group of patients with similar respiratory symptoms (fever, cough, shortness of breath). However, the illness was named as COVID-19 on January 13, 2020. Initially, people in the seafood and animal market in Wuhan were diagnosed with the illness caused by coronavirus. Then, the virus transmitted from person to person and spread to other cities in Hubei province, especially to Wuhan, and other provinces of China and the other countries in the world [20].

Novel coronavirus is a type of virus that can be transmitted from person to person very quickly. Therefore, it has affected life in a very short time all around the world and become a pandemic. Many countries have developed certain measures against the COVID-19 outbreak. A shortage of hygienic materials and mask supply has been observed in different countries in the world. According to the data from World Health Organization, there are 3,145,407 confirmed cases and 221,823 confirmed deaths in a total of 214 countries or regions, as of May 1, 2020 [31].

As of May 1, 2020, the country with the highest number of confirmed cases worldwide is the United States of America (1,035,353), which is respectively followed by Spain Italy (203, 591),the United (212,917),Kingdom (165,225), Germany (159,119), France (127,066) and Turkey (117,589) [30]. In the context of the confirmed cases in Turkey, Istanbul is the leading province with the highest number of cases as of April 10, 2020 (28,014), which is followed by İzmir (2,884), Ankara (2,032), Kocaeli (1,702) and Konya (1,690), respectively. The number of confirmed cases in Antalya is 166 by April 25, 2020 [3].

A number of measures against COVID-19 have been put into effect in various regions in Turkey. Some of these measures can be listed as follows: interprovincial travel restriction, online education, flexible working hours, shopping temporary closure of malls. obligation of wearing protective mask, and lockdown especially in the weekends. In addition, there are various measures specific the hospitality industry: namely. to personnel's maximum compliance with hygiene rules, maintenance and repair of air conditioners, removal of toys in playgrounds, closure of sauna, massage rooms and gymnasiums, airing the rooms for at least 1 hour after cleaning, and use of disposable gloves [19].

### Local tourist behavior

Tourist behaviors are discussed in the literature in different contexts such as cultural [18: 41. domestic/local [5: 13]. environmentally sustainable [10], origin and cognition [11; 12], gender [14], choice of destination [16; 35]. In tourism research conducted to explore and explain tourist behavior, proximal motives come to the fore in general. Kock et al. [11] examine the origin of tourist behavior within the framework of five fundamental motives [22]. The understanding of tourist behavior is discussed in psychology in the light of such motives as evading harm, exploration, affiliation, status, and mating. Research results reveal that make tourists can different decisions depending on the basic motive being activated [11].

The literature on tourist behavior generally concentrates on to what extent tourists are affected by and feel satisfied with the services provided [17]. Moreover, tourist behavior differs by cultural differences [18; 4; 35]. In the study conducted by Pizam and Jeong [18], 18 out of 20 behavioral characteristics of tourists vary on the basis of their nationalities. Similarly, it is concluded in a study by Zhang et al. [35] that tourists from different continents and countries have different behaviors and perceptions. In the study in which local and foreign tourist behaviors are

analyzed comparatively, Carr [5] puts forward that behaviors of local tourist are different than those of foreign tourists. The research results report that foreign tourists have higher tendency to engage in more passive and hedonistic behaviors.

#### Literature review

comprehensive literature review was A conducted on Novel Coronavirus Disease (COVID-19), which has turned into a pandemic and impacted over the world. A limited number of studies were found due to the fact that the disease has a very recent onset and its effect is still widely experienced all over the world. These studies explain the effect of the epidemic on different subject areas. In this context, the effects of the pandemic on socio-economic developments [15], finance [7], society [6], weather [21], life [8], environment [27; 34], daily communication on social media [33], tourism [32], academic research [9], undeclared-work, policy [29] and purchase behavior towards personal protective equipment [1] are discussed in the literature. According to Nicola et al. [15], the COVID-19 outbreak has induced a fear of economic crisis and stagnation in people. In addition, social distancing, self-isolation and travel restrictions have had negative impacts on employment. An increase in the need for medical supplies has been observed worldwide. Goodel [7] warns investors, politicians and the public that the financial consequences of the outbreak could be even greater than those of the past crises, and claims that COVID-19 will have a devastating effect on а global scale. Similarly. Chakraborty and Maity [6] argue that the outbreak could lead to a global breakdown. Haleem et al. [8] report in their study that the pandemic affects daily life negatively. It is explained in the study that the conditions such as restrictions in the service sector. cancellation or postponement of sports organizations, disruption in cultural and religious holidays, the concept of social distancing, closure of movie theatres, playgrounds and entertainment venues, and postponement of the exams have created stress on people.

Zambrano-Monserrate et al. [34] investigate the positive and negative indirect effects of the COVID-19 outbreak on the environment. In the study, it is stated that the pandemic has brought along travel restrictions and quarantine practices. People's staying at home due to the pandemic contributed to improved air quality, clean beaches and reduced environmental pollution. On the other hand, it caused a decrease in recycling and an increase in waste. As a result, it is concluded in the study that the contribution to the environment for a short while is not sustainable. In another study investigating the impact of the pandemic on the environment, Wang and Su [27] reveal that air quality in China improved in the short-run. The research results report that the outbreak reduces global carbon emissions. Nevertheless, it is also stated that this positive state achieved in a short time is not sustainable, as suggested by Zambrano-Monserrate et al. [34]. In the study conducted by Haleem et al. [9], academic research fields that the COVID-19 outbreak would influence are identified and listed as follows: vaccine development, medication/therapy, health care equipment, and social, economic. environmental, sustainability, psychiatrics, the emergence of a new workplace and work culture, information technology revolution, online awareness workshop and capacity building, biological warfare, psychological issues, industry 4.0, importance of home life, global trade, commerce, medical supply chains, public health and policy. It is also stated that the pandemic has brought new challenges for global research communities. Yang et al. [32] analyzed the impact of the COVID-19 outbreak on the tourism industry via a calibrated dynamic stochastic general equilibrium (DSGE) model. The analysis results reveal that all variables including production and labor force in tourism industry decrease further as the magnitude of the disaster increases. Findings in the study put forward that SARS in 2003, Middle East Respiratory Syndrome in 2014 and COVIDsimilarities. Having 19 have similar characteristics with the current study aiming to determine the travel behaviors of local tourists in Turkey after COVID-19, a study

was conducted by Wen et al., [28] in China context. In the study, the effect of the SARS outbreak 2003 on the consumption in behavior of local tourists in China is examined. Similarities among the outbreaks on global scale (SARS, Middle East Respiratory Syndrome, COVID-19) [32] are important with regard to comparing the results. The SARS epidemic affected the attitudes of local tourists towards life and lifestyle. The greatest impact of the epidemic was the increased public awareness on safety hygiene. SARS impacted on and the tendencies and preferences of local tourists, particularly travel pattern. For example, in the post-epidemic period, tourists showed greater interest in outdoor activities and ecotourism [28]. In parallel with the information in the literature, the negative effects of the pandemic on different sectors have started to be felt more. Especially the tourism industry is one of the sectors being affected by the pandemic Ouarantine practices and most. travel restrictions across the world have also affected the tourism graphics of the countries. For example, the Chinese hotel market had a 71% decrease between January 23 and 26, compared to the same period of the previous year [2]. Having received approximately 1.45 million Chinese tourists in the first quarter of 2019, Vietnam hosted 644,000 Chinese tourists in January, 2020 [15]. Similarly, the number of tourists visiting Turkey in March, 2020 decreased by 65%. Moreover, in the first quarter of 2020, the number of tourists visiting Turkey has also decreased by 22.11%, compared to the same period of the previous year [25]. Tourism statistics of the first quarter signal that the year 2020 will be quite challenging for the tourism industry. At this point, post-pandemic local tourist behavior gains great importance.

### **MATERIALS AND METHODS**

### Aim of research

The main objective of this empirical study is to inquire about potential consumer behavior of individuals to participate in domestic tourism activities in Turkey when the COVID-19 outbreak is over. In other words, it

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Research population is composed of local tourists who were involved in domestic tourism activities at least once with minimum one night stay in accommodation facilities in Turkey. According to the accommodation statistics provided by The Ministry of Culture and Tourism in 2019, the number of local tourist arrivals to accommodation facilities with tourism operation certificate and municipality certificate is 42 million, that of overnight stay is 78.5 million, and the average length of stay is 1.87 nights. In this regard, Istanbul with 4.7 million domestic arrivals, Antalya with 4.4 million domestic arrivals and Ankara with 2.4 domestic arrivals are the first three provinces in the ranking, respectively [23]. Considering the fact that coastal tourism dominates both domestic and international tourism in Turkey and that the coastal tourism prevailing across the country is quite underdeveloped in Istanbul, it can be indicated that Antalya province is the most popular tourism destination in the context of both domestic tourism and international tourism. To address the subject matter briefly in the context of international tourism, Antalya hosting approximately 32.51% of 45 million foreign visitors in 2019 ranked the second after Istanbul [24]. In the light of the information acquired. Antalya was considered to be the most suitable destination with regard to obtaining more sound and generalizable

•Has COVID-19 affected individuals' daily life and working life?

•Has COVID-19 affected tourism activities throughout the period it dominated?

•Does COVID-19 have any influence over individuals' travel intentions, travel behaviors and travel patterns?

•Has COVID-19 caused any changes with regard to hygiene practices during journey?

•Do the effects of COVID-19 differ in line with demographical characteristics of tourists?

## Population and sample

data as local people in Antalya have pretty high participation in and awareness about tourism activities. The research population was limited to the individuals residing in Antalya in the research period and involved in domestic tourism activities previously. Due to the important share of Antalya within the tourism industry in Turkey, it was set as a requirement for respondents, assuming that their levels of experience would be at maximum, to having accommodated in any tourism facility in Antalya at least once a year, as well as staying at least once in any destination in Turkey. Owing to the fact that the research population was very large and it was impossible to reach the whole population, the study was conducted over a sample representing the population, as this technique was considered to be more cost and timeeffective. In Antalya where approximately 2.5 million inhabitants reside according to the address-based population registration statistics for 2019 by Turkish Statistics Institute [26], 426 respondents having given consent to participate in the research filled in questionnaire forms, and all forms were subjected to analysis. Since there was no possibility to have face-to-face interviews with the respondents due to the pandemic, the link of the online survey prepared by the researchers via "google forms" was announced and shared on various social media platforms. In this way, the responses were collected between April 01 and April 20, 2020 subjected to analysis. and In the announcement published in social media platforms, it was noted that the survey must be completed by those residing in Antalya and having accommodated in any tourism facility in Antalya at least once a year, as well as staying at least once in any destination in Turkey within a year.

### Measurement tools

In the current study, survey was used as data collection tool. The survey comprises two parts. The first part involves four questions aiming to identify demographical characteristics of respondents (gender, marital status, education and income level). In the second part, a 5-point Likert scale (5=agree, 4=somewhat agree, 3=neither agree nor

disagree, 2=somewhat disagree, 1=disagree) composed of 3 dimensions, namely "general impacts", "attitude and preference", "hygiene and safety" and 22 items utilized by Wen et al. [28] in their study aiming to determine the effect of the SARS outbreak on consumer behaviors of local Chinese tourists was adopted in the current study in order to identify the effects of the COVID-19 outbreak on respondents' consumer behaviors. In addition, the item (I will not take wild animals as food in the future) under the dimension of "attitude and preference" in Wen et al. [28]'s scale was removed from the scale used in the current study, as Turkish people do not have such kind of eating habits to a large extent. Consequently, the current study employs a 21item scale with the dimensions of "general impacts" (4 items), "attitude and preference" (9 items) and "hygiene and safety" (8 items). Data analysis

SPSS and AMOS programs were utilized to analyze the survey data. Descriptive statistics involving frequency and percentage analyzes were used to analyze the demographic characteristics of the respondents. For the analysis of the responses provided by the respondents, arithmetic mean and standard deviation analyzes as well as frequency and percentage analyzes were performed. With the purpose of testing the research question "Do the effects of COVID-19 differ in line with demographical characteristics of tourists?", "Independent Samples t-test" for the variables involving two and groups "One-Way Variance Analysis (ANOVA) with Independent Samples" for the variables involving more than two groups were used for analysis. In order to determine in which combination(s) the significant difference in the variables that contain more than two groups are observed, the Bonferroni Test in cases where the homogeneity (equality) of variances is provided and Tamhane's T2 test in the opposite case were performed in line with the data obtained from the post-hoc multiple comparison test statistics, which does not necessitate the principle of equal number of samples in groups. The homogeneity of variances was analyzed via the Levene's test. The reliability of the scale was measured via

Demographical

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Cronbach's alpha, while exploratory and confirmatory factor analyses were used for scale validation.

## **RESULTS AND DISCUSSIONS**

#### Demographical findings

Table 1. Demographical characteristics of respondents\*

D. Characteristics	Groups	f	%		
	Female	261	61.3		
Gender	Male	165	38.7		
	Total	426	100		
	Married	261	61.3		
Marital Status	Single	165	38.7		
	Total	426	100		
	Primary school	4	0.9		
	High school	47	11		
Educational Background	Undergraduate	282	66.2		
	Postgraduate	93	21.8		
	Total	426	100		
	2000 TL and less	43	10.1		
	2001-4000	95	22.3		
Monthly Income	4001-6000	137	32.2		
Monthly Income	6001-8000	62	14.6		
	8001 TL and more	89	20.9		
	Total	426	100		

Source: \*Calculated by authors.

#### Scale findings

Reliability and exploratory factor analysis results and the findings obtained through descriptive statistics

Findings obtained through the measurement scale developed with the purpose of identifying the effects of the COVID-19 outbreak on consumer behavior are presented in Table 2.

Measurement reliability coefficients calculated via Cronbach's alpha for each dimension in the scale are also provided in Table 2.

The most important point concluded in the reliability analysis is the fact that the reliability coefficient of the "hygiene and safety" dimension experiences a remarkable increase (from .721 to .796) in the event that Item 14 (I prefer to stay in high quality star hotels after COVID-19) is removed from the scale.

According to the exploratory factor analysis results concluded via the varimax rotation method and presented in Table 2, it is seen that the lowest factor loading is .555 and there is no need to remove any item from the scale. As a result of the exploratory factor analysis, a total of 6 factors with an eigenvalue greater than 1 were identified under three dimensions, which shows parallelism with the study where the scale was first used.

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the

characteristics

respondents are presented in Table 1. The

majority of the respondents in the study are women (61.3%), married (61.3%), have bachelor's degree (66.2%) and a monthly

income of 4,001 TL - 6,000 TL (32.2%).

#### Results of Confirmatory Factor Analysis

In addition to reliability analysis and exploratory factor analysis, confirmatory factor analysis was performed to achieve the soundest results especially in the context of removing items from the scale. Figure 1 demonstrates the final version of the model representing the results of the first-order confirmatory factor analysis performed through the AMOS program. The model involves the standardized regression weight estimates, as well.

Within the scope of confirmatory factor analysis, the Maximum Likelihood method was used.

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Table 2. Scale findings\*

		Scale	x	S.d	Factor loadings	Cronbacl alpha	
	General Impact		4.34	.82		.637	
	Impact on	1. Covid-19 has greatly affected my work and life.	4.56	.87	.857		
	life	2. Covid-19 has greatly affected my attitude towards life and my way of life.		1.07	.877		
	Impact on	3. All of my business travels have been cancelled during the Covid-19 period.	4.12	1.44	.781		
	tourism	4. All of my leisure travels have been cancelled during the Covid-19 period.		1.29	.871		
	Cumulative Tota	l Variance Explained %	74.577				
	KMO and Bartle	tt's Test	KMO			.62	
	KMO unu burne	11 5 1 651		's Test p		.00	
	Attitude and Pre	4.05	.75		.762		
		5. Because of Covid-19, I believe travelling in Turkey will be unsafe.	3.34	1.52	.690		
		6. I will greatly reduce my travel plans in the next 12 months.	4.10	1.28	.764		
	Tourism inclination	7. I will avoid travelling to crowded big cities after Covid- 19.	4.17	1.20	.701		
tysts		8. I will reduce the length of travel and tourism after Covid-19.	3.84	1.37	.740		
Factors Identified in Exploratory Factor Analysis		9. In choosing tourist destinations, I will avoid Covid-19- affected areas.		.98	.555		
		10. Because of Covid-19, my interest in participating in outdoor activities and eco-tourism has increased.	4.22	1.31	.648		
	Mode of tour	11. I prefer suburbs or areas within short distance for leisure travel after Covid-19.		1.29	.621		
		12. I will reduce the possibility of joining tour groups after Covid-19		1.01	.590		
		13. I prefer travelling with family members and relatives after Covid-19.		1.43	.595		
	Cumulative Tota	l Variance Explained %			52.727		
	Cumulative Total Variance Explained %				2.121	.83	
		KMO and Bartlett'sTest			KMO Barlett's Test p		
ŝ	KMO and Bartle	li stesi	Barlett	S IESLD		.00	
suoin							
racions	KMO and Bartle Hygiene and Saj Food &		Barlett           4.32           2.65	.56 1.55	.799	.721	
ractors	Hygiene and Saj	fety         14. I prefer to stay in high quality star hotels after Covid- 19.         15. I prefer separated dining while travelling with a tour	4.32	.56	.799 .693		
raciors	Hygiene and Saj Food &	fety         14. I prefer to stay in high quality star hotels after Covid-19.         15. I prefer separated dining while travelling with a tour group.         16. I care more about the hygiene and safety of the tourist	<b>4.32</b> 2.65	<b>.56</b> 1.55			
Factors	Hygiene and Saj Food &	fety         14. I prefer to stay in high quality star hotels after Covid- 19.         15. I prefer separated dining while travelling with a tour group.	4.32       2.65       3.17	.56 1.55 1.56	.693		
Lactors	Hygiene and Saj Food & lodging	fety         14. I prefer to stay in high quality star hotels after Covid- 19.         15. I prefer separated dining while travelling with a tour group.         16. I care more about the hygiene and safety of the tourist sites after Covid-19.         17. I care more about the hygiene and safety of the public	4.32         2.65           3.17         4.74	.56 1.55 1.56 .75	.693 .782		
Fuciors	Hygiene and Saj Food &	fety         14. I prefer to stay in high quality star hotels after Covid- 19.         15. I prefer separated dining while travelling with a tour group.         16. I care more about the hygiene and safety of the tourist sites after Covid-19.         17. I care more about the hygiene and safety of the public recreation sites after Covid-19.         18. I care more about the hygiene and safety of the means of transportation after Covid-19.         19. I care more about the hygiene and safety of the means of transportation after Covid-19.         19. I care more about the health of the members in the	4.32         2.65         3.17         4.74         4.80	.56 1.55 1.56 .75 .66	.693 .782 .866		
F 461073	Hygiene and Saj Food & lodging	fety         14. I prefer to stay in high quality star hotels after Covid- 19.         15. I prefer separated dining while travelling with a tour group.         16. I care more about the hygiene and safety of the tourist sites after Covid-19.         17. I care more about the hygiene and safety of the public recreation sites after Covid-19.         18. I care more about the hygiene and safety of the means of transportation after Covid-19.	4.32           2.65           3.17           4.74           4.80           4.81	.56 1.55 1.56 .75 .66 .65	.693 .782 .866 .879		
ractors	Hygiene and Saj Food & lodging	fety         14. I prefer to stay in high quality star hotels after Covid-19.         15. I prefer separated dining while travelling with a tour group.         16. I care more about the hygiene and safety of the tourist sites after Covid-19.         17. I care more about the hygiene and safety of the public recreation sites after Covid-19.         18. I care more about the hygiene and safety of the means of transportation after Covid-19.         19. I care more about the hygiene and safety of the means of transportation after Covid-19.         20. I care more about the hygiene and safety of the hotels	4.32         2.65           3.17         4.74           4.80         4.81           4.75	.56           1.55           1.56           .75           .66           .65           .75	.693 .782 .866 .879 .757		
Lactor	Hygiene and Saj Food & lodging Hygiene	fety         14. I prefer to stay in high quality star hotels after Covid- 19.         15. I prefer separated dining while travelling with a tour group.         16. I care more about the hygiene and safety of the tourist sites after Covid-19.         17. I care more about the hygiene and safety of the public recreation sites after Covid-19.         18. I care more about the hygiene and safety of the means of transportation after Covid-19.         19. I care more about the health of the members in the tour group after Covid-19.         20. I care more about the hygiene and safety of the hotels after Covid-19.         21. I care more about the hygiene and safety of the daily necessities while travelling after Covid-19.	4.32         2.65           3.17         4.74           4.80         4.81           4.75         4.83	.56           1.55           1.56           .75           .66           .65           .75           .62           .61	.693 .782 .866 .879 .757 .882 .866		
Lactor	Hygiene and Saj Food & lodging Hygiene	<ul> <li><i>fety</i> <ol> <li>I. I prefer to stay in high quality star hotels after Covid-19.</li> <li>I. I prefer separated dining while travelling with a tour group.</li> <li>I. Care more about the hygiene and safety of the tourist sites after Covid-19.</li> <li>I. Care more about the hygiene and safety of the public recreation sites after Covid-19.</li> <li>I. Care more about the hygiene and safety of the means of transportation after Covid-19.</li> <li>I. Care more about the health of the members in the tour group after Covid-19.</li> <li>I. Care more about the hygiene and safety of the hotels after Covid-19.</li> <li>I. Care more about the hygiene and safety of the hotels after Covid-19.</li> <li>I. Care more about the hygiene and safety of the hotels after Covid-19.</li> <li>I. Care more about the hygiene and safety of the daily necessities while travelling after Covid-19.</li> </ol></li></ul>	4.32         2.65           3.17         4.74           4.80         4.81           4.75         4.83	.56           1.55           1.56           .75           .66           .65           .75           .62           .61	.693 .782 .866 .879 .757 .882	.00	

Source: \*Calculated by authors..

The final version of the model was achieved in three stages by way of testing the model at each stage. At the first stage, modification indices were analyzed in order to maximize the goodness-of-fit indices, and a covariance was developed between the error terms of Item 16 (I care more about the hygiene and safety of the tourist sites after COVID-19.) and of Item 17 (I care more about the hygiene and safety of the public recreation sites after COVID-19) which are observed to modify model fit summary at a good rate. At the second stage, Item 14 (I prefer to stay in high quality star hotels after COVID-19) which has the lowest standardized regression weight estimate (.102) was removed from the model.

At the third stage, modification indices were re-analyzed and a covariance was developed between the error terms of Item 3 (All of my business travels have been cancelled during the COVID-19 period.) and Item 4 (All of my leisure travels have been cancelled during the COVID-19 period.) which are observed to modify model fit summary at a good rate. Fit indices of the final model are presented in Table 3.



Fig. 1. Confirmatory factor analysis model Source: Calculated by authors..

Table 3. Results of confirmatory factor analysis
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CMIN	DF	CMIN/DF*	GFI**	IFI**	CFI**	RMSEA***	
425.482	165	2.579	.907	.923	.923	.061	
r = 0.00 * CMINI/DE < 2 ** CEL IEL CEL > 0.0 ***DMCEA < 0.0							

p=.000, \* CMIN/DF  $\leq$  3, \*\* GFI, IFI, CFI  $\geq$  .90, \*\*\*RMSEA  $\leq$  .08 Source: Calculated by authors.

## Interpretation of findings on the effects of COVID-19

As a result of the reliability analysis and the confirmatory factor analysis, Item 14 (I prefer to stay in high quality star hotels after 398 COVID-19) was removed from the scale. In this respect, arithmetic means, standard deviations and reliability coefficients related to the "hygiene and safety" dimension were revised as shown in the table below and compared with other dimensions.

and safety" dimension, was reduced to a single item and named as "food".

In addition, the "food and lodging" factor, which consists of 2 items under the "hygiene

Scale	x	S.d.	Cronbach's Alpha
General Impact (2 factor: impact on life, impact on tourism)	4.34	.82	.637
<i>Attitude and Preference</i> (2 factor: tourism inclination, mode of tour)	4.05	.75	.762
Hygiene and Safety (2 factor: <u>food</u> , hygiene)	4.56	.58	.796

Source: \*Calculated by authors..

As the responses are analyzed in the light of Table 2, it is seen that arithmetic means of all items are above (3.00). Therefore, it can be surely indicated that the COVID-19 outbreak has affected daily life and working life, tourism activities, travel intention, behavior and pattern, and transformed the need for hygiene during journey. It has been determined that the respondents will attach greater importance to the hygiene and safety of hotels ( $\overline{x}$ =4.83), will pay more attention to the hygiene and safety of daily needs while traveling ( $\overline{x}$ =4.82), and will care more about hygiene and safety of transportation vehicles  $(\overline{x}=4.81)$ , particularly in the post-COVID-19 period. On the other hand, it has been revealed that the respondents less prefer dining in a different place while travelling in a tour group ( $\overline{x}=3.17$ ), have weaker beliefs that travelling across Turkey will not be safe due to the outbreak ( $\overline{x}=3.34$ ), and they are less willing to prefer travelling with family members and relatives ( $\overline{x}$ =3.76). In the light of the analysis results presented in Table 4, the fact that the respondents will attach greater importance to the hygiene and safety of tourist attractions and public recreational areas after COVID-19 ( $\overline{x}$ =4.56) comes to the fore as the most important finding.

### The different effects of COVID-19 on the basis of respondents' demographical characteristics

The scale designed with three dimensions to measure the effects of COVID-19 on consumer behaviors reflects the respondents' considerations on the subject matter. The

findings obtained from the scale were compared in the light of respondents' demographical characteristics and the results were presented in Table 5. In order to determine in which combination(s) the significant difference in the variables that contain more than two groups are observed, the Bonferroni Test in cases where the homogeneity (equality) of variances is provided and Tamhane's T2 test in the opposite case were performed in line with the data obtained from the post-hoc multiple comparison test results. The homogeneity of variances was analyzed via the Levene's test. Respondents' evaluations within the scope of the general impacts dimension differ in accordance with their educational background and monthly income. The fact that primary school graduates ( $\bar{x}=5.00$ ) agree more than others ( $\overline{x}$ =4.05,  $\overline{x}$ =4.40,  $\overline{x}$ =4.26) with the assumption that the COVID-19 outbreak has affected daily life, working life and tourism activities points out the origin of the difference. In the context of monthly income, the fact that the respondents having an income of 2,000 TL and below ( $\overline{x}$ =3.98) agree less than others having an income of 2,001 TL -4,000 TL (x=4.47) and of 6,001 TL and 8,000 TL ( $\overline{x}$ =4.49) with the assumption that the COVID-19 outbreak has affected daily life, working life and tourism activities points out the origin of the difference.

Respondents' evaluations within the scope of the attitude and preference dimension involving travel intention, behavior and pattern differ in accordance with gender,

marital status and educational background. Female respondents ( $\overline{x}$ =4.17) compared to male respondents ( $\overline{x}$ =3.87), married ones ( $\overline{x}$ =4.13) compared to single ones ( $\overline{x}$ =3.93), and undergraduates ( $\overline{x}$ =4.12) compared to high school graduates ( $\overline{x}$ =3.78) have stronger believes that the outbreak will affect travel intention, behavior and pattern. Lastly,

respondents' evaluations within the scope of the hygiene and safety dimension differ significantly on the basis of gender. Compared to male respondents ( $\overline{x}$ =4.46), female ones ( $\overline{x}$ =4.62) will have higher tendency to put greater attention on hygiene and safety precautions in tourism activities and places.

Table 5. Comparison of respondents' considerations on the basis of demographical characteristics
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Dimensions	Variables	Groups	n	x	s.d.	Levene's	t/F	р	Post-hoc
						Test (p)*			
	Gender	Female	261	4.36	.81	.827	.818	.414	No difference
		Male	165	4.30	.84				
	Marital Status	Married	261	4.35	.82	.546	457	.648	No difference
80		Single	165	4.31	.82				
act	Educational	Prim.school <sup>a</sup>	4	5.00	.00	.000	3.547	.015**	(a and b,c,d)
General impacts	background	High school <sup>b</sup>	47	4.05	1.13				****
i la		Undergraduate <sup>c</sup>	282	4.40	.77				
lera		Postgraduate <sup>d</sup>	93	4.26	.76				
Jei	Monthly	2,000 TL. and less <sup>a</sup>	43	3.98	.97	.000	3.430	.009***	(a and b, c)
0	income	2,001-4,000 <sup>b</sup>	95	4.47	.69				****
1		4,001-6,000	137	4.28	.90				
		6,001-8,000°	62	4.49	.54				
		8,001 TL and more	89	4.35	.86				
	Gender	Female	261	4.17	.68	.005	3.905	.000***	Difference exists
		Male	165	3.87	.81				
е	Marital status	Married	261	4.13	.74	.674	-2.614	.009***	Difference exists
enc		Single	165	3.93	.75				
fere	Educational	Prim.school	4	4.66	.20	.089	4.629	.003***	(a and b)
pre	background	High school <sup>a</sup>	47	3.78	.86				****
l pr		Undergraduate <sup>b</sup>	282	4.12	.73				
e ai		Postgraduate	93	3.94	.71				
Attitude and preference	Monthly	2,000 TL and less	43	4.07	.77	.131	.771	.545	No difference
,ttit	income	2,001-4,000	95	4.07	.65				
A		4,001-6,000	137	4.09	.76				
		6,001-8,000	62	4.09	.68				
		8,001 TL and more	89	3.93	.85				
Hygiene and Safety	Gender	Female	261	4.62	.49	.000	2.687	.008***	Difference exists
		Male	165	4.46	.68				
	Marital Status	Married	261	4.60	.52	.185	-1.671	.095	No difference
		Single	165	4.50	.65				
	Educational	Prim.school	4	4.85	.20	.000	1.878	.133	No difference
	background	High school	47	4.46	.72				
		Undergraduate	282	4.60	.44				
		Postgraduate	93	4.48	.81				
'gie	Monthly	2,000 TL and less	43	4.54	.40	.122	.708	.586	No difference
Нy	income	2,001-4,000	95	4.64	.42				
		4,001-6,000	137	4.54	.63				
		6,001-8,000	62	4.56	.60				
1		8,001 and more	89	4.51	.68				

\* p>.05 indicates homogenous variances; \*\*p<.05; \*\*\*p<.01, \*\*\*\* Bonferroni, \*\*\*\*\* Tamhane's T2 Source: Calculated by authors.

#### CONCLUSIONS

Tourism industry ranks at the top among other industries being affected by the COVID-19 outbreak most, which has dragged the world into a pandemic. Along with the changing needs of individuals in this process, behaviors have also transformed. Bearing the assumption in the mind that attitudinal changes following the COVID-19 outbreak would create a remarkable impact on the tourism industry, the current study was conducted to measure the attitudes and behaviors of potential local tourists in the post-pandemic period. From this point of view, the studies conducted on the subject so far were reviewed at first. Later, research questions were developed and inquired through appropriate analysis techniques. Research findings were discussed in two sections below.

#### Theoretical implications

The literature involves a very limited number of studies on the COVID-19 outbreak [15; 7; 6; 21; 8; 27; 34; 33; 32; 9; 1]. Gradual emergence of the global effects of the pandemic increases the importance of the studies to be conducted in this field. In addition, further research is needed to contribute to the literature regarding the scenarios that would arise after the pandemic. The current study sheds light on a different point than other studies as it examines the potential local tourist behavior in the postpandemic period. The results obtained will contribute to other studies in the literature.

Findings in the current research reveal that the COVID-19 outbreak has affected the daily life, working life and tourism activities. Moreover, the outbreak has transformed the travel intentions, behaviors, patterns and hygiene perceptions of the respondents. As the relationship between demographic variables and scale dimensions is examined, it is observed that the respondents' evaluations within the scope of the general impact dimension differ by their educational background and monthly income. It is also seen that local tourists' considerations within the scope of the attitude and preference dimension vary according to gender, marital status and educational background. In the scope the hygiene and safety dimension, it is revealed that the respondents' perceptions differ only by gender.

The most important and fundamental finding concluded in the current study is that respondents will attach greater importance to the hygiene and safety of tourist attractions and public recreational areas after the COVID-19 outbreak. Therefore, hygiene and safety in all facilities, particularly in accommodation facilities. vehicles and tourism activities will be the most determinant factor in travel preferences of tourists. In this is anticipated regard, it that partial normalization process in the tourism industry in Turkey, where the COVID-19 outbreak is under control to a remarkable extent, will start in August, 2020. Pandemic struggle package released by Turkish government covers May, June and July. On the condition that the precautions laid down in the package are followed soundly, it is predicted that more active days will be experienced in domestic tourism as of August. An action plan and a precaution package covering the period until complete normalization should be prepared with the joint efforts of central government, local administrations, non-governmental organizations and sector representatives.

Practical implications

In the light of the research findings, it is suggested that the future precautions should be largely focused on "hygiene and safety". Fundamental precautions to be implemented by practitioners so as to ensure hygiene and safety in tourism facilities, especially in accommodation facilities, and tourism activities during and after the COVID-19 outbreak are suggested as follows:

-At the first stage, it is of great importance for the tourism industry that domestic tourism mobility starts within August, 2020, in which it is planned to initiate the normalization process in tourism (on the condition that a second wave does not emerge). Depending on the course of the pandemic in the upcoming periods, trips should be organized to specific countries to be selected taking into notice the countries' struggles against the pandemic. Nevertheless, it does not seem possible to start international travels especially in a short while.

-Mask-wearing and maintenance of at least 1.5 meters of physical distance which are the minimum self-protection measures must be observed while travelling.

-It is recommended for accommodation facilities to operate with half capacity. In this context, all spaces including eating and drinking facilities, bar, disco, and so on should be reduced to half capacity. Fitness hall, spa, indoor pools, and Turkish baths should be closed.

-Measuring guests' fever at the entrance of the hotel, ensuring the use of masks, especially in closed and intensely-used areas in the hotel, placing disinfectant units in certain places in the hotel for hand sanitation, and using written and visual materials to warn guests and guide them to comply with the rule of physical distancing must be considered as the most basic and essential precautions to be followed.

-Additional precautions to be taken can be listed as follows: it must be ensured that the rooms are cleaned every day, the guests do not visit the room for a while after cleaning, the room is properly cleaned after check-out, and check-in for the same room at the same day is not allowed, the use of the elevator is prohibited, the seating capacity is reduced in the lobby and the other areas where people rest and spend time, the distance between seats is adjusted appropriately, the number of sun loungers on the beach and by the pool is reduced and the in-between distance is adjusted, the chlorine level of the pool water is well-set, a certain number of staff is assigned to ensure compliance with the physical distancing rule in the beach and pool area which are intensely used by guests, a la carte service is offered rather than open buffet, the dining tables are arranged according to the physical distancing rule, and the dishes are served with a glass protective jar.

-Not only guiding the guests through the rules that should be followed in the hotel, but also raising the awareness of the staff and providing them with training on the pandemic are one of the most important steps to be taken. The staff must have minimum knowledge of the outbreak to be able to warn the guests, ensure the hygiene and safety of the facility and take personal protective precautions.

-Another important matter is to validate and inspect that the facilities have taken the necessary precautions within the scope of the COVID-19 outbreak. For this aim, a certification system should be developed, and the facilities meeting the requirements should be granted with certificate, and it must be ensured that only the certified facilities do operate in this period. Strict inspections must be carried out, and severe criminal sanctions must be imposed on those that violate the precautionary measures. -It may also be rendered compulsory to demonstrate with an emblem or logo at the entrance of the hotel that the facility is certified proving that hygiene and safety measures are in place. Even if complete normalization process starts after the pandemic is over, people's interest in hygiene and safety may not decrease, therefore, these certificates and signs may provide hotels with a marketing and competitive advantage in the future.

The theoretical and practical implications in this study constitute an important resource for both tourists and business owners. The research is expected to contribute to all stakeholders in the context of novel tourist behaviors that may be observed in the sector after the COVID-19 outbreak. For future research, it is recommended to focus on scenarios covering the potential postpandemic period. Unlike the current study examining the potential local tourist behaviors after the pandemic, empirical studies can be conducted to explore the situation in travel companies, accommodation facilities and food and beverage enterprises in the post-pandemic period. Researchers wishing for carrying out interdisciplinary research are recommended to study the psychological state of the local people after the pandemic.

### REFERENCES

[1]Addo, P. C., Jiaming, F., Kulbo, N. B., Liangqiang, L., 2020, COVID-19: fear appeal favoring purchase behavior towards personal protective equipment. The Service Industries Journal, 40, 471-490.

[2]Baker, T., 2020, Chinese hotels seeing steep declines from coronavirus, available at: http://www.hotelnewsnow.com/Articles/300132/Chines e-hotels-seeing-steep-declines-from-coronavirus,

Accessed on 01 May 2020.

[3]BBC News Turkey, 2020, 29 Aralık koronavirüs tablosu: Türkiye'de vaka sayısı kaç, son durum ne? (December 29 coronaviruses table: the number of cases in Turkey many, what the latest situation?), https://www.bbc.com/turkce/haberler-turkiye-

51576487, Accessed on 01 May 2020.

[4]Brown, T. J., 1999, Antecedents of culturally significant tourist behavior. Annals of Tourism Research, 26 (3), 676-700.

[5]Carr, N., 2002, A comparative analysis of the behaviour of domestic and international young tourists. Tourism Management, 23, 321-325.

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[6]Chakraborty, I., Maity, P., 2020, COVID-19 outbreak: migration, effects on society, global environment and prevention. Science of the Total Environment, 728, 138882.

[7]Goodell, J. W., 2020, COVID-19 and finance: agendas for future research. Finance Research Letters, (Article in Press).

[8]Haleem, A., Javaid, M., Vaishya, R., 2020, Effects of COVID-19 pandemic in daily life. Current Medicine Research and Practice, (Article in Press).

[9]Haleem, A., Javaid, M., Vaishya, R., Deshmukh, S. G., 2020, Areas of academic research with the impact of COVID-19. American Journal of Emergency Medicine, (Article in Press).

[10]Juvan, E., Dolnicar, S., 2016, Measuring environmentally sustainable tourist behaviour. Annals of Tourism Research, 59, 30-44.

[11]Kock, F., Josiassen, A., Assaf, A. G., 2018, On the origin of tourist behavior. Annals of Tourism Research, 73, 180-183.

[12]Kock, F., Ringberg, T., 2019, Embodied cognition effects on tourist behavior. Annals of Tourism Research, 78, 102725.

[13]Lita, R. P., Surya, S., Ma'ruf, M., Syahrul, L., 2014, Green attitude and behavior of local tourists towards hotels and restaurants in West Sumatra, Indonesia. Procedia Environmental Sciences, 20, 261-270.

[14]Mirehie, M., Gibson, H. J., 2020, The relationship between female snow-sport tourists' travel behaviors and well-being. Tourism Management Perspectives, 33, 100613.

[15]Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., Agha, R., 2020, The socio-economic implications of the coronavirus and COVID-19 pandemic: a review. International Journal of Surgery, 78, 185-193.

[16]Padhi, S. S., Pati, R. K., 2017, Quantifying potential tourist behavior in choice of destination using Google Trends. Tourism Management Perspectives, 24, 34-47.

[17]Pearce, P. L., 2016, Australian contributions to tourist behaviour studies. Journal of Hospitality and Tourism Management, 26, 84-90.

[18]Pizam, A., Jeong, G., 1996, Cross-cultural tourist behavior perceptions of Korean tour guides. Tourism Management, 17 (4), 277-286.

[19]Republic of Turkey Ministry of Health, 2020,

https://covid19bilgi.saglik.gov.tr/depo/diger\_kamu\_kur uluslar/COVID19,

KonaklamaTesislerindeAlinmasiGerekenOnlemler.pdf (Precautions to be taken at accommodation

facilities.pdf), 2020b, Accessed on 01 May 2020.

[20]Republic of Turkey Ministry of Health, 2020, https://covid19bilgi.saglik.gov.tr/tr/covid-19-yeni-

koronavirus-hastaligi-nedir, (what is the covid-19 new coronavirus disease), 2020a, Accessed on 01 May 2020.

[21]Şahin, M., 2020, Impact of weather on COVID-19 pandemic in Turkey. Science of the Total Environment, 728, 138810.

[22]Schaller, M., Kenrick, D. T., Neel, R., Neuberg, S. L., 2017, Evolution and human motivation: a fundamental motives framework. Social and Personality Psychology Compass, 11 (6), 12319.

[23]The Ministry of Culture and Tourism, 2020a, Accommodation statistics for 2019, https://yigm.ktb.gov.tr/TR-201120/konaklama-

istatistikleri.html, Accessed on 01 May 2020.

[24]The Ministry of Culture and Tourism, 2020b, Border statistics for 2019, https://yigm.ktb.gov.tr/TR-249702/sinir-istatistikleri.html, Accessed on 01 May 2020.

[25]TSI (Turkish Statistical Institute), 2020a, Tourism Statistics, Quarter I: January-March, 2020, http://www.tuik.gov.tr/PreHaberBultenleri.do;jsessioni d=03WhpqMT6NND6GbmMnhSIBPJxcnLXn38qgvL pR6dH0qRYS2gj6Wr!-400425222?id=33672,

Accessed on 01 May 2020.

[26]TSI (Turkish Statistical Institute), 2020b, Addressbased population registration statistics for 2019, http://www.tuik.gov.tr/PreTablo.do?alt\_id=1059, Accessed on 01 May 2020.

[27]Wang, Q., Su, M., 2020, A preliminary assessment of the impact of COVID-19 on environment-a case study of China. Science of the Total Environment, 728, 138915.

[28]Wen, Z., Huimin, G., Kavanaugh, R. R., 2005, The impacts of sars on the consumer behaviour of chinese domestic tourists. Current Issues in Tourism, 8 (1), 22-38.

[29]Williams, C. C., Kayaoglu, A., 2020, COVID-19 and undeclared work: impacts and policy responses in Europe. The Service Industries Journal, (Article in Press).

[30]World Heath Organization, 2020, CoronavirusDisease(COVID-19)Dashboard,Marcinet Marcinet Mar

https://covid19.who.int/, Accessed on 01 May 2020.

[31]World Health Organization, 2020, Coronavirus Disease (COVID-19) Pandemic,

https://www.who.int/emergencies/diseases/novel-

coronavirus-2019, Accessed on 01 May 2020.

[32]Yang, Y., Zhang, H., Chen, X., 2020, Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak. Annals of Tourism Research, (Article in Press).

[33]Yu, M., Li, Z., Yu, Z., He, J., Zhou, J., 2020, Communication related health crisis on social media: a case of COVID-19 outbreak. Current Issues in Tourism, 1-7.

[34]Zambrano-Monserrate, M. A., Ruano, M. A., Sanchez-Alcalde, L., 2020, Indirect effects of COVID-19 on the environment. Science of the Total Environment, 728, 138813.

[35]Zhang, K., Chen, Y., Li, C., 2019, Discovering the tourists' behaviors and perceptions in a tourism destination by analyzing photos' visual content with a computer deep learning model: the case of Beijing'', Tourism Management, 75, 595-608.