

# TRAVEL HABITS AND CHANGES CAUSED BY THE COVID-19 PANDEMIC IN BOSNIA AND HERZEGOVINA

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*Key-words:* tourism, COVID-19 pandemic, tourist habits, socio-demographic factors, tourist trips.

**Abstract.** In the past ten years, there has been significant growth in tourism worldwide, including in Bosnia and Herzegovina. The tourism sector is facing a series of challenges and limitations in the general business environment due to the COVID-19 pandemic, as is the entire global economy. The current pandemic has slowed down the growth of world tourism and thus led to the poorer performance of private tourism subjects and an increase in unemployment in the sector. This study aims to analyse the habits of the inhabitants of Bosnia and Herzegovina and the changes in behaviour caused by the COVID-19 pandemic. The two main questions entertained are: whether socio-demographic variables influenced the intention to travel during the COVID-19 pandemic, and whether tourist travel habits influenced the intention to travel during the COVID-19 pandemic. The study uses a quantitative research approach that included data collection through an online survey. The questionnaire link was distributed electronically, via Facebook (social network), and e-mail. The population included in this research are the inhabitants of Bosnia and Herzegovina. The convenience sample included 265 respondents and the research was conducted for one and a half months (from March 2, 2022 to May 17, 2022). The results of the research show that socio-demographic factors influenced the intention to travel during the COVID-19 pandemic and that respondents who own a car would travel more in 2022 than respondents who do not own a car; that respondents aged 31–50 would travel more in 2022 than the older respondents, that respondents who are employed would travel more in 2022 than pensioners, that respondents living in a household of 1–2 members would travel more in 2022 than respondents living in a household of 5 or more members, that respondents with postgraduate studies would travel more in 2022 than respondents with elementary studies only and that respondents with a monthly income of over 2,500 BAM would travel more in 2022 than respondents with monthly income between 500 to 1,500 BAM. The results also show that those respondents who travelled frequently before the COVID-19 pandemic would travel less in 2022 in the context of the current situation of the COVID-19 pandemic.

## 1. INTRODUCTION

Tourism represents one of the fastest growing economic activities, which significantly affects the growth and development of the global economy. In the past ten years, there has been significant growth in tourism worldwide, including in Bosnia and Herzegovina. Tourism as an economic branch with a significant potential for development is an increasingly frequent topic of the competent institutions in Bosnia and Herzegovina. The fact is that in the period before the outbreak of the COVID-19 pandemic, tourism recorded constant growth year after year, and such a trend was justifiably predicted and continued. Tourism activity in Bosnia and Herzegovina has seen a significant increase in the number of tourist arrivals and overnight stays in recent years. In 2019, the number of tourist arrivals reached 1,641,000, which is a growth of 25.6% compared to 2017. The number of overnight stays by tourists was 3,371,000, which is an increase of 25.9%. This growth is the result of a higher number of foreign tourist arrivals, which increased by almost 30%, i.e., by 26.4% in the case of overnight stays by foreign tourists. The number of arrivals and overnight stays of domestic tourists was lower, but still high. In the 2017–2019 period, the increase in the number of arrivals was 15.4%, and in overnight stays was 24.6% (Ekonsultacije, 2021). When it comes to the year 2020, specifically the January–July period, according to the official data, tourists made 257,256 visits, which is 71.7%

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fewer, and 635,172 overnight stays, which is 66.2% fewer compared to the same period in 2019. The number of overnight stays by domestic tourists is lower by 40.5%, while the number of overnight stays by foreign tourists is lower by 76.5% compared to the same period in 2019 (Aljazeera, 2020).

In addition to the significant impact on the economy, tourism is extremely sensitive to various types of risks. Crisis situations have a negative impact on the development of tourism, and this impact has been significantly intensified since the 2000s, when numerous crises occurred, such as natural disasters, terrorist attacks, epidemics etc. (Abdullah *et al.*, 2020; Butu *et al.*, 2020; Fenichel *et al.*, 2013; Jones & Salathe, 2009).

In the period before the pandemic, tourism was the fastest-growing economic branch in the world. The tourism sector, as well as the entire global economy, is now facing a series of challenges and limitations in the general business environment due to the COVID-19 pandemic (Abdullah *et al.*, 2020; Butu *et al.*, 2020; Čaušević, 2023; Fotiadis *et al.*, 2021; Gössling, 2021). This pandemic has caused a global crisis, which, in turn, has affected the economy and society in general, especially the service industry, which also includes tourism. The onset of the COVID-19 pandemic at the beginning of 2020 left its mark on the economy of countries all over the world. The pandemic has slowed down the growth of world tourism and thus led to a poorer performance of private tourism entities and an increase in unemployment in the sector. One of the key measures to solve this pandemic included the introduction of a travel ban, which had the effect of reducing the number of tourist trips. Based on this, it is possible to conclude that tourism is one of the economic branches that suffered the most damage and that the COVID-19 pandemic had the greatest impact on this activity. This is evident through the drop in income, suspension of flights, restriction of movement, and so on. It is a massive, dynamic, and complex socio-economic phenomenon of the modern era, which includes a wide spectrum of relationships that reflect on the economic, ecological, and social aspects of life.

Pandemics are not exactly a new phenomenon that is strictly related to modern societies, since they did exist in the past (Butu *et al.*, 2020). Among previous epidemics is the H5N1 bird flu epidemic (commonly known as bird flu), which has received worldwide attention since 2004, and was initially detected in East and Southeast Asia, only to later spread worldwide (Chan & Baum, 2007). The COVID-19 pandemic is considered the most important global health disaster of the century and the most significant challenge humanity has faced since World War II (Chakraborty & Maity, 2020). The closest parallel to the situation we are in could be the Spanish flu of 1918 when, according to estimates, about 27% of people became infected and about 1.7% of the world's population became sick (Mirzaei, Sadin & Pedram, 2021).

The COVID-19 pandemic at the beginning of 2020 shocked the global community and surprised the professional and scientific public, but answers arrived very quickly in the field of tourism and related studies (Vojnović, 2021). The fear of the COVID-19 virus has led to significant uncertainty and chaos in many industries. Tourism has experienced a sharp decline in income and has become one of the economic sectors most seriously affected by the pandemic. The shock affected both the demand side (restrictions on freedom of movement, border closures, tourists' fear of infection) and the supply side (closure of accommodation and catering facilities, as well as leisure facilities used in tourism) (Ugur & Akbiyik, 2020).

Different scientific aspects of the vision of travel and tourism after the global transformation of the COVID-19 disease in 2020 were investigated (Lew *et al.*, 2020). Many researchers have individually dealt with the impact of the coronavirus pandemic on travel and tourism. Hussain *et al.* (2021) established, on the eve of the third wave of the pandemic, that a new tourist era had begun, that they are more cautious, conservative, and limited. Consequently, there began the reshaping of tourism products, experiences, and significant investments. Hartman (2021) proposes areas of adaptive tourism associated with complex adaptive systems (CAS) as a means of survival in the context of changing circumstances, such as overtourism, COVID-19 disease, climate change, economic crises, and other factors. By applying two different methodologies, Fotiadis *et al.* (2021) indicate that the drop in tourist arrivals can range between 30.8% and 76.3% with a duration of at least until June 2021. Gössling *et al.* (2021) compared the effects of

the COVID-19 disease with previous epidemics and pandemics and other types of global crises in the period between 2000 and 2015. They found that international tourism was exposed to a wide range of crises in the past, such as terrorist attacks, the outbreak of the severe acute respiratory syndrome (SARS) (2003), the global economic crisis of 2008/2009, and the Middle East Respiratory Syndrome (MERS) outbreaks. None of these led to a long-term decline in global tourism development. They concluded that tourism as a system, at least in the observed period, was resistant to external shocks, while the impact of the coronavirus is unprecedented. Zheng *et al.* (2021) conducted research in China in 2020 to establish what drives the pandemic of travel fear and how people enact self-protection, pandemic coping, and travel-related resilience. The results showed that threat severity and sensitivity can cause fear of travel, leading to protective motivation and travel behaviour after a pandemic outbreak. The results also revealed that the fear of travel can trigger different coping strategies, which increases people's psychological resilience and the adoption of cautious tourist behaviour (Vojnović, 2021).

Fear of infection and perceived risk also significantly influence travel behaviour, especially in transit, and the impact was different based on the infected area and people's demographic characteristics (Kim *et al.*, 2017; Cahyanto *et al.*, 2016). Several previous studies have highlighted that individuals tend to cancel or delay international travel or flights to avoid infection during a pandemic. Such self-protective behaviour mainly depends on demographic characteristics (age and race in particular) and the perceived risk of infection (Fenichel *et al.*, 2013; Sharangpani *et al.*, 2011). In particular, several studies reported that older travellers were more willing to postpone their trips compared to young travellers (18–35 years) during the H1N1 outbreak (Leggat *et al.*, 2010; Sharangpani *et al.*, 2011). The results of an online survey conducted by Jones & Salathe (2009) during the beginning of the swine flu outbreak explained that older age was associated with more avoidant behaviours including avoiding large gatherings and public transportation.

All these previous studies point out that behaviour during travel during a pandemic situation could be significantly different compared to everyday life. Many factors (socio-demographic, as well as attitudinal) influence such changes in behaviour and travel patterns. Previous studies have analysed COVID-19 and tourism in destination countries, but only a few studies have analysed the behaviours of the countries from which travellers travel (Čaušević, 2023; Hotle & Mumbower, 2021; Matsuura & Saito, 2022). For this reason, it is important to investigate changes in behaviour and travel patterns caused by the COVID-19 epidemic, i.e., whether socio-demographic factors have an impact on travel intention during the COVID-19 pandemic and whether tourist travel habits have an impact on travel intention during the COVID-19 pandemic. So far, no study has answered these questions. Therefore, the primary aim of this study is to fill the gap by analysing the socio-demographic characteristics of the inhabitants of Bosnia and Herzegovina, their habits, and travel patterns.

## 2. STUDY AREA

Bosnia and Herzegovina is a country in Southeast Europe, located in the western part of the Balkan peninsula (Fig. 1). Bosnia and Herzegovina stretches over an area of 51,129 square kilometres. It is surrounded by three countries – the Republic of Croatia to the North, West and South, the Republic of Serbia to the East, and the Republic of Montenegro to the Southeast. Its borders generally follow certain natural features, and for the most of its extent have an orographic and hydrographic character. Bosnia and Herzegovina also has one of the shortest coastlines in the world. In the sector of the Bay of Neum and the Klek peninsula in the Bay of Mali Ston, it reaches the Adriatic Sea, with a coastal façade of 24 kilometres in length. The characteristic shape of the national territory on a geographic map is frequently associated with a right triangle with even legs, whose hypotenuse has a northwest-southeast direction. This motif is also used on the national flag (Department of Geography, 2023).

With an average altitude of 625 meters, Bosnia and Herzegovina ranks among the hypsometrically higher countries in Europe. Its terrain is predominantly mountainous, but at the same time it is very broken into valleys. The entire morphostructure of this area belongs to the Dinaric Mountain System, which extends on the northwest-southeast direction through several countries. In a wider context, the Dinaric mountains are part of the Mediterranean zone of the Alpide belt, which is still quite tectonically active, in seismic terms. The mountain peaks of the Dinaric system are the highest in its southeastern sector (Department of Geography, 2023).

Considering the official results of the 2013 census, it can be said that Bosnia and Herzegovina has about 3.5 million inhabitants. It is evident that war events have left catastrophic scars on the demographic image of this country, since there is a decrease of almost a million inhabitants compared to 1991. Although Bosnia and Herzegovina traditionally used to be an emigration area all throughout history, it recorded a very intense population growth during the 20<sup>th</sup> century, only to reach a record 4.4 million inhabitants in 1991. The impact of demographic transition was also visible, since this growth had been slowing down even before the war. The last phase of demographic transition took place together with war events, and in recent years, a negative natural increase has been recorded, together with the aging of the population. The average population density is under 70 inhabitants/km<sup>2</sup>. When it comes to the population structure, for political reasons, most attention is paid to the ethnic composition, dominated by three constituent ethnic groups: Bosniaks (50.1%), Serbs (30.8%) and Croats (15.4%). The settlement structure of Bosnia and Herzegovina consists of about 6,000 inhabited places, 105 of which are classified as urban (cities and towns). Regarding the size of the rural population (58%), Bosnia and Herzegovina ranks at the very top of the list of the most rural European countries (Department of Geography, 2023).

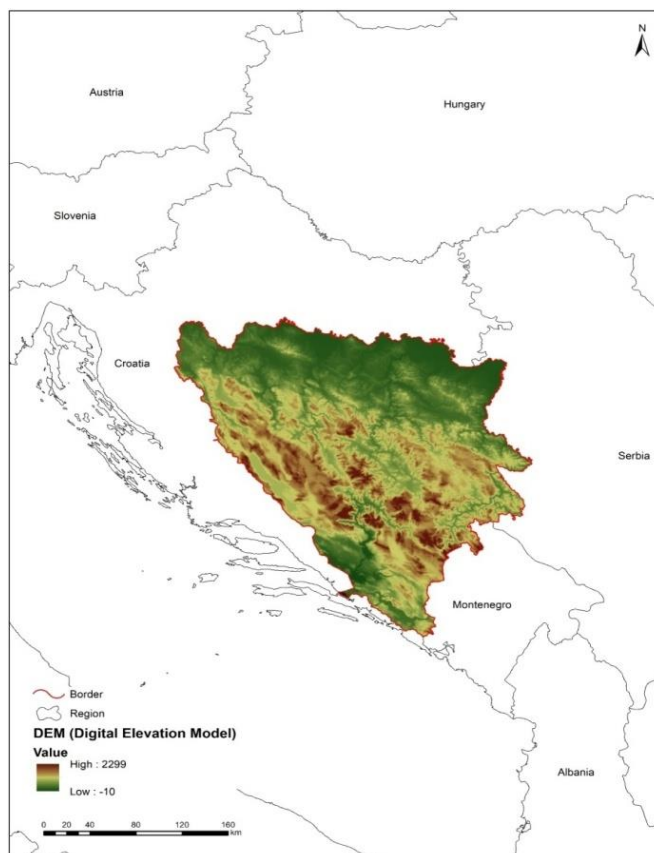


Fig. 1 – Geographical position of Bosnia and Herzegovina.

Tourism, as an increasingly important branch of the tertiary sector of the economy, has great development potential in Bosnia and Herzegovina, based on a significant number of unique destinations, both in terms of natural and cultural-historical heritage. Among the urban centres that are characterized by specific historical development visible in their architecture and other tourism contents, Sarajevo and Mostar stand out in particular, but so do Bihać, Banja Luka, Jajce, Travnik, Višegrad and some other towns that are also home to many historical buildings and sites. According to the number of foreign visitors, religious tourism is at the very top of the tourism offer. As Bosnia and Herzegovina is famous for its multireligious character, this tourism branch is based on a large number of sacred objects (mosques, churches, monasteries, synagogues) bearing a great cultural and historical value. Medjugorje is by far the most visited destination of this type, because it is one of the most famous Marian shrines in the world. The Sarajevo Film Festival is one of the most famous examples of manifestation tourism in the country. Bathing tourism is developing in Neum (the only coastal town), and on numerous lakes and rivers in the interior. A large number of spas point to a great potential for this type of tourism and, so far, the best valorised are Reumal Spa in Fojnica and Vrućica Spa near Teslić. As to mountain landscapes, there are several types of tourism, and the most significant destinations are Jahorina, Bjelašnica, Vlašić and Kupres. When capitalising on the natural environment for tourism purposes it is necessary to ensure its preservation, because it is the largest resource that this country has. There are a number of protected areas within the territory of Bosnia and Herzegovina, but only four are classified as national parks – Sutjeska, Kozara, Una and Drina (Department of Geography, 2023).

Tourism was the fastest growing sector in Bosnia and Herzegovina until the onset of the COVID-19 pandemic. The first case of the spread of the coronavirus pandemic in Bosnia and Herzegovina was recorded in March 2020. To control the spread of the virus, the government of Bosnia and Herzegovina has imposed and recommended preventive measures and different controls depending on the local administration and socioeconomic conditions. Such strategies included closing schools, remote or online classes, closing shops and restaurants, working from home, restrictions on public gatherings, social events, and meetings, locking down cities, closing international borders and airports, imposing curfews and social distancing, the suspension of public transportation and taxi operations, as well as travel restrictions (Čaušević, 2023). The COVID-19 pandemic has stopped the positive trend of tourism growth in Bosnia and Herzegovina. The consequences of the pandemic are substantial, but already in 2021, a significant recovery was noticeable. In 2020, tourists in Bosnia and Herzegovina made 500,916 visits, which is 69% less to 2019, and 1,240,983 overnight stays, which is 63% less compared to the same year. In 2022, a total of 1,464,216 arrivals were registered (907,526 foreign and 556,690 domestic), which is 11% less than the record year 2019 (the Agency for Statistics of Bosnia and Herzegovina, 2023). The mentioned data shows that the tourism sector in Bosnia and Herzegovina has already significantly recovered from the consequences of the COVID-19 pandemic.

### 3. METHODOLOGY

The purpose of the study is to analyse the habits of the inhabitants of Bosnia and Herzegovina and the changes in behaviour caused by the COVID-19 pandemic. The two main questions asked in the research are: do socio-demographic variables influence the intention to travel during the COVID-19 pandemic, and do tourist travel habits influence the intention to travel during the COVID-19 pandemic?

The study used a quantitative research approach that included data collection through an online survey. The questionnaire was created using Google Forms in the Bosnian language since the respondents are residents of Bosnia and Herzegovina. The questionnaire contained questions about the demographic structure of the respondents, how often the respondents travelled before the pandemic, and to what extent they intend to travel in 2022. The questionnaire link was distributed electronically,

via Facebook (social network) and e-mail. The population included in this research are the inhabitants of Bosnia and Herzegovina. The convenience sample included 265 respondents, and the research was conducted over a month and a half (from March 2<sup>nd</sup>, 2022 to May 17<sup>th</sup>, 2022). Respondents from the sample were selected randomly.

In the study, descriptive statistics and tests of statistical significance were used in the interpretation and analysis of the obtained data. The analysis of the obtained data was performed using the IBM SPSS Statistics 26.0 statistical program, which is the world's leading statistical software used to solve research problems by means of ad-hoc analysis, hypothesis testing, and predictive analytics. Statistical tests are selected according to the type of data processed as part of the analysis. Descriptive statistics were used to describe the research results by variables and as a basis for statistical tests. Nonparametric tests were mainly used in this study for inferential statistical analyses. Among the nonparametric tests, the Mann-Whitney and Kruskal-Wallis tests were used. Spearman's rank correlation coefficient was also used to examine the correlation between travel habits and personal travel expectations variables in 2022, during COVID-19.

#### 4. RESULTS

Table 1 tests the normality of the distribution for the following variable: "To what extent will you be traveling in 2022 in the context of the current situation regarding the COVID-19 pandemic".

Since the Kolmogorov-Smirnov test concerning the normality of the distribution for the variable "How much will you travel in 2022 in the context of the current situation regarding the COVID-19 pandemic?" (at the significance level of 0.01) deviates from the normal distribution, the non-parametric Man-Whitney and Kruskal-Wallis tests were used to test the difference in the arithmetic mean concerning socio-demographic factors.

Table 1

Testing the normality of the distribution for the travel intention variable in 2022 in the context of the current situation regarding the COVID-19 pandemic

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
To what extent will you be traveling in 2022 in the context of the current situation regarding the COVID-19 pandemic?	.218	265	.000	.877	265	.000

Lilliefors Significance Correction

Source: Research results, 2022.

The non-parametric Mann-Whitney test shows that owning a car is a statistically significant factor ( $z = -2.836$ ,  $p < 0.01$ ) that influences the extent to which respondents will travel in 2022 in the context of the current situation regarding the COVID-19 pandemic, so the respondents who own a car ( $M = 141.27$ ) believe that they will travel more in 2022 than those who do not ( $M = 113.18$ ).

Table 2

Group statistics of the influence of socio-demographic factors on the intention to travel in 2022 in the context of the current situation regarding the COVID-19 pandemic

To what extent will you be traveling in 2022 in the context of the current situation regarding the COVID-19 pandemic? Group		Mean Rank	Mann-Whitney Kruskal-Wallis <sup>b</sup>	z	p
Sex	male	130.52	7803.500 <sup>a</sup>	-.408	.683
	female	134.37			
Age	18 – 30 years	130.32	14.304 <sup>b</sup>		.001
	31–50 years	152.60			
	over 50 years	98.06			

(continued)

Education	Elementary School	20.00	8.184 <sup>b</sup>		.042
	High school	133.54			
	Associate degree or college	125.80			
	Postgraduate education	157.18			
Employment	Student	125.30	17.147 <sup>b</sup>		.001
	Employed	148.20			
	Pensioner	76.65			
	Others	120.21			
Monthly household income (BAM)	Less than 500 BAM	118.66	7.907 <sup>b</sup>		.048
	500 BAM – 1,500 BAM	117.40			
	1,500 BAM – 2,500 BAM	142.89			
	More than 2,500 BAM	144.11			
Number of people in the household	1–2	141.74	8.281 <sup>b</sup>		.016
	3–4	134.28			
	5 and more	92.33			
Owning a car	YES	141.27	5747.000 <sup>a</sup>	-2.836	.005
	NOT	113.18			
Owning a motorcycle	YES	140.38	1982.500 <sup>a</sup>	-.428	.669
	NOT	132.49			

Source: Research results, 2022.

The non-parametric Kruskal-Wallis test from Table 2 shows that:

- Statistically, respondents aged 31–50 (M = 152.60) significantly ( $p < 0.01$ ) believe that they will travel more in 2022 than the older respondents (M = 98.06),
- Statistically, respondents who are employed (M = 148.20) significantly ( $p < 0.01$ ) believe that they will travel more in 2022 than pensioners (M = 76.65),
- Statistically, respondents who live in a household of 1–2 members (M = 141.74) significantly ( $p < 0.05$ ) believe that they will travel more in 2022 than respondents who live in a household of 5 or more members (M = 92.33),
- Statistically, respondents who have a postgraduate education (M = 157.18) significantly ( $p < 0.05$ ) think that they will travel more in 2022 than respondents who have an elementary education only (M = 20.00),
- Statistically, respondents with a monthly income of over 2,500 BAM (M = 144.11) significantly ( $p < 0.05$ ) believe that they will travel more in 2022 than respondents with a monthly income between 500 and 1,500 BAM (M = 117.40).

Table 3

The correlation between travel habits and personal travel expectations variables in 2022 during COVID-19

			How often did you travel before the COVID-19 pandemic?	To what extent will you be traveling in 2022 in the context of the current situation regarding the COVID-19 pandemic?
Spearman's rho	How often did you travel before the COVID-19 pandemic?	Correlation Coefficient	1.000	-.229**
		Sig. (2-tailed)	.	.000
		N	265	265
	To what extent, on a scale of 1 to 5, do you think you will travel in 2022 in the context of the current situation regarding the COVID-19 pandemic?	Correlation Coefficient		1.000
		Sig. (2-tailed)		.
		N		265

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Research results, 2022.

Table 3 shows a statistically significant negative correlation ( $r = -0.229$ ) between the variable “How often did you travel before the COVID-19 pandemic?” and “To what extent do you think you will travel in 2022 in the context of the current situation regarding the COVID-19 pandemic?”, so that those respondents who travelled often before COVID-19 think they will travel less in 2022 in the context of the current situation regarding the COVID-19 pandemic.

## 5. DISCUSSIONS

The results of the study showed that the respondents who travelled frequently before and during the COVID-19 pandemic think that they will travel less in 2022 in the context of the current situation regarding the COVID-19 pandemic. The results of a study conducted in China in 2020 showed that the pandemic can cause fear of travel (Zheng *et al.*, 2021), which is in agreement with this study.

This study showed that those respondents who own a car will travel more in 2022 than respondents who do not own a car, in the context of the current situation regarding the COVID-19 pandemic. The findings of the study also show that respondents aged 31–50 will travel more in 2022 than the older respondents, that respondents who are employed will travel more in 2022 than pensioners, that respondents living in a household of 1–2 members travel more than respondents who live in a household of 5 or more members, that respondents who have a post-graduate education will travel more than respondents who have an elementary education only, and that respondents who have a monthly income of over 2,500 BAM will travel more in 2022 than respondents with a monthly income between 500 and 1,500 BAM.

The study “The dynamics of travel avoidance: The case of Ebola in the U.S.” examined the factors that influenced the avoidance of domestic travel by Americans due to confirmed cases of Ebola in the United States in late 2014. It was determined that sensitivity and self-efficacy significantly influence the avoidance of domestic travel. The findings also supported the significant role of perceived risk, subjective knowledge, age, and gender. In particular, several studies reported that older travellers were more willing to postpone their trips compared to younger travellers (18–35 years) during the H1N1 outbreak (Leggat *et al.*, 2010; Sharangpani *et al.*, 2011). The results of an online survey conducted by Jones & Salathe (2009) during the beginning of the swine flu outbreak explained that older age was associated with more avoidant behaviours, including avoiding large gatherings and public transportation. The findings of this study confirm the results of previously conducted research.

Furthermore, this study is in agreement with the study titled “Exploring the impacts of COVID-19 on travel behaviour and mode preferences”, which established that gender, car ownership, employment status, travel distance, and the primary purpose of travel are significant predictors of mode choice before and during the COVID-19 pandemic.

Cahyanto *et al.* (2016) concluded that perceived vulnerability, perceived risk, subjective knowledge, and self-efficacy influence the significant avoidance of domestic travel. Demographic characteristics such as age and gender were also found to be significantly related to travel avoidance. Kim *et al.* (2017) examined the differences in travel behaviour in Seoul, South Korea before and after the MERS outbreak using data from smart cards linked to transit use. The findings of that study showed that travel behaviour is significantly influenced by fear. That is, travel frequency was significantly reduced in Seoul after the 2015 MERS outbreak. Statistical analyses further revealed that land prices, the availability of potential MERS hotspots in the analysis area, the number of businesses and restaurants, and the number of people over 65 years of age are variables that significantly influence the reduction in travel frequency during MERS.



## 6. CONCLUSIONS

Like any other pandemic, COVID-19 caused significant changes on all continents, in all countries, regions, urban and rural communities, families, the way of thinking of each individual. Ultimately, the pandemic affected the way of life (Butu *et al.*, 2020). Domestic and international flights were halted in most countries, and travel restrictions made tourism and even essential travel scarce. Most tourism-related businesses, such as accommodation facilities, restaurants, and travel agencies, were closed or operating at limited capacities, such as airlines. This has led to uncertainty, followed by a reluctance to travel even after restrictions were eased. Thanks to COVID-19; tourists' behaviours, requirements, and even their travel attributes changed. Identifying the change in consumer behaviour, especially in the choice of destinations and services, is of vital importance for restoring the lost trust of tourists and reviving tourism (Mirzaei, Sadin & Pedram, 2021). Therefore, this research analysed the change in tourist behaviour patterns due to the outbreak of COVID-19 and compared it with previous habits related to tourist trips.

It should be noted that there are some limitations associated with this study. First, this study is based on data collected through an online survey of the inhabitants of Bosnia and Herzegovina. Bosnia and Herzegovina had a different level of restrictions during the pandemic and different percentages of the infected population than the rest of the world. Second, only those who had Internet access, namely those who had access to Facebook or e-mail, could answer the questionnaire. Therefore, generalizing the results to the average population in Bosnia and Herzegovina may not be practical. In addition, it is likely that the respondents did not give an honest answer about their travel habits, namely about the frequency of travel before the COVID-19 pandemic, because the results showed that those respondents who travelled often before COVID-19 thought that they would travel less during the pandemic.

Increasing the sample size and the sample diversity is recommended for future research in order to address these issues. In addition, the epidemic is still active, creating serious health and economic problems around the world, so the further study of this topic in new situations, in different parts of the world, can provide a significant amount of useful information. This study can be continued in the future, being an interest for researchers who expand the geographical area or deal with tourism, or serving as a starting point for a comparative analysis. Given the possibility that outbreaks of COVID-19 and similar viruses will re-emerge in the future, alongside the emergence of additional health crises, the findings may help the tourism industry in planning and responding to other health problems. The results of this study could be useful in travel planning based on travel habits during various crises in tourism, including epidemics, but also in the development of various policies during crisis situations.

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