

Research Article

Mehmet Sariışık, Veli Ceylan*, Mustafa İnanç Kapucuoğlu

Impact of the COVID-19 pandemic on travel behavior: A case study of domestic inbound travelers in Turkey

<https://doi.org/10.2478/ejthr-2023-0017>

received July 4, 2022; accepted October 23, 2023

Abstract: The main aim of this study is to examine post-pandemic travel intentions and the factors affecting domestic tourism in Turkey. For this purpose, a scale adapted to the field of tourism, based on Ajzen's Theory of Planned Behaviour, was used to collect the data forming the basis of the research. A total of 611 valid questionnaires were collected through the popular social media platform LinkedIn, with the questionnaire prepared between January 10 and April 29, 2022. SmartPLS 3 and SPSS were used for analysis. The resulting data were analysed using Structural Equation Modelling (SEM). It was determined that the variables of Attitude, Subjective Norm, and Perceived Behavioural Control had a significant effect on post-pandemic travel intention. It was determined that domestic tourism participants intend to travel, but have a desire to do preliminary research on pandemic controls in the city they plan to visit.

Keywords: Travel Intention; Travel Plan after Pandemic; Planned Behavior Theory; COVID-19

1 Introduction

COVID-19, a form of severe respiratory syndrome, emerged in China in November 2019 and spread throughout the world in a short time (Abu Bakar & Rosbi, 2020). Significant losses continue to be experienced in many industries from COVID-19 (Fairlie, 2020; Zhu & Deng, 2020). Undoubtedly,

tourism and travel businesses are among the industries most affected by this crisis (Das & Tiwari, 2021; Valencia & Crouch, 2008). Many issues such as travel restrictions, new rules and practices introduced by state and national governments, economic difficulties, cancellation of flights, and widespread anxiety have compounded the severity of COVID-19's impact. As the pandemic ends, people's travel intentions, perceptions, and the factors affecting these, are becoming matters of curiosity and discussion. Many scientific studies in the field of tourism have focused on post-pandemic travel intention (Cabeza-Ramírez & Sánchez-Cañizares, 2021; Das & Tiwari, 2021; Polat et al., 2020; Li et al., 2021; Zhu & Deng, 2020). Such studies have attempted to determine the factors affecting travel intentions and their importance (Lam & Hsu, 2006).

It is understood from the scientific research that the epidemic diseases (SARS, Ebola, and COVID-19) that have emerged in the recent past have had significant negative effects on travel intention, with the perceived risk of the epidemic negatively affecting desire to travel and causing reservations to be cancelled or not made at all. Cahyanto et al. (2016) found that the perceived risk related to the Ebola epidemic negatively affected the intention to travel, thus eliciting the behaviour of travel avoidance. Wen et al. (2005), in their study on SARS, concluded that the epidemic negatively affected the travel intentions of people in Asia, especially in China. The impact of COVID-19 on travel intentions and behaviours has been greater than that of other outbreaks. Das and Tiwari (2021) concluded that attitudes, subjective norms, perceived behavioural control, and positive-negative emotions have all negatively affected travel intention during the COVID-19 pandemic. Female and elderly tourists are among the participants who perceived COVID-19 more severely, meaning that the epidemic negatively affected the travel intention of these tourists at a greater level. Li et al. (2021), in their attempts to determine how the COVID-19 epidemic will affect travel intentions, concluded that the epidemic has had a negative effect on people's travel intentions. The negative impact of the epidemic on travel intentions caused a loss

*Corresponding author: Veli Ceylan, Sakarya University of Applied Sciences, Faculty of Tourism, Dept. of Gastronomy and Culinary Arts, Turkey, Email: veliceylan@subu.edu.tr

Mehmet Sariışık, Mustafa İnanç Kapucuoğlu, Sakarya University of Applied Sciences, Faculty of Tourism, Dept. of Gastronomy and Culinary Arts, Turkey

of demand in the aviation and accommodation sectors. Polat et al. (2020) found that the perceived risk and value of the COVID-19 outbreak among people who prefer air travel directly affected their travel intentions, to the point of them cancelling their travel plans.

Over the last 30 years, epidemics have spread to many countries very quickly via global travel. The resulting crises have adversely affected not only businesses and employees but also tourists' travel intentions and, by extension, their behaviour. Many studies have focused on the effects of pandemics on tourism and travel intentions (Aro et al., 2009; Chien & Law, 2003; Cooper, 2006; Gu & Wall, 2006; Kuo et al., 2008; McAleer et al., 2010; Min, 2005; Rittichainuwat & Chakraborty, 2009; Rosselló et al., 2017; Wilder-Smith, 2006; Yang et al., 2020; Yeh, 2020), the effects of epidemics on travel attitudes and behaviours (Cahyanto et al., 2016; Lee et al., 2012; Pine & McKercher, 2004; Yanni et al., 2010), and travel risks and tourist behaviour during the COVID-19 pandemic (Abraham et al., 2021; Bae & Chang, 2020; Das & Tiwari, 2021; Karl et al., 2021; Li & Ito, 2021; Matiza, 2020; Nazneen et al., 2020; Neuburger & Egger, 2021; Zheng et al., 2021).

Travel intention, which is one of the basic elements that lead a person to visit a region, is explained as an important mental process that transforms motivation into behaviour (Jang et al., 2009). Research on travel intention, which is one of the most important components of tourism movements, has defined it as attraction to a destination (Ma et al., 2018) in relation externalities such as norms and attitudes (Ru et al., 2018), electronic word of mouth communication (Zarrad & Debabi, 2015), time perception (Lu et al., 2016), innovation (Zhang et al., 2020), and natural disasters (Lehto et al., 2008). While factors such as destination attractiveness or novelty positively affect travel intention, factors such as natural disasters and terrorism negatively affect this intention and prevent individuals from making a travel decision (Araña & León, 2008). Another important factor affecting intention and decisions around travel and making is disease and epidemics. pre-COVID-19 outbreaks caused a significant decrease in tourism demand. Compared to the generally more regional effects of these earlier epidemics, the impact of COVID-19 has expanded to a global level (Polyzos et al., 2020).

In this study, post-pandemic travel intentions of potential demand in the tourism industry (which has been widely impacted by the COVID-19 pandemic), and the factors affecting said intentions, were investigated. The degree of influence on the factors related to the risks and attitudes of tourists toward travel is examined. The limited number of studies in the related literature on the changes in tourists' travel intention and touristic consumption

behaviour after COVID-19 indicates the importance of this study. It is predicted that this study's argumentative approach, which overlaps with similar studies conducted before and during the pandemic, will also shed light on the travel intentions and behaviours of tourists post-pandemic.

2 Literature Review

2.1 Attitude, Theory of Planned Behaviour and Subjective Norms

Attitude, Theory of Planned Behaviour, and subjective norms are important factors that have been studied for their impact on travel intention. Attitude is a concept that refers to individuals' positive or negative evaluations regarding a particular object, person, event, or situation. These evaluations often correlate with emotional reactions, beliefs, and actions, and consequently can significantly influence individuals' behaviours (Jhangiani & Tarry, 2022). Attitude is a critical psychological concept for understanding how individuals react to their environments and experiences, as well as how they shape their future behaviours (Jain, 2014). Within the context of tourism, attitudes are essential to comprehending how tourists feel about a specific destination, service, or experience, and how these feelings influence their travel decisions. For instance, a tourist's positive attitude towards a destination can increase the likelihood of them visiting that location, while a negative attitude generally has the opposite effect. Consequently, tourism marketers and service providers frequently endeavour to positively influence tourists' attitudes, with the goal of attracting more tourists and encouraging them to revisit. This aim may involve strategies such as improving service quality, building a more positive brand image, and enhancing customer satisfaction (Rajesh, 2013).

The Theory of Planned Behaviour (TPB) is a psychological theory designed to elucidate individuals' intentions to perform a certain behaviour and how these intentions translate into specific actions. According to this theory, an individual's intention to execute a specific behaviour is determined by their evaluation of the outcomes of the behaviour (attitudes), whether significant others approve of the behaviour (subjective norms), and the individual's perception of their ability to perform the behaviour (perceived behavioural control) (Ajzen, 1991). In the context of tourism, the Theory of Planned Behaviour is commonly used to understand tourists' intentions to visit a specific

destination and how these intentions convert into actual travel (Yuzhanin & Fisher, 2016). For instance, a tourist's intention to visit a destination can be influenced by their thoughts about the destination, whether their social circle approves of the visit, and their perceived ability to carry out the visit. This theory can be helpful in defining marketing and promotion strategies in the tourism industry. It can also be beneficial in enhancing comprehension of how tourism services can be designed and how destinations can be improved to meet tourists' expectations (Quintal et al., 2010).

Subjective norms refer to individuals' perceptions of whether significant others in their environment desire that they perform a specific behaviour, and their willingness to comply with these expectations. This concept plays a significant role in social psychology, especially as part of Ajzen's Theory of Planned Behaviour. Subjective norms can greatly influence individuals' behaviours and decisions because people often seek approval from their surroundings and desire to be in conformity with them. In the context of tourism, subjective norms can have a considerable impact on tourists' travel decisions (Nguyen et al., 2023). For instance, if a tourist's family or friends suggest visiting a particular destination, it could increase the tourist's intention to visit that destination. Similarly, if a tourist's social environment values a certain type of travel (for instance, ecotourism or adventure tourism), this could make the tourist more eager to try this type of travel. Consequently, tourism marketers and service providers often attempt to influence subjective norms using techniques such as social proof or referrals. These can be very effective in encouraging tourists to try a destination or service (Zhang & Cao, 2023).

2.2 Epidemics and Tourism

The epidemics experienced in the past century have caused negative effects in many areas, leading to the closure of many businesses and the unemployment of millions of workers. Undoubtedly, this situation has tended to have its strongest impact on the tourism industry. Given that tourism continues to be perceived as a form of luxury consumption, it seems to be given up quickly in adverse situations where demand is easily lost.

SARS, which emerged in China in November 2002 and lasted for 6-12 months, affected all areas of life on a regional scale. This epidemic, which had a huge impact in many cities in China, dealt a great blow to China's tourism activities, especially in large metropolises, and had a significant negative impact on travel intention and

tourist behaviour; negative economic effects then ensued (Wilder-Smith et al., 2020). Many people cancelled their planned vacations and trips. The restrictions imposed by the government and municipalities and the loss of motivation brought about by the epidemic made those cancellations inevitable. Outdoor activities and rural tourism attracted the most attention during this period (Wen et al., 2005). SARS also negatively affected the vitality of tourism activities in Southeast Asia (Dombey, 2003).

Ebola, another epidemic disease that emerged simultaneously in Sudan and Zaire in 1976 (Pourrut et al., 2005), also significantly affected tourist behaviour. Due to its impact on travel intention and tourism demand, Ebola caused a sudden decrease in the number of tourists in Africa (Sifolo & Sifolo, 2015). Ebola also significantly affected tourism activities in other regions where cases occurred. Cahyanto et al. (2016), in their research conducted in the United States, revealed that Ebola caused Americans to avoid domestic travel. The perception of risk brought by the epidemic is the most important reason for avoiding travel. In addition to Ebola, influenza epidemics (bird and swine) have negatively affected travel decisions and behaviours, though not to the extent of COVID-19. Flu epidemics have had the most severe negative effects on vacation and airline reservations (McKibbin, 2009).

On the other hand, in a study by Terziyska and Dogramadjieva (2020) on COVID-19 and travel intention, it was determined that the majority of the participants (90%) had a desire to travel after 2020. In addition, 70% of the participants stated that they would be able to travel in the spring and summer in the same year and that they would like to carry out activities such as entertainment, excursions, and visits to acquaintances (friends/relatives) once COVID-19 subsided. Ivanova et al. (2020) found that the participants had an intention to travel within the first two months after the travel restrictions were lifted. Though most of those travels were domestic family trips in their personal vehicles, hygiene and trust in destinations' health systems were crucial deciding factors in whether they were actually carried out. Another finding obtained from the study was that the health and safety preferences of women and people in older age groups were more prominent.

Zheng et al. (2021), in their study on the fear of travel after the pandemic, concluded that post-pandemic fear could lead to cautious travel behaviour. In a study by Wachyuni and Kusumaningrum (2020), it was investigated how tourist behaviour would change after the COVID-19 pandemic. Their results indicated that tourists would tend to prefer nature tourism among tourism types (66%) and limit their travel times to 1-4 days. Wen et al.

(2020) investigated the changes in Chinese tourists' preferences for tourism movements in terms of life, travel, and tourism due to the COVID-19 epidemic. They found a shift in tourist movements toward of slow and smart tourism for the future. Şengel et al. (2020) investigated the effects of death anxiety caused by the COVID-19 pandemic on travel behaviour. Their results showed that anxiety about death due to the pandemic affected travel and destination intentions.

Luo and Lam (2020) revealed in their research on travel anxiety, risk, and intention that travel intention is negatively affected by anxiety and risk attitudes. Neuburger and Egger (2021) investigated the relationship between travel risk and tourist behaviours during the pandemic, concluding that the pandemic (COVID-19) has caused a serious increase in perceived travel risk and shortened travel times. According to Nazneen et al. (2020), who studied the perceptions of risk among tourists during COVID-19, it was found that tourists were seriously worried about traveling, especially in the first 12 months. Another finding of that study was that the pandemic seriously affected the decisions of tourists regarding their travels and perceptions of hygiene and safety.

Li et al. (2021) conducted a study on the effects of tourists on planned travel behaviour after the pandemic. They found a preference for private vehicles over public transportation, and that tourists tended to shorten their holidays in the wake of a crisis environment.

In a study by Matiza (2020), the possible effects of the COVID-19 pandemic on tourist behaviour in the short and medium terms were examined. The researcher determined the dimensions of tourist behaviour for the post-COVID-19 period and recommended some short-term measures can be taken to mitigate travel-related risks. The research indicates that tourist behavior in the post-COVID-19 period has evolved, with a greater emphasis on safety, health, and responsible travel. The tourism industry is advised to adapt to these changes by implementing strategies that address these new preferences and concerns, ensuring a safe and comfortable travel experience for tourists. In another study, Nair and Sinha (2020) investigated people's intentions regarding their future travel actions. As a result, it was determined that accessibility, discounts, hygiene, and health issues were the most important motivation factors in destination selection. Aydın and Doğan (2020), on the other hand, in a study on the effects of the COVID-19 epidemic on tourist consumption behaviours in Turkish tourism, confirmed that COVID-19 has had an effect on the consumption behaviours of tourists, who must adjust to a "new normal."

The rise of the COVID-19 pandemic has heightened concerns for individual safety (Rettie & Daniels, 2021). As a response, people have adopted numerous precautions, like limiting outdoor activities or selecting destinations with minimal infection risks (Zheng et al., 2021). In this context, the drive to sidestep illness and hazards can be viewed as motivations for travel (Karl et al., 2021). Qiao et al. (2021) explored the link between the COVID-19 outbreak and travellers' self-preservation motives.

In his conceptual study, Yaşar (2020) investigated the effects of the pandemic on the tendency of individuals to participate in the holiday movement, determining that tourists wanted to stay away from crowded environments. In a study by Zhu and Deng (2020), the relationship between COVID-19 risk and rural tourism participation intention was investigated. It was found that greater knowledge levels among participants about the risk of pneumonia decreased the perceived risks related to rural tourism.

Silik et al. (2020) evaluated domestic tourist behaviour in terms of generational differences after the COVID-19 pandemic. The results revealed that after the end of the COVID-19 epidemic, behavioural changes varied between different age cohorts. Kılıç et al. (2020) determined that there have been changes in the consumption attitudes of tourists during the post-epidemic period. It was determined that domestic tourists would be able to participate in holiday activities after the pandemic became normalized. These tendencies refer to behaviours within the borders of a country, and the measures taken by that country will be effective in the decisions of the tourists planning their vacations abroad.

The literature contains a myriad of studies probing the connection between the COVID-19 pandemic and travel intent. Zenker et al. (2021) delved into the influence of individual concerns on tourists' travel aspirations. Meanwhile, Zheng et al. (2021) identified risks during the COVID-19 era as impactful on travel desires. Luo and Lam (2020) discerned that COVID-19 apprehensions had a direct, adverse bearing on travel intentions. Similarly, Riestyaningrum et al. (2020) concluded that the pandemic substantially sways tourist travel inclinations. Notably, while the majority of research emphasizes the adverse effects of pandemic-related information on travel plans, some studies, like Isaac and Keijzer (2021), suggest potential positive shifts in travel intent as circumstances become more favourable.

3 Research Method

3.1 Aim of the Research

The main purpose of this research is to reveal the perceptions of Turkish tourists during the early stages of the COVID-19 pandemic and their planned post-pandemic domestic travel behaviour. The effect of the pandemic on the travel intentions of domestic tourism participants will be investigated.

3.2 Research Hypotheses and Framework

In this study, Ajzen's (1991) Theory of Planned Behaviour (TPB) was used to investigate planned changes in travel behaviour after the pandemic. This scale has also been adapted to research in the field of tourism (Hasan et al., 2020; Li et al., 2021; Meng & Choi, 2019; Meng & Cui, 2020). The scale for the present study was adapted from Li et al. (2021). Hospitality (HOS) and Impression (IMP) were added to the model with two sub-expressions each. Likewise, Attitude (ATT), Subjective Norm (SUN), and Perceived Behavioural Control (PBC) consist of two statements each. Finally, post-pandemic travel intention (PPT) was also represented. Interpandemic perceptions of destinations (IPP) were measured through perceptions of destination hospitality during the pandemic and impressions were based on cognitive information about the pandemic at the destination.

Based on this information, people's opinions, behaviours, and attitudes can be shaped according to their perceptions. One of the factors most strongly affecting opinions, behaviours, and attitudes is undoubtedly risk perception (Neuburger & Egger, 2021). Risk perception also plays an important role in the perception of pandemics (Poletti et al., 2011). Pandemic risk perception in tourism also affects travel decisions and purchasing experiences with tourism products (Das & Tiwari, 2021).

Another issue that influences travel decision making is attitudes (Sánchez-Cañizares et al., 2021). Prior to COVID-19, Epidemics such as SARS, H1N1, and influenza caused disruptions in tourism activities on regional and global scales. The main reasons for said disruptions were risk and the perception of a pandemic (Yang & Nair, 2014). The effects of risk perception and attitudes related to the pandemic were also examined in studies on the COVID-19 epidemic (Godovykh et al., 2021; Nazneen et al., 2020). The measures taken during the pandemic process have been effective in shaping perceptions of the pandemic.

It has accordingly been observed that perception has affected travel intention after the pandemic (Benjamin et al., 2020). Based on this, the following hypotheses have been developed:

H1: IPP has a significant effect on ATT.

H2: ATT has a significant effect on PPT.

H3: IPP has a significant effect on PPT.

Perceived behaviour control explains the ability of individuals to perform a behaviour (Benjamin et al., 2020). Subjective norms, on the other hand, refer to the social pressure that a person perceives about performing or not performing a certain behaviour (Fischer & Karl, 2022). Perceived behavioural control and subjective norms have significant effects on destination choice and travel intention (Lam & Hsu, 2006). Perceived behavioural control and subjective attitudes have continued to affect travel behaviours in the wake of COVID-19 (Aschwanden et al., 2020). Based on this information, the following hypotheses were developed:

H4: PBC has a significant effect on PPT.

H5: SUN has a significant effect on PPT.

The research hypothesis and framework are shown in Figure 1.

3.3 Research Tools

The measurement tool utilized in this research is adapted from the TPB scale (Ajzen, 1991). Both HOS and IMP (Li et al., 2021), SUN (Chen & Tung, 2014; Li et al., 2021), ATT

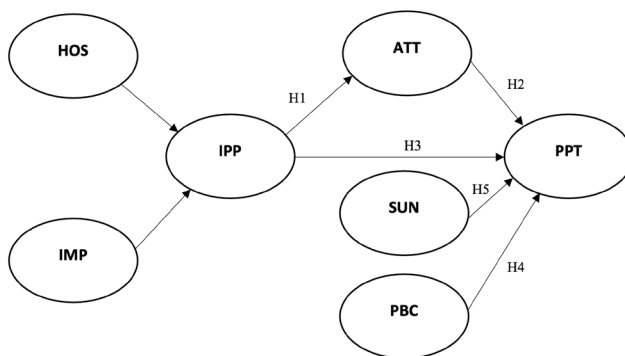


Figure 1: Research Model

(Wang & Ritchie, 2012), and PBC (Chen & Tung, 2014; Li *et al.*, 2021; Wang & Ritchie, 2012) comprise two statements each. PPT, from Li *et al.* (2021), is represented by a single statement. Respondents rate items on a 5-point Likert scale, with options spanning from strongly agree (scored as 5) down to strongly disagree (scored as 1). The latter section of the measurement tool gathers information on eight distinct demographic attributes, including factors like age, educational background, and income level.

3.4 Survey Method and Sample

The data for this study were collected through an online survey conducted during the pandemic (between 10 January 2022 and 29 April 2022). The improbable snowball sampling method was used, via LinkedIn, to target people who made at least one domestic trip every year (before the pandemic). They were asked to share the survey with others who exhibited similar travel behaviour. The questionnaires took about five minutes to complete. In all, 617 questionnaires were filled. Of those, 611 were retained for analysis, as six were found to be suspicious in terms of the authenticity of their answers. The proposed post-pandemic planned behaviour model was analysed using SmartPLS 3.

4 Results

Partial least squares structural equation modelling (PLS-SEM) was used to analyse the data with SmartPLS software (version 3.0). PLS-SEM is a statistical analysis technique used to evaluate complex research hypotheses and theoretical models that incorporate multiple dependent and independent variables. PLS-SEM is a regression technique employed to model one or more response variables using a series of predictor variables. This approach presupposes that the relationships between the responses and predictors are linear, and that there is multicollinearity amongst the predictors. PLS-SEM is particularly useful when working with large and complex data sets that include measurement errors and numerous predictors (Sarstedt *et al.*, 2014; Leguina, 2015).

First, participants' gender, education, income, and age were tabulated and analysed with descriptive statistics. The demographic characteristics of the participants are presented in Table 1. A significant portion of the participants were women (56%), and nearly half of them were university graduates (49.3%). In terms of income, 57.6% of the participants (42% of whom are under the age of 30) earned less than 400 USD monthly. A significant portion of the participants (61.2%) said they preferred to travel with their families.

Table 1: Demographics of Respondents

Variable	n	%	Variable	n	%
Gender			Marital Status		
Female	342	56.0	Married	305	49.9
Male	269	44.0	Single	306	50.1
Age			Income		
30 and younger	256	41.9	400 dollars or less	352	57.6
31-40	166	27.2	401-600 dollars	80	13.1
41 and older	189	30.9	601 dollars or more	179	29.3
Education			Who do you go on vacation with?		
High school	104	17.0	Alone	41	6.7
Bachelor's	301	49.3	With immediate family	376	61.2
Postgraduate	206	33.7	With a friend	93	15.5
Number of Children			With multiple friends	83	13.6
None	327	53.5	With relatives	18	2.9
1	120	19.6			
2	164	26.8			

The PLS-SEM algorithm's outcomes affirm the credibility and dependability of the internal and external models. These include the outer component metrics, Cronbach's α , CR, AVE, and associated weights (refer to Table 2). The study's participant count is adequate for complex data evaluation. PLS-SEM aids in identifying concealed data patterns and understanding the interrelations between variables (Hair et al., 2014). The measurement scale assessment adheres to three standards: 1) latent variables' CR shouldn't drop below 0.7 (Nunnally, 1994); 2) AVE shouldn't surpass 0.5 (Fornell & Larcker, 1981); and 3) factor loadings in CFA should remain above 0.6 (Nunnally, 1994). For our research, the aggregate trust measure surpassed 0.70. In evaluating our findings, the AVE metric for PBC was slightly below 0.7, though the disparity was minimal. The factor loadings ranged from 0.769 to 0.953. Once the measurement model's integrity was ascertained, a pathway analysis involving five elements was conducted. With all VIF metrics under 5, multicollinearity issues were absent (Hair et al., 2014). Our analytical outcomes also aligned with the CFA outcomes presented by Li et al. (2021) in relation to the adopted scale.

According to the results of the path analysis (Figure 2, Table 3), IPP has an effect on ATT. Similarly, the effect of IPP on PPT, mediated by ATT ($\beta = 0.045$, $\beta = 0.145$), was also detected. The coefficient of determination (R^2) is very high at 0.620, indicating that 62% of the PPT variability is explained by the model.

4.1 Analysis of Hypotheses

Examining and evaluating the structural model with PLS hinges on two essential viewpoints. Initially, it's about normalizing the path coefficient; next, it's about defining the explanatory model through R (Fornell & Larcker, 1981; Hair et al., 2014). Each prospective path coefficient between variables, combined with the R -value outcome, indicates the alignment level between the structural model and the observational data. The normalized path coefficient should be close to a 5% statistical significance. R is used to gauge analytical proficiency, with a higher R -value indicating enhanced capability. Table 3 displays the outcomes of the PLS path evaluation.

Table 2: Analysis of the Convergent Validity of the Theory of Planned Behaviour

	ITEMS	Outer loading	Cronbach's alpha	CR	AVE
HOS	During the travel ban. the city I intended on visiting remained welcoming to visitors from parts of the country hardest hit by the pandemic	0.953	0.845	0.948	0.901
	The city I intended on visiting showed a great deal of resilience in ensuring the health and safety of visitors	0.945			
IMP	My impression of the city will be affected by the number of coronavirus cases reported	0.869	0.843	0.860	0.754
	My impression of the city will be affected by its reported coronavirus recovery rate	0.868			
ATT	Once this epidemic is over, I believe it is still a good idea to go on holiday to the city I intended on visiting	0.875	0.776	0.813	0.705
	Once this epidemic is over, I would be excited about going on holiday to the city I intended on visiting	0.778			
SUN	Once this epidemic is over, we intend on going on holiday to the destination we had chosen to visit originally	0.875	0.772	0.808	0.709
	Once this epidemic is over, my friends and colleagues intend on going on holiday to the destination they had chosen to visit originally	0.769			
PBC	Once this epidemic is over, I will remain financially able to go on holiday in the city I intended on visiting	0.862	0.779	0.814	0.695
	Once this epidemic is over, I will continue to have availability in my schedule to go on holiday in the city I intended on visiting originally	0.794			
PPT	After this epidemic, I will go on holiday to the city I intended on visiting originally	1			

Table 3. PLS path analysis results

Model Path	β	t	Label
H1 IPP $\rightarrow$ ATT	.305	3.118	Accepted
H2 ATT $\rightarrow$ PPT	.458	12.291	Accepted
H3 IPP $\rightarrow$ PPT	.280	2.348	Accepted
H4 PBC $\rightarrow$ PPT	.872	47.964	Accepted
H5 SUN $\rightarrow$ PPT	.624	35.542	Accepted

As a result of the hypothesis, it was determined that IPP had a positive effect on ATT ($\beta = .305$, $t = 3.118$). Based on this result, H1 was accepted. For the second hypothesis, the effect of ATT on PPT was measured. Analysis showed that ATT had a strong positive effect on PPT ($\beta = .458$, $t = 12.291$), so H2 was accepted. In addition, IPP's effect on PPT ($\beta = .280$, $t = 2.348$), PBC's effect on PPT ($\beta = .872$, $t = 47.964$), and SUN's effect on PPT ($\beta = .624$, $t = 35.542$) were strong and positive. Thus, hypotheses H3, H4, and H5 were also accepted.

4.2 Verification of Distinctive Validity

Table 4 showcases the pre-established 95% confidence intervals for the TPB linkage coefficients. Observing Table 3, it is evident that none of the dimension's coefficients reach 1. This suggests a modest correlation amongst ATT, SUN, PBC, and PPT behavioural tendencies. Thus, this study upholds the discriminant validity of the theory of planned behaviour, as mentioned by Jang et al. (2009).

In the comprehensive assessment, this research employed seven metrics: the χ^2 test, the ratio of chi-square to degrees of freedom, GFI, AGFI, RMSEA (which are considered to gauge the fit between sample data and

Table 4: Path Analysis and Effect Size

	Path Coefficients	T-statistics	f2
IPP- ATT	.145	3.825	0.213
IPP-PPT	.105	2.662	0.138
ATT-PPT	.346	6.258	0.375
PBC-PPT	.686	15.510	0.480
SUN-PPT	.262	5.387	0.303
R ²		Q ²	
ATT	0.226	0.184	
PPT	0.620	0.590	

proposed theories), CFI, and PCFI. For this investigation, the relationship between χ^2 and degrees of freedom stands at 2.72, which is under 3. The respective values for GFI, AGFI, RMSEA, CFI, and PCFI were 0.98, 0.95, 0.06, 0.97, and 0.37. Post-adjustment, as depicted in Table 5, all the fit indices aligned with the acceptable benchmarks (Jang et al., 2009), pointing to an effective match between sample data and theoretical propositions. Consequently, the study's model was deemed fitting.

5 Discussion

Understanding post-pandemic behavioural patterns of tourists can serve as a predictor for the duration of the tourism industry's recovery period. The Theory of Planned Behaviour (TPB) was applied to scrutinize travel intentions. The initial indicator is an attitude towards the act of traveling; another key indicator, the subjective norm, yielded promising results, showing that observing others preparing for travel intensifies the travel desires of those surveyed.

Research was conducted to assess the fit of the proposed structural model, merging tourists' attitudes, subjective norms, and perceived behaviour control. Consistently with expectations, the proposed model was found to demonstrate a fitting alignment. Notably, subjective norms were observed to directly impact intention. Comparable results have been identified in studies conducted by Chang (1998), Chai and Pavlou (2004), and Mat and Sentosa (2008). It is suggested that input from families, friends, and referrals might exert a stronger pull on travel intentions than on actual buying actions.

A notable influence of the Theory of Planned Behaviour (TPB) on tourists' choices to travel to local sites was found to be a post-pandemic trend. Beyond TPB's three

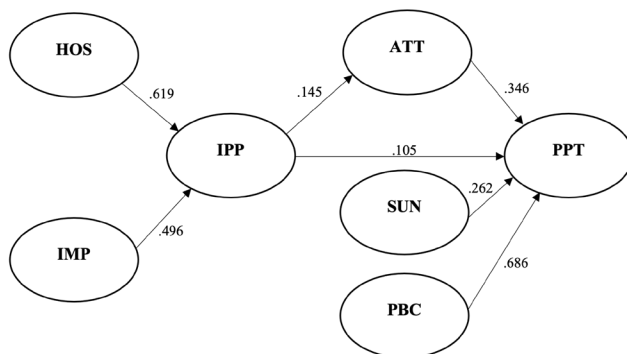
**Figure 2:** Path Analysis Results

Table 5: Analysis of Goodness of Fit of the Model

Goodness-of-Fit Index	Acceptable Range	Before Correction	After Correction	Goodness of Fit of the Model
χ^2 (chi-square)	Smaller the Better	49.481	4.123	pass
χ^2 and degrees of freedom	< 3	3.54	2.72	pass
GFI	> 0.80	.930	.977	pass
AGFI	> 0.80	.930	.945	pass
RMSEA	< 0.08	.079	.064	pass
CFI	> 0.90	.974	.966	pass
PCFI	> 0.50	.326	.371	pass

sub-factors, the IPP variable was distinguished by two aspects: IMP and HOS. Following the analysis, every hypothesis was accepted. Perceived Behavioural Control was found to exhibit a marked and favourable association with intent to travel to local spots after the COVID-19 outbreak. In the realm of tourism, the TPB's elements (ATT, SUN, and PBC) were identified as creating a beneficial behavioural effect (referencing studies by Hwang et al., 2020; Kim and Hwang, 2020; Li et al., 2021; and Wu et al., 2017). Past research by Lam and Hsu (2004), Li et al. (2021), Armitage and Conner (2001), and Davis et al. (2002) identified PBC as a strong determinant within TPB.

A heightened sense of caution in individuals' travel plans post-pandemic was observed. Given that IPP influences ATT and PPT (Li et al., 2021), it is observed that those considering travel often extensively research their intended destinations. It is assumed that top travel choices are cities perceived as safe and health-conscious (Moeinaddini et al., 2015). Historical studies underline that a majority of travellers use online resources to enrich their understanding of a destination before embarking. Gathering destination-specific information has been noted as a collective undertaking in the travel-decision framework by Amore and Hall (2016). Positive e-WOM (electronic word of mouth) was found to bolster the travel aspirations of potential visitors (Jalilvand & Samiei, 2012). However, adverse details, like perceived potential hazards, can diminish the desire to travel (Beerli et al., 2007; Narangajavana Kaosiri et al., 2017).

Analyses revealed that the sub-variables of TPB (ATT, SUN, and PPC) also had a positive effect on PPT. Significant similarities with many studies (Liu et al., 2021) were found. However, this effect was not observed in all studies. For instance, Das and Tiwari (2021) found that ATT, SUN, and PBC had no effect on PPT in their study with Indian

tourists. Research conducted by Polat et al. (2020) and Dai and Jia (2020) supports their finding.

6 Conclusion

Given that previous studies generally coincided with peak contagion periods, it can be inferred that ongoing restrictions may have influenced the research results. However, given that the number of cases in Turkey had decreased significantly at the time this research was conducted, it's assumed that pandemic-induced fears might have also decreased to some extent (T.R. Ministry of Health, 2022). It was also determined that IPP affects PPT; this result is in line with previous studies (Li et al., 2021; Sung et al., 2020).

Theoretical Implications: Outcomes of this study offer both theoretical insights and practical implications for the fields of service literature and tourism management. From a theoretical standpoint, the study brings several unique perspectives to the fore. It employs the Theory of Planned Behaviour (TPB) to investigate the motivators of tourist behaviour within Turkey. The study extends the TPB by incorporating factors like perceived service quality, risk perception, perceived value, destination image, and travel behaviour, thereby enriching the corpus of knowledge related to tourism.

Practical Implications: In the aftermath of the pandemic, it is suggested that tourism businesses should learn more about the profiles of potential visitors. Concerns about risk sensitivities (Cori et al., 2020) and economic challenges (Nicola et al., 2020) remain prevalent. The results of this research, which underscore the significance of tourist attitudes, subjective norms, and perceived

risk elements, highlight the necessity of business leaders to factoring in these determinants influencing TPB.

Limitations of the Research: Under time limitations and the impact of the COVID-19 pandemic, a total of 611 valid samples were collected through online channels. Future studies might aim to expand the sample pool to refine the data acquisition process, utilizing a combination of online and traditional survey methods. Although the survey of this research showed noteworthy reliability and validity, its scope was limited to travel motivation and intention within the parameters of the Theory of Planned Behaviour. Other possible determinants were overlooked. Future research might integrate alternative theoretical models to further explore travel outcomes stemming from COVID-19. It is also noted that the majority of respondents were from low-risk areas, so results could differ when these methods are applied to high-risk regions. It suggests that while recent research has identified certain determinants of travel behavior in the post-COVID-19 period, it may have overlooked other potentially significant factors. The suggestion for future research to integrate alternative theoretical models indicates a need to broaden the scope of analysis to gain a more comprehensive understanding of how COVID-19 impacts travel outcomes. This approach would help in identifying and understanding additional factors that could influence tourist behavior in the context of the pandemic.

Bionotes

Mehmet SARIİŞİK holds a PhD in Tourism Management. He is a professor of Tourism at Sakarya University of Applied Sciences. His research interests are innovations in the hospitality industry, tourism management and gastronomy. Orcid ID: 0000-0002-0681-6137

Veli CEYLAN has a Master's degree in Gastronomy and Culinary Arts. He currently works as a research assistant at Sakarya University of Applied Sciences, Tourism Faculty. Research areas include nutritional attitudes and behaviors, food chemistry in culinary applications and hospitality/travel management. Orcid ID: 0000-0001-7098-7777

Mustafa İnanç KAPUCUOĞLU has a master's degree in Tourism Management. He currently works as a research assistant in Tourism at the Sakarya University of Applied Sciences. His research interests are hospitality management and innovation in local cuisines. Orcid ID: 0000-0002-1051-1934

References

- [1] Abraham, V., Bremser, K., Carreno, M., Crowley-Cyr, L., & Moreno, M. (2021). Exploring the consequences of COVID-19 on tourist behaviors: Perceived travel risk, animosity and intentions to travel. *Tourism Review*, 76(4), 701–717. <https://doi.org/10.1108/TR-07-2020-0344>
- [2] Abu Bakar, N. A., & Rosbi, S. (2020). Effect of Coronavirus disease (COVID-19) to tourism industry. *International Journal of Advanced Engineering Research and Science*, 7(4), 189–193. <https://dx.doi.org/10.22161/ijaers.74.23>
- [3] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [4] Amore, A., & Hall, C. M. (2016). From governance to meta-governance in tourism? Re-incorporating politics, interests and values in the analysis of tourism governance. *Tourism Recreation Research*, 41(2), 109–122. <https://doi.org/10.1080/02508281.2016.1151162>
- [5] Araña, J. E., & León, C. J. (2008). The impact of terrorism on tourism demand. *Annals of Tourism Research*, 35(2), 299–315. <https://www.sciencedirect.com/science/article/pii/S0160738307001120>
- [6] Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499. https://www.researchgate.net/publication/227533335_Efficacy_of_the_Theory_of_Planned_Behaviour_A_Meta-Analytic_Review
- [7] Aro, A. R., Vartti, A. M., Schreck, M., Turtiainen, P., & Uutela, A. (2009). Willingness to take travel-related health risks—a study among Finnish tourists in Asia during the avian influenza outbreak. *International Journal of Behavioral Medicine*, 16(1), 68–73. <https://pubmed.ncbi.nlm.nih.gov/19127439/>
- [8] Aschwanden, D., Strickhouser, J. E., Sesker, A. A., Lee, J. H., Luchetti, M., Stephan, Y., Sutin, A. R., & Terracciano, A. (2020). Psychological and Behavioural Responses to Coronavirus Disease 2019: The Role of Personality. *European Journal of Personality*, 35(1), 51–66. <https://pubmed.ncbi.nlm.nih.gov/32836766/>
- [9] Aydın, B., & Doğan, M. (2020). Yeni Koronavirüs (COVID-19) Pandemisinin turistik tüketici davranışları ve Türkiye turizmi üzerindeki etkilerinin değerlendirilmesi (Evaluation of Effects of the COVID-19 Pandemic on Touristic Consumption Behavior and Tourism in Turkey). *Pazarlama Teorisi ve Uygulamaları Dergisi [Journal of Marketing Theory and Applications]*, 6(1), 93–115. https://www.researchgate.net/profile/Buelent-Aydin/publication/342200914_Evaluation_of_Effects_of_the_COVID-19_Pandemic_on_Touristic_Consumption_Behavior_and_Tourism_in_Turkey/links/5ee891e592851ce9e7e2a7/Evaluation-of-Effects-of-the-COVID-19-Pandemic-on-Touristic-Consumption-Behavior-and-Tourism-in-Turkey.pdf
- [10] Bae, S. Y., & Chang, P. J. (2020). The effect of coronavirus disease-19 (COVID-19) risk perception on behavioural intention towards 'untact' tourism in South Korea during the first wave of the pandemic (March 2020). *Current Issues in Tourism*, 24(7), 1–19. <https://doi.org/10.1080/13683500.2020.1798895>

- [11] Beerli, A., Meneses, G. D., & Gil, S. M. (2007). Self-congruity and destination choice. *Annals of Tourism Research*, 34(3), 571–587. <https://doi.org/10.1016/j.annals.2007.01.005>
- [12] Benjamin, S., Dilletle, A., & Alderman, D. H. (2020). “We can’t return to normal”: Committing to tourism equity in the post-pandemic age. *Tourism Geographies*, 22(3), 476–483. <https://doi.org/10.1080/14616688.2020.1759130>
- [13] Cabeza-Ramírez, L. J., & Sánchez-Cañizares, S. M. (2021). Exploratory analysis of the connections between acceptance of the Covid health passport and intention to travel: the case of Spain. *Current Issues in Tourism*, 25(12), 1871–1875. <https://doi.org/10.1080/13683500.2021.1962258>
- [14] Cahyanto, I., Wiblishauser, M., Pennington-Gray, L., & Schroeder, A. (2016). The dynamics of travel avoidance: The case of Ebola in the US. *Tourism Management Perspectives*, 20(2016), 195–203. <https://doi.org/10.1016/j.tmp.2016.09.004>
- [15] Chai, L., & Pavlou, P. A. (2004). From “ancient” to “modern”: A cross-cultural investigation of electronic commerce adoption in Greece and the United States. *Journal of Enterprise Information Management*, 17(6), 416–423. <https://doi.org/10.1108/17410390410566706>
- [16] Chang, M. K. (1998). Predicting unethical behaviour: A comparison of the Theory of Reasoned Action and the Theory of Planned Behaviour. *Journal of Business Ethics*, 17(16), 1825–1834. <https://link.springer.com/article/10.1023/a:1005721401993>
- [17] Chen, X., & Tung, K.-K. (2014). Varying planetary heat sink led to global-warming slowdown and acceleration. *Science*, 345(6199), 897–903. <https://www.science.org/doi/10.1126/science.1254937>
- [18] Chien, G. C. L., & Law, R. (2003). The impact of the Severe Acute Respiratory Syndrome on hotels: A case study of Hong Kong. *International Journal of Hospitality Management*, 22(3), 327–332. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7131588/>
- [19] Cooper, M. (2006). Japanese Tourism and the SARS Epidemic of 2003. *Journal of Travel & Tourism Marketing*, 19(2-3), 117–131. https://doi.org/10.1300/J073v19n02_10
- [20] Cori, L., Bianchi, F., Cadum, E., & Anthonj, C. (2020). Risk Perception and COVID-19. *International Journal of Environmental Research and Public Health*, 17(9), 1–6. <https://doi.org/10.3390/ijerph17093114>
- [21] Dai, Y., & Jia, L. (2020, December 18-19). *A study on tourists’ travel intention under the situation of novel coronavirus pneumonia epidemic* [Conference session]. 6th Annual International Conference on Social Science and Contemporary Humanity Development (SSCHD 2020), Virtual Conference. <http://www.sschd2020.org/>
- [22] Das, S. S., & Tiwari, A. K. (2021). Understanding international and domestic travel intention of Indian travellers during COVID-19 using a Bayesian approach. *Tourism Recreation Research*, 46(2), 228–244. <https://doi.org/10.1080/0250828.1.2020.1830341>
- [23] Davis, L. E., Ajzen, I., Saunders, J., & Williams, T. (2002). The decision of African American students to complete high school: An application of the theory of planned behavior. *Journal of Educational Psychology*, 94(4), 810–819. <https://psycnet.apa.org/doi/10.1037/0022-0663.94.4.810>
- [24] Dombey, O. (2003). The effect of SARS on the Chinese tourism industry. *Journal of Vacation Marketing*, 10(1), 4–10. <https://journals.sagepub.com/doi/pdf/10.1177/135676670301000101>
- [25] Fairlie, R. (2020). The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy*, 29(4), 727–740. <https://doi.org/10.1111/jems.12400>
- [26] Fischer, R., & Karl, J. A. (2022). Predicting behavioral intentions to prevent or mitigate covid-19: A cross-cultural meta-analysis of attitudes, norms, and perceived behavioral control effects. *Social Psychological and Personality Science*, 13(1), 264–276. <https://doi.org/10.1177/19485506211019844>
- [27] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 3–50. <https://doi.org/10.2307/3151312>
- [28] Godovykh, M., Pizam, A., & Bahja, F. (2021). Antecedents and outcomes of health risk perceptions in tourism, following the COVID-19 pandemic. *Tourism Review*, 76(4), 737–748. <https://doi.org/10.1108/TR-06-2020-0257>
- [29] Gu, H., & Wall, G. (2006). The effects of SARS on China’s tourism enterprises. *Tourism: An International Interdisciplinary Journal*, 54(3), 225–234. <https://hrcak.srce.hr/file/237999>
- [30] Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- [31] Hasan, K., Abdullah, S. K., Islam, F., & Neela, N. M. (2020). An integrated model for examining tourists’ revisit intention to beach tourism destinations. *Journal of Quality Assurance in Hospitality & Tourism*, 21(6), 716–737. <https://doi.org/10.1080/1528008X.2020.1740134>
- [32] Hwang, J., Kim, I., & Gulzar, M. A. (2020). Understanding the eco-friendly role of drone food delivery services: Deepening the theory of planned behavior. *Sustainability*, 12(4), 1–12. <https://doi.org/10.3390/su12041440>
- [33] Isaac, R. K., & Keijzer, J. (2021). Leisure travel intention following a period of COVID-19 crisis: a case study of the Dutch market. *International Journal of Tourism Cities*, 7(3), 583–601. <https://doi.org/10.1108/IJTC-08-2020-0158>
- [34] Ivanova, M., Ivanov, I. K., & Ivanov, S. (2020). Travel behaviour after the pandemic: the case of Bulgaria. *Anatolia*, 32(1), 1–11. <https://doi.org/10.1080/13032917.2020.1818267>
- [35] Jain, V. (2014). 3D model of attitude. *International Journal of Advanced Research in Management and Social Sciences*, 3(3), 1–12. https://www.researchgate.net/publication/265567380_3D_Model_of_Attitude
- [36] Jalilvand, M. R., & Samiei, N. (2012). The impact of electronic word of mouth on a tourism destination choice: Testing the theory of planned behavior (TPB). *Internet research*, 22(5), 591–612. <https://doi.org/10.1108/10662241211271563>
- [37] Jang, S., Bai, B., Hu, C., & Wu, C.-M. E. (2009). Affect, travel motivation, and travel intention: A senior market. *Journal of Hospitality & Tourism Research*, 33(1), 51–73. https://www.researchgate.net/publication/247753548_Affect_Travel_Motivation_and_Travel_Intention_a_Senior_Market

- [38] Jhangiani, R., & Tarry, H. (2022). *Principles of Social Psychology: 1st International HSP Edition*. BCcampus.
- [39] Karl, M., Kock, F., Ritchie, B. W., & Gauss, J. (2021). Affective forecasting and travel decision-making: An investigation in times of a pandemic. *Annals of Tourism Research*, 87(2021), 1–14. <https://doi.org/10.1016/j.annals.2021.103139>
- [40] Kılıç, B., Aslan, H., & Gövce, M. (2020). COVID-19 Sonrası Turistik Tüketim Tutumu [Tourists' Consumption Attitude After Covid-19]. *Gaziantep Üniversitesi Journal of Social Sciences [Gaziantep University Journal of Social Sciences]*, 19(Special Issue), 554–570. <https://dergipark.org.tr/en/download/article-file/1264705>
- [41] Kim, J. J., & Hwang, J. (2020). Merging the norm activation model and the theory of planned behaviour in the context of drone food delivery services: Does the level of product knowledge really matter? *Journal of Hospitality and Tourism Management*, 42(2020), 1–11. <https://doi.org/10.1016/j.jhtm.2019.11.002>
- [42] Kuo, H.-I., Chen, C.-C., Tseng, W.-C., Ju, L.-F., & Huang, B.-W. (2008). Assessing impacts of SARS and avian flu on international tourism demand to Asia. *Tourism Management*, 29(5), 917–928. <https://doi.org/10.1016/j.tourman.2007.10.006>
- [43] Lam, T., & Hsu, C. H. C. (2004). Theory of planned behavior: Potential travelers from China. *Journal of Hospitality & Tourism Research*, 28(4), 463–482. https://www.researchgate.net/publication/235657191_Theory_of_Planned_Behavior_Potential_Travelers_from_China
- [44] Lam, T., & Hsu, C. H. C. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management*, 27(4), 589–599. <https://doi.org/10.1016/j.tourman.2005.02.003>
- [45] Lee, C.-K, Son, H.-J., Bendle, L.-J., Kim, M.-J., & Han, H. (2012). The impact of non-pharmaceutical interventions for 2009 H1N1 influenza on travel intentions: A model of goal-directed behavior. *Tourism Management*, 33(1), 89–99. <https://doi.org/10.1016/j.tourman.2011.02.006>
- [46] Leguina, A. (2015). A primer on partial least squares structural equation modeling (PLS-SEM). *International Journal of Research & Method in Education*, 38(2), 220–221. <https://doi.org/10.1080/1743727X.2015.1005806>
- [47] Lehto, X., Douglas, A. C., & Park, J. (2008). Mediating the effects of natural disasters on travel intention. *Journal of Travel & Tourism Marketing*, 23(2-4), 29–43. https://doi.org/10.1300/J073v23n02_03
- [48] Li, J., Nguyen, T. H. H., & Coca-Stefaniak, J. A. (2021). Coronavirus impacts on post-pandemic planned travel behaviours. *Annals of Tourism Research*, 86(2021), 1–5. <https://doi.org/10.1016/j.annals.2020.102964>
- [49] Li, S. R., & Ito, N. (2021, January 19-22). “Nothing can stop me!” Perceived risk and travel intention amid the COVID-19 pandemic: A comparative study of Wuhan and Sapporo [Conference Session]. ENTER 2021 eTourism Conference. https://link.springer.com/chapter/10.1007/978-3-030-65785-7_47
- [50] Liu, Y., Shi, H., Li, Y., & Amin, A. (2021). Factors influencing Chinese residents' post-pandemic outbound travel intentions: an extended theory of planned behavior model based on the perception of COVID-19. *Tourism Review*, 76(4), 871–891. <https://doi.org/10.1108/TR-09-2020-0458>
- [51] Lu, J., Hung, K., Wang, L., Schuett, M. A., & Hu, L. (2016). Do perceptions of time affect outbound-travel motivations and intention? An investigation among Chinese seniors. *Tourism Management*, 53(2016), 1–12. <https://doi.org/10.1016/j.tourman.2015.09.003>
- [52] Luo, J. M., & Lam, C. F. (2020). Travel anxiety, risk attitude and travel intentions towards “travel bubble” destinations in Hong Kong: Effect of the fear of COVID-19. *International Journal of Environmental Research and Public Health*, 17(21), 1–11. <https://www.mdpi.com/1660-4601/17/21/7859>
- [53] Ma, E., Hsiao, A., & Gao, J. (2018). Destination attractiveness and travel intention: the case of Chinese and Indian students in Queensland, Australia. *Asia Pacific Journal of Tourism Research*, 23(28), 200–215. <https://doi.org/10.1080/10941665.2017.1411964>
- [54] Mat, N. K. N., & Sentosa, I. (2008, November 6-8). *The integration of theory of planned behavior (TPB) and technology acceptance model in internet purchasing: A structural equation modeling (SEM) approach* [Conference Session]. Applied International Business Conference 2008, Universiti Malaysia, Malaysia. https://www.researchgate.net/publication/275214932_THE_INTEGRATION_OF_THEORY_OF_PLANNED_BEHAVIOR_TPB_AND_TECHNOLOGY_ACCEPTANCE_MODEL_IN_INTERNET_PURCHASING_A_STRUCTURAL_EQUATION_MODELING_SEM_APPROACH
- [55] Matiza, T. (2020). Post-COVID-19 crisis travel behaviour: Towards mitigating the effects of perceived risk. *Journal of Tourism Futures*, 8(1), 99–108. <https://migrationhealthresearch.ion.int/post-covid-19-crisis-travel-behaviour-towards-mitigating-effects-perceived-risk>
- [56] McAleer, M., Huang, B.-W., Kuo, H.-I., Chen, C.-C., & Chang, C.-L. (2010). An econometric analysis of SARS and avian flu on international tourist arrivals to Asia. *Environmental Modelling & Software*, 25(1), 100–106. <https://doi.org/10.1016/j.envsoft.2009.07.015>
- [57] McKibbin, W. J. (2009). *The Swine Flu Outbreak and its Global Economic Impact*. Brookings. <https://www.brookings.edu/on-the-record/the-swine-flu-outbreak-and-its-global-economic-impact>
- [58] Meng, B., & Choi, K. (2019). Tourists' intention to use location-based services (LBS): Converging the theory of planned behavior (TPB) and the elaboration likelihood model (ELM). *International Journal of Contemporary Hospitality Management*, 31(8), 3097–3115. <https://doi.org/10.1108/IJCHM-09-2018-0734>
- [59] Meng, B., & Cui, M. (2020). The role of co-creation experience in forming tourists' revisit intention to home-based accommodation: Extending the theory of planned behavior. *Tourism Management Perspectives*, 33(2020), 1–13. <https://doi.org/10.1016/j.tmp.2019.100581>
- [60] Min, J. C. (2005). The effect of the SARS illness on tourism in Taiwan: An empirical study. *International Journal of Management*, 22(3), 497–503. <https://www.proquest.com/openview/3feb52c19ba2e7fc9ecb85f3cabcd5fd/1?pq-orig-site=gscholar&cbl=5703>
- [61] Moeinaddini, M., Asadi-Shekari, Z., Sultan, Z., & Shah, M. Z. (2015). Analyzing the relationships between the number of deaths in road accidents and the work travel mode choice at the city level. *Safety Science*, 72(2015), 249–254. <https://doi.org/10.1016/j.ssci.2014.09.015>

- [62] Nair, B. B., & Sinha, S. (2020). COVID-19 and future travel decisions: How do the destination-choice-based motivators redefine tourist's choices? *Enlightening Tourism*, 10(2), 306-322. <https://doi.org/10.33776/et.v10i2.4919>
- [63] Narangajavana Kaosiri, Y., Callarisa Fiol, L. J., Rodríguez Artola, R., Moliner Tena, M. Á., & Sánchez García, J. (2017, September 6-8). The effects of travelling reasons on social media resources and tourist expectations [Conference Session]. XXIX Congreso de Marketing AEMARK 2017, Sevilla, Spain. <https://core.ac.uk/download/pdf/161255261.pdf>
- [64] Nazneen, S., Hong, X., & Ud Din, N. (2020). COVID-19 crises and tourist travel risk perceptions. *SSRN Electronic Journal*, 1(1), 1–8. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3592321
- [65] Neuburger, L., & Egger, R. (2021). Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Current Issues in Tourism*, 24(7), 1003-1016. <https://doi.org/10.1080/13683500.2020.1803807>
- [66] Nguyen, H. M., Phuc, H. N., & Tam, D. T. (2023). Travel intention determinants during COVID-19: The role of trust in government performance. *Journal of Innovation & Knowledge*, 8(2), 1–8. <https://doi.org/10.1016/j.jik.2023.100341>
- [67] 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 pandemic (COVID-19): A review. *International Journal of Surgery*, 78(2020), 185–193. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7162753/>
- [68] Nunnally, J. C. (1994). *Psychometric theory 3E*. Tata McGraw-Hill Education.
- [69] Pine, R., & McKercher, B. (2004). The impact of SARS on Hong Kong's tourism industry. *International Journal of Contemporary Hospitality Management*, 16(2), 139–143. <https://doi.org/10.1108/09596110410520034>
- [70] Polat, İ., Erdoğan, D., & Sesliokuyucu, O. S. (2020, October 22-24). *Airline passengers' travel intention in the COVID-19 era* [Conference Session]. IV International Applied Social Sciences Congress, Turkey. https://www.researchgate.net/publication/345178943_Airline_passengers'_travel_intention_in_the_Covid-19_era
- [71] Poletti, P., Ajelli, M., & Merler, S. (2011). The effect of risk perception on the 2009 H1N1 pandemic influenza dynamics. *PloS One*, 6(2), 1–15. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3034726/>
- [72] Polyzos, S., Samitas, A., & Spyridou, A. E. (2020). Tourism demand and the COVID-19 pandemic: An LSTM approach. *Tourism Recreation Research*, 46(2), 175–187. <https://doi.org/10.1080/02508281.2020.1777053>
- [73] Pourrut, X., Kumulungui, B., Wittmann, T., Moussavou, G., Délicat, A., Yaba, P., Nkoghe, D., Gonzalez, J.-P., & Leroy, E. M. (2005). The natural history of Ebola virus in Africa. *Microbes and Infection*, 7(7-8), 1005-1014. <https://doi.org/10.1016/j.micinf.2005.04.006>
- [74] Qiao, G., Ruan, W. J., & Pabel, A. (2021). Understanding tourists' protection motivations when faced with overseas travel after COVID-19: The case of South Koreans travelling to China. *Current Issues in Tourism*, 25(10), 1588–1606. <https://doi.org/10.1080/13683500.2021.1928011>
- [75] Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism Management*, 31(6), 797–805. <https://doi.org/10.1016/j.tourman.2009.08.006>
- [76] Rajesh, R. (2013). Impact of Tourist Perceptions, Destination Image and Tourist Satisfaction on Destination Loyalty: A Conceptual Model. *Pasos. Revista de Turismo y Patrimonio Cultura*, 11(3), 67–78. <https://www.redalyc.org/pdf/881/88128048007.pdf>
- [77] Rettie, H., & Daniels, J. (2021). Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic. *American Psychologist*, 76(3), 427–437. <https://doi.org/10.1037/amp0000710>
- [78] Riestyaningrum, F., Ferdaos, E., & Bayramov, B. (2020). Customer behavior impact on international tourist's travel intention due to Covid-19. *Journal of Sustainable Tourism and Entrepreneurship*, 1(3), 231–43. <https://doi.org/10.35912/joste.v1i3.367>
- [79] Rittichainuwat, B. N., & Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3), 410–418. <https://doi.org/10.1016/j.tourman.2008.08.001>
- [80] Rosselló, J., Santana-Gallego, M., & Awan, W. (2017). Infectious disease risk and international tourism demand. *Health Policy and Planning*, 32(4), 538–548. <https://doi.org/10.1093/heapol/czw177>
- [81] Ru, X., Wang, S., Chen, Q., & Yan, S. (2018). Exploring the interaction effects of norms and attitudes on green travel intention: An empirical study in eastern China. *Journal of Cleaner Production*, 197(1), 1317–1327. <https://doi.org/10.1016/j.jclepro.2018.06.293>
- [82] Sánchez-Cañizares, S. M., Cabeza-Ramírez, L. J., Muñoz-Fernández, G., & Fuentes-García, F. J. (2021). Impact of the perceived risk from Covid-19 on intention to travel. *Current Issues in Tourism*, 24(7), 970–984. <https://doi.org/10.1080/13683500.2020.1829571>
- [83] Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105–115. <https://doi.org/10.1016/j.jfbs.2014.01.002>
- [84] Şengel, Ü., Işkın, M., Gökhan, G., & Çevrimkaya, M. (2020). COVID-19 İle İlgili Ölüm Kaygısının Seyahat Davranışına Etkisi (Impact of COVID-19 Related Death Anxiety on Travel Behaviour). *Gaziantep Üniversitesi Sosyal Bilimler Dergisi*, 19 (Covid-19 Special Issue), 105-121. <https://doi.org/10.21547/jss.787466>
- [85] Sifolo, N., & Sifolo, P. P. S. (2015). The tourism inconvenience of the Ebola epidemic: lessons for the South African tourism sector. *African Journal of Hospitality, Tourism and Leisure*, 4(1), 1–11. [http://www.ajhtl.com/uploads/7/1/6/3/7163688/article43vol4\(1\)2015_.pdf](http://www.ajhtl.com/uploads/7/1/6/3/7163688/article43vol4(1)2015_.pdf)
- [86] Silik, C. E., Ilgaz, B., & Dünder, Y. (2020). COVID-19 Sonrası Turist Davranışlarının Kuşak Farklılıkları Açısından Çoklu Uyum Analizi (MCA) ile Değerlendirilmesi (Evaluation of post-COVID-19 tourist behaviours in terms of generation differences with multiple correspondence analysis (MCA)). *İğdır Üniversitesi Sosyal Bilimler Dergisi (İğdır University Journal of Social Sciences)*, 1(24), 341-72. <https://dergipark.org.tr/tr/pub/igdirsosbilder/issue/66831/1045229>
- [87] Sung, Y.-A., Kim, K.-W., & Kwon, H.-J. (2020). Big data analysis of Korean travelers' behavior in the post-COVID-19

- era. *Sustainability*, 13(1), 1–21. <https://doi.org/10.3390/su13010310>
- [88] T.R. Ministry of Health. (2022). *Daily COVID-19 Chart*. <https://covid19.saglik.gov.tr>
- [89] Terziyska, I., & Dogramadjieva, E. (2020, October 21-22). *Should I stay or should I go? Global COVID-19 pandemic influence on travel intentions of Bulgarian residents* [Conference Session]. The 20th International Scientific Conference Globalization and its Socio-Economic Consequences 2020, Zilina, Slovak Republic. <https://doi.org/10.1051/shsconf/20219201048>
- [90] Valencia, J., & Crouch, G. I. (2008). Travel Behavior in Troubled Times: The Role of Consumer Self-Confidence. *Journal of Travel and Tourism Marketing*, 25(1), 25–42. <https://doi.org/10.1080/10548400802164871>
- [91] Wachyuni, S. S., & Kusumaningrum, D. A. (2020). The effect of COVID-19 pandemic: How are the future tourist behavior? *Journal of Education, Society and Behavioural Science*, 33(4), 67–76. https://www.researchgate.net/publication/341977338_The_Effect_of_COVID-19_Pandemic_How_are_the_Future_Tourist_Behavior
- [92] Wang, J., & Ritchie, B. W. (2012). Understanding accommodation managers' crisis planning intention: An application of the theory of planned behaviour. *Tourism Management*, 33(5), 1057–1067. <https://doi.org/10.1016/j.tourman.2011.12.006>
- [93] Wen, J., Kozak, M., Yang, S., & Liu, F. (2020). COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tourism Review*, 76(1), 74–87. <https://doi.org/10.1108/TR-03-2020-0110>
- [94] 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. <https://doi.org/10.1080/13683500508668203>
- [95] Wilder-Smith, A. (2006). The severe acute respiratory syndrome: Impact on travel and tourism. *Travel Medicine and Infectious Disease*, 4(2), 53–60. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7106206/pdf/main.pdf>
- [96] Wilder-Smith, A., Chiew, C. J., & Lee, V. J. (2020). Can we contain the COVID-19 outbreak with the same measures as for SARS? *The Lancet Infectious Diseases*, 20(5), 102–107. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7102636/pdf/main.pdf>
- [97] Wu, J.-R., Lennie, T. A., Dunbar, S. B., Pressler, S. J., & Moser, D. K. (2017). Does the theory of planned behavior predict dietary sodium intake in patients with heart failure? *Western Journal of Nursing Research*, 39(4), 568–581. <https://journals.sagepub.com/doi/epub/10.1177/0193945916672661>
- [98] Yang, E. C. L., & Nair, V. (2014). Tourism at risk: A review of risk and perceived risk in tourism. *Asia-Pacific Journal of Innovation in Hospitality and Tourism (APIHT)*, 3(2), 239–259. <https://link.springer.com/article/10.7603/s40930-014-0013-z>
- [99] Yang, Y., Zhang, H., & Chen, X. (2020). Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak. *Annals of Tourism Research*, 83(2020), 1–67. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7147856/pdf/main.pdf>
- [100] Yanni, E. A., Marano, N., Han, P., Edelson, P. J., Blumensadt, S., Becker, M., Dwyer, S., Crocker, K., Daley, T., Davis, X., Gallagher, N., Balaban, V., McCarron, M., Mounts, A., Lipman, H., Brown, C., & Kozarsky, P. (2010). Knowledge, attitudes, and practices of US travelers to Asia regarding seasonal influenza and H5N1 avian influenza prevention measures. *Journal of Travel Medicine*, 17(6), 374–381. <https://pubmed.ncbi.nlm.nih.gov/21050316/>
- [101] Yaşar, İ. (2020). Pandemi (Covid 19 Salgını) sürecinin bireylerin tatile çıkma eğilimlerine etkisi [The effect of the pandemic (COVID-19 epidemic) process on the tendency of individuals to go on vacation]. *Turizm Çalışmaları Dergisi (Journal of Tourism Studies)*, 2(2), 1–14. <https://dergipark.org.tr/tr/download/article-file/1350545>
- [102] Yeh, S. S. (2020). Tourism recovery strategy against COVID-19 pandemic. *Tourism Recreation Research*, 46(2), 188–194. <https://doi.org/10.1080/02508281.2020.1805933>
- [103] Yuzhanin, S., & Fisher, D. (2016). The efficacy of the theory of planned behavior for predicting intentions to choose a travel destination: a review. *Tourism Review*, 71(2), 135–147. <https://doi.org/10.1108/TR-11-2015-0055>
- [104] Zarrad, H., & Debabi, M. (2015). analyzing the effect of electronic word of mouth on tourists attitude toward destination and travel intention. *International Research Journal of Social Sciences*, 4(4), 53–60. <http://www.isca.me/IJSS/Archive/v4/i4/7.ISCA-IRJSS-2015-019.pdf>
- [105] Zenker, S., Braun, E., & Gyimóthy, S. (2021). Too afraid to travel? Development of a pandemic (COVID-19) anxiety travel scale (PATs). *Tourism Management*, 84(2021), 1–11. <https://doi.org/10.1016/j.tourman.2021.104286>
- [106] Zhang, P., & Cao, K. (2023). Understanding the uncivilized tourism behavior of tourists: A planned behavior model based on the perspectives of cognitive dissonance and neutralization. *Sustainability*, 15(5), 1–17. <https://doi.org/10.3390/su15054691>
- [107] Zhang, Y., Li, J., Liu, C.-H., Shen, Y., & Li, G. (2020). The effect of novelty on travel intention: the mediating effect of brand equity and travel motivation. *Management Decision*, 59(6), 1271–90. <https://doi.org/10.1108/MD-09-2018-1055>
- [108] Zheng, D., Luo, Q., & Ritchie, B. W. (2021). Afraid to travel after COVID-19? Self-protection, coping and resilience against pandemic 'travel fear'. *Tourism Management*, 83(2021), 1–13. <https://doi.org/10.1016/j.tourman.2020.104261>
- [109] Zhu, H., & Deng, F. (2020). How to influence rural tourism intention by risk knowledge during COVID-19 containment in China: Mediating role of risk perception and attitude. *International Journal of Environmental Research and Public Health*, 17(10), 1–23. <https://doi.org/10.3390/ijerph17103514>