

CHANGES IN POST-PANDEMIC TRAVELLING BEHAVIOUR. WHAT ARE THE EFFECTS OF THE COVID-19 PANDEMIC ON STUDENTS' TRAVELLING INTERESTS?

Iulia Ruxandra Țicău^{1*}, Hadad Shahrazad²

¹Bucharest University of Economic Studies, Romania, iulia.ticau@gmail.com

²Bucharest University of Economic Studies, Romania, shahrazad.hadad@fabiz.ase.ro

Abstract

The novel Coronavirus has led to devastating tragedies, creating a worldwide crisis upon economy and society. Starting from people suffering from illness, deaths, unemployment up until poverty, the COVID-19 pandemic can be considered one of the darkest periods of the world's history. More broadly, the virus has transformed our everyday lifestyles, inter-human interactions, dynamics of life and last but not least, perceptions upon travelling. The tourism sector has been tremendously affected by the expansion of the virus, with hundreds of countries closing borders, introduction of numerous travel restrictions and suspended flights. Restrictions, regulations and the fear of not getting infected with the new virus have created chaos and considerably changed the way individuals currently perceive travelling. Our study takes a demand-side perspective in order to determine changes in travelling behaviours of individuals, by focusing on students, before and during the COVID-19 pandemic. The study acts as a pilot test and aims at offering guidance for the tourism sector in elaborating and adapting to changing demands on the market. For this purpose, we have collected primary data by distributing a survey among students studying at Universities in Romania. Results have been analysed and compared with relevant literature research. Findings reveal the importance of rate of infection, possible occurring restrictions and costs as being critical when choosing travel destinations during pandemic. Conclusions demonstrate that there is a high need for strong collaboration and cooperation between governments and tourism agencies and businesses. We propose tourism organisations to direct their promotions upon relaxing and safe destinations, at a domestic level in a first phase, followed by international alternatives. We consider that competition can take a backseat during these tough periods and make room for collaborative behaviours and partnerships for the industry to survive.

Keywords:

COVID-19, pandemic, tourism, transportation, travel behaviour

JEL Classification: M10, M30, O10, R41.

DOI: 10.24818/CTS//4/2022/1.03

1. Introduction

Since first reported in Wuhan, China in 2019, the virus COVID-19 has rapidly spread across the globe, infecting thousands of people, causing severe health problems that resulted in multiple deaths (Wang et al, 2020). This led to a global pandemic that up until this point, recorded over 236 million cases of infected people world-wide and caused over 4 million deaths (WHO, 2021). With useless efforts to control the virus, the global economy started to collapse, leading to a severe economic and sanitary crisis. The pandemic caused a worldwide panic in people's behaviour, a fact shown by the empty shelves in stores and out of stock online markets. The regulatory actions such as social distancing and travel restrictions influenced many people to change lifestyles and re-consider the way they spend their free time. Fear of contagion changed habits and perspectives, influencing the way people perform everyday tasks. As a result, it has been observed a major transition from physical to online shopping, from face-to-face to Zoom meetings, from indoors to outdoors sports activities. All these were meant to diminish the spread of the virus, leading to a more secure way of living everyday life.

Implicitly, restrictions on travelling have been enforced by governments around the globe, with unexpected and strict regulations on both domestic and international levels. People's freedom of

* contact author

travelling was drastically limited, causing a lot of ambiguity and tension. Based on Wuhan restrictions results, there is a high level of agreement that early travel limitations can diminish the number of new infections. Wuhan travelling restrictions limited the international spread of the virus with 70%-80% and resulted in reductions of virus dispersion in China. Also, flight transportation to and outside China added more safety to the pandemic expansion (Karen et al, 2021).

While such major changes have been reported as being successful in diminishing the spread of the virus, little is known about how individuals adjusted to this new situation and what the consequences of such measures upon their behaviour are. Furthermore, it is unclear which of the post-pandemic habits will remain unchanged and the adjustments that will become part of an individual's life.

As tourism is one of the most affected industries during the pandemic, we propose a demand-side perspective to analyse travel behavioral changes. Analyses of individual variations in terms of frequency of travelling, new destination preferences or risk perception are still subjects that have to be studied and discussed. The new 'normal' when travelling in the pandemic era is critical to understand new travelling behaviours, new ways of choosing destinations and the way of perceiving safety, so that tourism businesses can adapt to changing demand and elaborate new action plans.

Restrictions, regulations, the fear of not getting infected by this devastating virus have critically changed the way humans perceive a car ride in the neighborhood, a 3-days city break or a one-week vacation in a foreign country. Tourism has been tremendously impacted due to its high dependence on individuals' behaviours and attitudes, while travelers claim action from travel providers to support their protection and flexibility. Population needs their providers to adapt and find the safest way to travel safely, maintaining proper conditions. There is a high need of understanding changing travelling behaviours under pandemic times, to build trust and communication so that adequate measures can be identified and put into place for maintaining resilient global economies.

It is obvious that COVID-19 crisis affected all levels of individuals and groups. However, Julius et al. (2020) recognized students with lower incomes among are the most vulnerable categories. Students represent a segment usually exposed to a lot of travelling activities, either inside their city, inside the country or outside borders. There is an increasing trend among this category of population, as it even became a 'fancy' social media habit to constantly post new travel destinations and discoveries. This segment of the population is usually 'on the run', driven by the desire to experience 'the new', to discover new lands and cultures, to explore and learn day-by-day. Being dynamic and energetic, students usually have higher mobility in lifestyles. Restricting travelling during the pandemic may have greatly impacted their life choices and their perceptions upon travelling. Therefore, the study proposes the analysis of travelling behaviours of students' when spending their vacations, due to their unique living and tendency towards having a dynamic type of lifestyle. For this purpose, travel-activity behaviour will be measured before and during the COVID-19 pandemic. Special attention will be paid to critical areas such as destination preferences, frequency of travelling, transportation mode, perceived risk and health conditions. The research framework follows a cross-sectional design, encompassing a survey measuring individual's travel attitudes and the influence of the pandemic over their behaviour.

2. Literature review

2.1 Industry under crisis

The novel COVID-19 has affected the worldwide economy, leading to increasing unemployment rates, poverty and serious illness and death cases. The tragedy affected all economic sectors, with high emphasis however on the tourism sector, which was seemingly overnight blocked by restrictions. Flights were suspended in almost all countries, result of government travelling bans, decreasing demand and changing consumer travelling behaviours (Julius et al., 2020). Even domestically, isolation restrictions, closing borders of various areas, temporary closure of local businesses, and limited activity of firms contributed to the collapse of economies.

We can define tourism industry as the amount of activities aimed at short-term movement to various locations away from home, for leisure or business purposes. It includes hotel industry, transportation industry and a series of additional industries and sectors (Revfine, 2021). It offers multiple economic benefits for countries, creating new job opportunities and bringing incredible financial revenues for

hotels and local businesses. In the last decades, tourism has been a continuously growing industry, witnessing a 59% increase internationally (Aref, 2020). According to data provided by WTTC, in 2019, tourism accounted for 10.3% of global GDP, while sustaining the livelihoods of 330 mil people around the globe (WTTC, 2019). There are countries heavily relying on the contributions brought by the tourism sectors, such as Macau (73.6%) and Maldives (56.6%). (WTTC, 2020)

The year of 2020 caused a severe impact on both domestic and international tourism, the latter one declining in Q1 by 22%, and by 65% in the first half of the year, when compared to 2019 (Aref, 2020). This led to a decrease of 1 billion USD worldwide international tourists' arrivals, the equivalent of a loss of \$1.3 trillion in tourism exports (UNWTO, 2021). The collapse of the industry was mostly witnessed in April 2020, where findings of World Tourism Organization show that international tourist arrivals decreased worldwide with 97%. (UNWTO, 2021)

The effects of the pandemic have implicitly impacted the transportation sector, with significant changes in mobility preferences since the beginning of the pandemic. Lockdowns, restrictions on travelling, minimum recommended distance between individuals have gradually made us shift from public transport to private vehicles. Long-distance trips have become a hard to reach objective, with major impact in air transportation. It has been estimated that international passenger demand at a global level decreased by 76% over the past year, leading to financial losses of approximately USD 500 billion, airline industry statistics confirming 2020 as being the worst year on record (IATA, 2021).

In Romania, the tourism industry used to steadily develop, the number of tourist domestic and international arrivals increasing by one million every year. However, imposing restrictions and regulations on travelling dramatically hit Romanian's tourism sector as well, as numbers of arrivals dropped with over 50%, totaling only 6.34 mil. people in 2020, compared to 13 mil. arrivals in 2019. (Statista, 2021)

2.2 Understanding travel behavioural changes

It is hard to believe that the chaos created by the spread of the virus did not severely impact human's behaviour upon travelling. Behaviours and attitudes are directly influenced by external stimulants, finally determining decisions and preferences.

A study from Longwoods International, among American 1.000 travelers, focused on travelling behaviours under pandemic conditions, revealed that 82% of individuals changed their holiday plans for the following six months due to the virus. There was a shift from international to domestic tourism of 11%, with respondents reporting that they feel safer and more comfortable to travel closer to their home rather than choosing long-distance destinations. The study also registered a reduction in travelling plans of 45% (Longwood International, 2020), showing a significant impact of the pandemic upon individuals' travel behaviour.

In a representative survey carried out by Deloitte in Switzerland, in 2021, among 2000 participants, half of the population exposed that they don't feel like changing air transportation over personal vehicle. They don't express changing behaviours in terms of transportation modes in comparison to the pre-pandemic period. On the other side, there is a 29% of respondents that expect to fly less, this response belonging to the +30 years old age groups, showing a decreased fear of getting infected with the new virus coming from the younger population (Deloitte Switzerland, 2021). The same study carried out by Longwoods International, among American travelers in 2020, revealed a change of 22% in changing preferences from flying to driving. There is a lot of discussion about whether sharing close space with strangers, however with a mask on, implies high levels of risk or not, as factors such as the material of the mask and the consistency of wearing it the whole flight can influence virus transmission (Mayo Clinic Staff, 2021; The New York Times, 2021). There are people that enjoy travelling by airplane and don't feel afraid of this transportation mode during the pandemic, however, some others feel safer driving in their own personal vehicle.

Making travelling appealing again in pandemic times entails a difficult process that involves a series of safety measures, able to diminish people's fear of getting infected with the new virus. Nelson et al. (2020) discovers that there is a positive relation between people's concern about the illness and the avoidance of getting out of own safe space, while Sobkow et al. (2020) reveals that preventive behaviour

can be a combination of ‘worry, controllability and perceived risk’. In the study, controllability was related to the threat being perceived as unpredictable by humans. Sobkow discovered that individuals with higher health concerns are more likely to show a preventive behaviour of not contacting the virus, by perceiving the risk as being higher. They usually obey strict hygiene rules and carefully respect social distancing measures for a longer period of time. However, it is interesting to note that it has been recorded a negative relationship between protective behaviours and worries about restrictions. (Sobkow et al., 2020) It is therefore people’s mind that has to perceive a holiday as being safe, for the industry to relaunch and start growing again.

Moreover, it has been claimed that quarantine can have a major impact upon humans’ perceptions. Braunack-Mayer et al. (2013) discovered that people experience feelings of sadness, anger, scare and anxiety after being isolated or quarantined. What is more, Brooks et al. (2020) observed that such feelings can continue longer for some individuals even after quarantine or isolation and affect their daily lives. This is a reason why many people that went through this illness of COVID-19 can now perceive the pandemic condition as being more alarming than the others, being continuously scared of not contacting the virus again and avoiding exposing themselves when making plans by always choosing the safest route. The same authors suggested that building trust and effective communication can contribute to minimising the negative psychological effects of the virus. A study conducted in Huzhou, a small city in China, obtained similar results, with respondents reporting frustration and anxiety during the pandemic “I felt very anxious and frustrated as I also needed to write up my research at the same time in addition to looking for a job”. However, it is interesting to note that some respondents admitted that time spent in quarantine provided them with unique opportunities to get closer to their family members, benefiting of increased quality time (Yang et al., 2021). Following the same argument, a study conducted in Greece and Indonesia revealed negative correlations between travelling and anxiety or fear. It has been observed that even though the illness generated concern, people still present a positive mentality when it comes to travelling, showing interest for leisure activities. (Wachyuni and Kusumaningrum, 2020)

Research upon the impact of COVID-19 on individuals’ behaviours has led scientists to admit that there is a strong correlation between one’s financial status and the impact of the pandemic. It has been observed that people with higher revenues have more contingency plans to sustain them in emergencies (Church et al., 2000). If we are to discuss this finding, we can there denote that the low-income class is exposed to financial instability in times of crisis. Poor people usually do not have the necessary income to sustain their previous living before the pandemic, because of the reduced availability of resources they possess. (NAACP, 2020) The impact of financial losses upon low income-class is more likely affect this social category on the long-term and have a greater impact compared to other classes (Brooks et al., 2020). The COVID-19 crisis has therefore created financial constraints majorly upon population with lower incomes, leading to a decrease in the standard of living, and eventually, preference for more affordable travel destinations, as according to Jiang et al. (2017), financial limitations directly determine travel choices.

3. Methodology

Our study takes a demand-side perspective to analyse Romanian students’ travelling preferences before and during pandemic times. The research acts as a pilot test for the proposed area, offering a guiding perspective for travel and tourism businesses, so that they can seize the right opportunities and build suitable experiences to enhance the recovery of the sector.

For conducting the research, the most relevant data was considered the one collected directly from students’ themselves, as this brings more authenticity and clarity to the outcomes of the study. Therefore, research was developed using *primary data*, data collected directly from the population considered. The sampling technique was non-probabilistic, and it was realised through *snowball-sampling*. Researchers utilise snowball sampling (chain sampling) to build a pool of participants for a research study by referring people who share a common research interest with the target demographic (Bruce, 2018)

The presence of primary data is a more reliable and accurate method compared to secondary data (formpl.us, 2020), especially for a research targeting individuals’ behaviours and attitudes. A lack of clarity in the way individuals experience feelings towards the impact of the phenomenon of pandemic

would have caused unreliability of the study, acting as a barrier in establishing a clear picture of travelling behaviours.

The proposed method to collect information from the sample is the survey, a quantitative type of research, able to gather relevant data directly from the population. The essence of survey method can be explained as “questioning individuals on a topic or topics and then describing their responses” (Jackson, 2011). Surveys and questionnaires allow the researcher to gather a large size of information in a short period of time. Moreover, it gives the subjects the possibility of giving anonymous answers to the questions asked. Therefore, it ensures greater honesty and accuracy of the results.

We obtained a sample composed of a number of 63 students (41 female and 22 male) with ages starting from 18 to +31. However, the majority of respondents had ages between 21-25 yrs. old (73.8%), showing that we are dealing with a young population.

The research was conducted among students located in Bucharest, enrolled at different Universities. The students were asked to answer a 19 questions survey regarding their COVID-19 pandemic experience and its effect on their travelling behaviour. The collected data was assessed and discussed according to relevant literature.

Therefore, the survey was designed to collect information regarding three major aspects:

- a) **socio-demographic aspects** including age, gender and monthly income;
- b) **pandemic experience-** health related items, contagion of the COVID-19 virus;
- c) an extensive question set covering **individuals’ attitudes, preferences and habits** when travelling in pre and post-pandemic conditions. The questions relied on factors such as destination preferences, frequency of travelling, travel mode and perceived risk.

The first set of questions refer to respondents’ socio-demographic details, so that a difference between gender preferences can be realised. Additionally, the study considers the age of an individual as being influential when making holiday plans, as tastes and attitudes may change according to age range. The study also wants to discover whether there is a connection between people’s monthly income and their travelling preferences, so that a question in this regard was also included. Relevant research has proved that individuals having various income levels and age groups tend to react instinctively. (Ha et al., 2020)

The experience of the pandemic and its negative effects upon their health status can significantly influence people’s perception of exposure to the virus, and implicitly determine the way they perceive vacations. (Braunack-Mayer et al., 2013; Nelson et al., 2020). This is the reason why our survey tried capturing specific information about contagion with the new virus and pre-existing health conditions. It is expected for individuals who are worried about their health to perceive risk as higher (Sobkow et al., 2020), so that we asked our respondents to rate on a 5-point Likert scale the severity of the virus upon their health, from 1 being ‘insignificant impact’ to 5 being ‘very high impact’.

The next set of questions focused on the concrete changes in behaviours, before and during the pandemic. In order to do so, we measure the shift from international travelling to domestic travelling, changes to driving from flying, perceived risk associated with specific travel destinations and factors influencing next vacations.

4. Results

As exposed in the previous section, the first set of questions aims to determine in which segment of the population the majority of respondents is found. The first two relate to personal data of students’, that of gender and age, while the next one referred to their income.

The enclosed table shows us that in terms of gender, a majority of 65.1% is represented by females, whereas the remaining 34.9% is composed of males, showing we have a preponderance of women travel behavioural changes.

The study tried to gather students with various age ranges, however the majority of respondents had ages between 21-25 years old (73.8%), followed by individuals with ages between 26 and 30 (16.4%).

As a result of the questionnaire we discovered that the sample to be analyzed in this study is part of a young population.

Table no 1: Socio-demographic data

Gender		Age range		Monthly income	
Male	34.9%	18-20 years old	7.9%	None	23.8%
		21-25 years old	74.6%	Less than 1500LEI	42.9%
Female	65.1%	26-30 years old	15.9%	Between 1500LEI to 2500LEI	14.3%
Prefer not to say	0%	31+ years old	1.6%	More than 2500LEI	19%

Source: Survey Results

4.1 The impact of income

The study also targeted income levels of individuals, as relevant research (Church et al., 2000; NAACP, 2020; Brooks et al., 2020) revealed that there is a high correlation between people's financial status and the impact of the pandemic, due to their unstable income that can highly affect their living both on the short and medium-term. According to the figures found in Table 1, the majority of targeted population earns less than 1500 LEI/month, or even no income at all. This fact is somehow understandable if we consider the resulted age range (21-25 years old) and the fact that they are all students. However, in Romania, the average monthly estimated costs are around 2.000 LEI, without rent (Numbeo, n.d.), so that our respondents may incur difficulties covering all their monthly expenses and save up for a next vacation.

Figures show that our sample is subject of a low-income, which can lead to financial constraints and finally influencing travel choices. The influencing factor of costs when travelling can be essential, especially for the low-income class that was significantly impacted by the crisis created by COVID-19 in various areas such as work, entertainment and travel (De Vos, 2020), with no contingency plans to back them up. (Church et al., 2000). Our sample is prone to perceiving travelling as a more costly activity now than before the pandemic, trying to find cheaper ways of spending their vacations. The importance of vacation costs will be highlighted in the following paragraphs of this paper.

Table no 2. Pandemic experience data

COVID-19 Infection		Chronical Disease	
YES	54%	YES	5%
NO	46%	NO	90.5%

Source: Survey results

As exposed in previous literature (Brooks et al., 2020; Braunack-Mayer al., 2013), people infected with the virus and quarantined for a minimum number of days are more lucky to feel scared and anxious about the virus and implicitly avoid situations that would expose them to get infected again. However, participants to our survey are almost equally spread when asked whether they got infected or not with the new virus, showing that this variable can not be an influencing factor for our discussion. We have a population with both COVID infections and without it. Additionally, when measuring impact severity upon health conditions, students' experienced various symptoms, with various opinions upon the severity of the virus, starting from no impact (24.4%) or low impact (16.1%), up until very high impact (8.1%). This is explicable considering that we are dealing with a young population, as we did not expect all the sample to expose negative experiences. We are therefore having a diverse sample, impacted or not by the virus, with possible influences coming from the experience of getting infected with COVID-19.

4.2 The domestic comeback

To avoid risks, travellers now increasingly seek out safer and closer to home destinations. In our study, people's avoidance of making future plans has been measured through the question "Do you hesitate making future reservations for holiday in the following year?" Previous studies in the USA (Longwoods International, 2020) have showed a decrease of 45% in holiday plans due to the pandemic risks and a cancellation of 50%. Our results align with previous research, with more than 70% of Romanians admitting to avoid making future plans for holidays in the following year (see Table no 3).

Table no 3. Future plans avoidance

Do you hesitate making future reservations for holidays in the following year?	
YES	71.4%
NO	28.6%

Source: Survey results

Participants' general travel preferences was considered necessary for the researcher to understand whether the pandemic has affected regular travel habits or not. Results show a substantial preference for travelling outside borders, with 75.4% of our students being active travellers outside Romania before the pandemic, showing changing tastes due increasing spread of the virus.

The ongoing pandemic is transforming travel behaviours and attitudes towards more trusted and predictable destinations, closer to ones actual living home. Our extensive research has revealed that planning inside Romania is currently a more preferred travel destination when compared to outside borders, with figures illustrated in Table 4.

Table no 4. Frequency of travelling before vs during the pandemic

INSIDE THE COUNTRY		OUTSIDE COUNTRY	
Before pandemic	8 - every month 31 -every few months 20 -every year	Before pandemic	31- every few months 21- every year 8- every few years
During pandemic	16 -every month 32-every few months 9- every year	During pandemic	10- every few months 27- every year 22- every few years
Increased frequency of travelling every month inside Romania +50% of the population		Decreased frequency of travelling every few months outside Romania -30% of the population	

Source: Survey results

With 50% more respondents booking a domestic trip every month during the pandemic, we have registered an increased preference for domestic travelling. Considering outside border options, besides health risk, governments imposed high restrictions, closed borders or asked for a negative test or a green certificate. All these impediments may have influenced respondents' frequency of travelling outside Romania, because while more than 50% of our total sample admitted to travel outside borders every few months before the pandemic, now only 20% of them do so. The same trend was observed in China, where 77% of travelers admitted to currently favor vacations closer to their home, preferably inside their own country (Wyman, 2020) A similar phenomenon was registered among American travelers, with 71% of respondents choosing domestic destinations, compared to 58% the previous year (Business Insider, 2020). By staying closer to their home, respondents to our questionnaire admitted to *feel safer* (80.4%), as travelling inside the country implies lower risks on restrictions, while the familiarity of one's home country can create a sense of belonging and mentally decrease risk perception.

Additionally, 41.3% of our analyzed sample tend to currently travel domestically in order to benefit of lower *costs*. As Chair of Interpid Group, Darrel Wade, forecasted: "Wealth will also be an issue as we are looking at a serious recession – the uncertainty around future income will make people focus on domestic and cheaper holidays", costs are essentials when choosing next travel destination during pandemics. Costs have been ranked the second most important influencing factor when choosing domestic over international travelling. With numerous companies downsizing due to the pandemic and

people worrying about losing their job day-by-day, costs have become a major determinant upon travel decisions, both on short and long-term. As research suggests, the low-income class is highly impacted during the pandemic, even on the long-term, as it can't afford sustaining their pre-pandemic lifestyle, so that recovering during such a crisis is a long and tough process. (Brooks et al., 2020; NAACP, 2020)

We are therefore witnessing a rebirth of domestic and regional travel, as a result of a shift from international travel towards inside country. Even though the longevity of this trend is still hard to define, there is a clear path to follow for tourism businesses. The industry should rethink and reorganize their strategies in order to meet changing demands, adopt proactive communication to inspire a sense of increased safety for travellers, to understand the client and meet his/her needs. There is unique opportunities to improve business models, to partner with local business and develop innovative ways to make domestic travel the 'new trend'. With high focus on lowering costs and inspire safety, success in refreshing travelling inside Romania may be guaranteed.

4.3 The critical factors

Being exposed to a 1 to 5 Likert scale, measuring a series of critical factors when planning future trips during pandemic, with 1 being 'not important at all' and 5 being 'very important', students enrolled at Universities in Romania rated '*possible occurring restrictions*' as being the most important factor when choosing their next travel destination. Almost 67% of the population fear the possibility of being stuck in a different country, due to the unstable pandemic situation the world is going through. The same phenomenon has been observed in an IATA survey (2020), where 80% of travellers admitted to be influenced by potential quarantine restrictions as much as of catching the virus. There is a high fear of not being able to return back home to their loved ones, this contributing to a slower recovery of the industry.

In light of the growing spread of the COVID-19 virus, people increasingly turn their trust towards authorities for clear and reliable data before and during their next travel. They started to avoid overpopulated areas, where increasing rates of infection may affect their well-being and implicitly their way of spending next vacations. They are more and more concerned about safety and hygiene factors, rate of infections in place they go to, such as hotels and recreational areas (Sigala and Principi, 2020) and their travel decisions are highly influenced by the expansion of the virus (Wen J. et al., 2020). In our study, students rated the second most important aspect when choosing next travel destination, the '*registered rate of infection*', with 43% of them considering it 'very important' while 45% rank it with 4/5 (important). They are being more likely to pick up places that seem safer, more clean and with fewer people. The President and CEO of Auto Club Group, observed that tourism agencies will further have to "give travellers as much information as possible to provide peace of mind", with full available information about their travel place to increase trust and communication. (Wyman, 2020)

The importance of costs incurred during the pandemic is highlighted by the responses of our participants, with 76.1% ranking expenses of the vacation as being important and very important. There is a majority of students in Romania paying increased attention to the amount of money they will spend during their next stay, as their low monthly income and the pandemic unstable situation can lead to difficult situations.

4.4 Facing concrete destinations

Changes in people's behaviour can highly depend on the perceived risk of a certain situation (Brewer et al., 2007). Risk perception can be defined as a general perspective individuals have upon the severity of a danger (Sobkow et al., 2020) and can be a crucial determinant of preventive behaviours. Bruine De Bruin and Bennett (2020) revealed that individuals perceiving the pandemic more alarming are more likely to develop protective behaviours. We therefore aimed to expose our participants to concrete travel destinations, psychologically associated with different risk levels during pandemic times. As hygiene and safety factors have become a significant criterion when deciding next travel destinations, but also price and location, our study aimed to evaluate perceived risks associated with the following destination places:

- A theme park experience such as PortAventura or Disneyland;
- A summer festival such as Tomorrowland;

- A week-long stay at a hotel/resort;
- A nature-based vacation at a rental property;
- A mountain climbing trip;
- A 3 days cultural city-break visiting museum.

We have witnessed a clear concern towards the possibility to end up in overly populated destinations, with no minimum social distance between people. Students ranked destinations implying theme parks and summer festival as being highly risky to travel to during pandemic times (21- high risk, 20-very high risk). These results were expected to be obtained considering that the proposed destinations imply a great amount of people sharing limited space. However, what we have interestingly noted is that, what once may have seemed as a really quiet, safe and intimate alternative to spend your vacation, a one week-long stay at a resort, is now considered risky or highly risky by the majority of our population. 36.5% of our respondents admitted to be afraid of planning to stay for long at a hotel, offering it a rank of 4 out of 5 on a Likert scale, , while 4.7% of them even consider it of very high risk, with 5/5 level of riskiness. Katie Fallon, the EVP of Corporate Affairs at the international hotel chain Hilton noted that “there has been a clear call to action from consumers to all big brands asking us to innovate our services in terms of health & safety”, showing Romanian’s travel behaviour as being in line with international travel trends. The uncertainty of the way COVID-19 is handled and controlled at the hotel they will travel to make tourists think twice before choosing their holiday location. It has been recorded that the decision-making process of tourists when choosing their stay is impacted by actions taken by hosts to improve cleaning of rooms and common areas (Wyman, 2020).

4.5 New transportations preferences

Transport can represent a vector for the transmission of the novel COVID-19, both on a regional and international scale (Gossling et al., 2020). Conditions of travelling in crowded places when using public travel modes increase the proximity between individuals and implicitly the probability to get infected with the virus (Krishnakumari and Cats, 2020). Transportation preferences can be influenced by internal and external determinants, such as personal characteristics, household characteristics, weather-related factors and trip characteristics (Ton et al., 2019). Just like the previously enumerated factors, the occurrence of the novel COVID-19 can change travel mode options. Travelling outside borders is usually achievable both by driving and by taking the airplane. However, there are studies that show that people deliberately avoid public transportation, due to the risks associated with such a case “*You had no idea if there was an infected person next to you on the bus, which made me feel unsafe.*”(Yang, 2021), admitting that they want to avoid social contact with others. It has been observed that air transportation can be of high risk, as placing a great number of people in limited spaces for a longer period of time can cause virus spread (Troko et al., 2011).

Therefore, travelling by airplane can create discomfort and fear when sharing closed space with strangers. When asked to choose between taking the airplane or their personal vehicle during the pandemic, almost 62% of respondents to our study admitted to consider having own space a better alternative. The bar charts bellow illustrates the main reason for their choice, showing a high tendency of fear to share common space with unknown people. The financial factor when booking next trips can be observable in the answers of this questions as well.

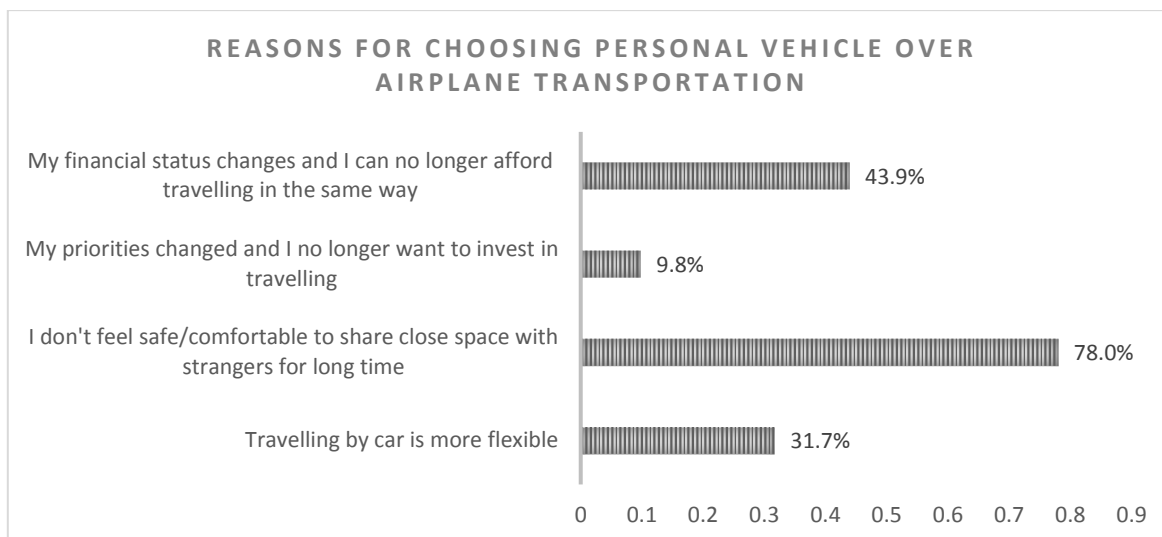


Fig. no.1: Reasons for choosing personal vehicle over airplane transportation

Source: Survey results

5. Discussion

The tourism industry must develop new mechanisms to recover from the pandemic crisis. For this purpose, it must gain valuable insights on changing travelling behaviours and not underestimate the potential psychological effects the unstable situation can have upon consumers. In this pilot study, we aimed to acquire valuable knowledge by analysing travelling changes before and during the pandemic, focusing on frequency of travelling, destination choices, and travel modes. We therefore propose the implementation of new travelling strategies that should:

- take into consideration economic losses;
- protect individuals' health;
- increase communication and transparency;
- support individuals' financial losses experienced as a result of pandemic crisis.

Our study reveals that the effects on travel behaviour are a result of a trauma cause by the virus, where people are scared and fear the possibility of getting infected or of losing their loved ones. Even though not all of our sample got infected with the new virus, results indicate that the majority of them avoid taking risks when travelling and try to find the safest way to spend vacations. It is clear that the sector has to ensure safety on an end-to-end journey, as our study showed that this is the most important factor when booking a trip. A collaborative relation is requested across travel supply chains. Businesses have the chance to select their partners and ask for compliance with health and safety protocols. Strict verification processes to ensure standards for handling COVID-19 pandemic should be extended. This would enhance trust of travelers and contribute to sector's recovery.

Government has the chance to reconsider economic losses caused by the pandemic and recognise the importance of tourism as one of a leading job creator. Greater cooperation with tourism sector and local businesses could be enhanced.

Competitive advantage could take a backseat, as working together to increase people's sense of safety would contribute to the survival of economies. Public-private business partnerships can be a key success, creating an interconnected ecosystem that could unify industries can lead to international coordination. A coordinated approach between countries would help the great number of lost jobs and contribute to industry survival.

Transparency in communication is essential to reassure travelling safety, in a world where consumers are always online, searching for trustworthy data before picking up their next travel destination. There should be a constant change of reliable information between businesses, governments and destinations aimed at reassuring travel confidence.

Although in Romania, the recovery of tourism industry seems to be starting at a domestic level, it is however important to re-launch interest for international destinations as well, to ensure worldwide

recovery. As the vaccine became available, the green certificate started to improve conditions when travelling, however the trauma of the pandemic still pressures people's intentions to travel abroad.

However, to capitalize on a first recovery, tourism boards should direct their marketing and promotional spending towards domestic travels and inspire residents to discover destinations inside country. The same approach has been considered by Iceland, which is offering vouchers for domestic travel and designed promotional campaigns focusing on vacations inside the country, while many countries are focusing on recovery such as Zealand conducting a study to 're-imagine' tourism after COVID-19 (Wyman, 2020).

Financial losses incurred by travelers during the pandemic should be seriously taken into consideration by tourism agencies, operators, businesses. In order to meet the limited financial income individuals, possess during pandemic, promotional offers should be made available for the industry to become appealing again. Looking at our results, it is clear that Romania's students can not afford spending on vacations as they used to do, showing a high tendency for cheap destinations. This is a real opportunity for both domestic and international tourism providers to create personalized offers for their customers and show empathy for the financial constraints incurred by a great amount of the population.

Last but not least, travelling by personal vehicle has been the most preferred transportation method during these times. It is not clear for how long, but travelling to destinations achievable by car will have better success in the near future. We consider this an additional tip for future tourism promoters as transportation mode can be crucial for travelers during pandemic.

Conclusions

Even though the current situation caused by the pandemic and its impact upon behaviours and tourism sector may seem uncertain and full of barriers, we consider that the resulted challenges can be converted into valuable opportunities. With efforts and goodwill, the sector can stretch and adapt to finally become stronger and meet changing trends. From international studies but also as a result of our national research, we are witnessing the formation of a 'new travel behaviour', that is able to change the path of tourism and start new innovative trends. It is therefore the right moment for tourism and all parties implied to take a moment to think, re-think and bring valuable new ideas for the industry to restart.

There is a shift in tastes, from international to domestic trips (Longwoods International, 2020) so that vacations offering increased safety and comfort closer to home places can gain considerable success. Additionally, our research brings additional evidence to the results disclosed by Deloitte (2021), that travelers express strong preference for having more personal space and hesitate taking the plane as transportation means. It is therefore great opportunity for businesses to offer alternative destinations, reachable with personal vehicle. Increased affordability for future vacations is an additional competitive advantage which tourism businesses can benefit from.

Our work can therefore provide guidance by revealing valuable insights collected directly from the traveler, indicating that it is crucial for providers to hear the voice of humans and adapt to their changing needs. This study explored Romanian students' current behaviour towards travelling inside or outside the country, showing many common behavioural changes as in international studies in the USA, China and other countries. Travelers worldwide ask for increased health and safety measures, factors able to rebuild trust and revive interest for travelling.

References

- Braunack-Mayer, A., Tooher, R., Collins, J., Street, J. and Marshall, H. (2013). Understanding the school community's response to school closures during the H1N1 2009 influenza pandemic. *BMC public health*, 13(1), p. 344.
- Brewer, N. T., Chapman, G. B., Gibbons, F. X., Gerrard, M., McCaul, K. D., and Weinstein, N. D. (2007). Meta-analysis of the relationship between risk perception and health behavior: the example of vaccination. *Health Psychol.*, 26, pp. 136-145.
- Brooks, S., Webster, R., Smith, L., Woodland, I., Wessely, S., Greenberg, N. and Rubin, G. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet (British edition)*, 395 (10227), pp. 912-920.

- Bruine De Bruin, W. and Bennett, D. (2020). Relationships between Initial COVID-19 risk perceptions and protective health behaviors: a national survey. *American Journal of Preventive Medicine*, 59, pp. 157-167.
- Church, A., Frost, M. and Sullivan K. (2020). Transport and social exclusion in London, *Transport Policy*, 7(3), pp. 195-205.
- Deloitte Switzerland. (2021). *Mobility after COVID-19: The lure of travelling versus flight-shaming*. [online]. Available at: <https://www2.deloitte.com/ch/en/pages/public-sector/articles/mobility-after-covid-19.html> [Accessed October 5, 2021].
- Formpl.us. (2020). *Primary Vs Secondary Data: 15 Key Differences & Similarities*. [online] Available at: <https://www.formpl.us/blog/primary-secondary-data> [Accessed 15 October 2021].
- Ha, J., Lee, S. and Ko, J. (2020). Unraveling the impact of travel time, cost, and transit burdens on commute mode choice for different income and age groups. *Transportation Research Part A: Policy and Practice*, 141, pp. 147-166.
- IATA. (2021). *Airline Industry Statistics Confirm 2020 Was Worst Year on Record*. [online]. Available at: <https://www.iata.org/en/pressroom/pr/2021-08-03-01/> [Accessed October 1st, 2021].
- Julius, E., Nuugulu, S., Julius, L. (2020). Estimating the Economic Impact of COVID-19: A Case Study of Namibia. *Munich Personal RePEc Archive (MPRA) Paper*, 99641.
- Krishnakumari, P. and Cats, O. (2020). *Virus spreading in public transport networks: the alarming consequences of the business as usual scenario*, [online] Available at: <https://www.linkedin.com/pulse/virus-spreading-public-transport-networks-alarming-usualkrishnan/?trackingId=81NAitHwK0R9oaO1GNGswQ%3D%3D> (Accessed 10 October 2021).
- Longwoods International. (2020). *COVID-19 Travel Sentiment Study-Wave 7*. [online]. Available at: <https://longwoods-intl.com/news-press-release/covid-19-travel-sentiment-study-wave-7> [Accessed at 05 October, 2021].
- Mayo Clinic Staff. (2021). *How well do face masks protect against coronavirus?* [online]. Available at: <https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/coronavirus-mask/art-20485449> [Accessed at 06 October, 2021].
- National Association for the Advancement of Colored People (NAACP). (2020). *Ten Equity Implications of the Coronavirus COVID-19 Outbreak in the United States. The imperative for civil rights advocacy, monitoring, and enforcement*. [online]. Available at: <https://eastsideforall.org/wp-content/uploads/2020/03/Ten-Equity-Considerations-of-the-Coronavirus-COVID-19-Outbreak-in-the-United-States-FINAL.pdf> [Accessed 1st October, 2021].
- Nelson, B. W., A. Pettitt, J. E. Flannery, and N. B. Allen (2020). Rapid Assessment of Psychological and Epidemiological Correlates of COVID-19 Concern, Financial Strain, and Health-Related Behavior Change in a Large Online Sample. *PLoS ONE*, 15 (11).
- Revfine. (2021). *Tourism Industry: Everything You Need to Know About Tourism | Revfine*. [online] Available at: <https://www.revfine.com/tourism-industry/> [Accessed 14 October 2021].
- S. Gössling, D. Scott, M. Hall. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, pp. 1-20.
- Sava, J. (2021). *Number of tourist arrivals in Romania 2020 | Statista*. [online] Statista, Available at: <https://www.statista.com/statistics/413253/number-of-arrivals-spent-in-short-stay-accommodation-in-romania/> [Accessed 15 October 2021].
- Sigala M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of business research*, 117, pp. 312–321.
- Sobkow, A., T. Zaleskiewicz, D. Petrova, R. Garcia-Retamero, and J. Traczyk (2020). Worry, Risk Perception, and Controllability Predict Intentions toward COVID-19 Preventive Behaviors. *Frontiers in Psychology*, 11.
- Bruce, B. F. (2018). *Snowball Sampling*. The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation. doi: <http://dx.doi.org/10.4135/9781506326139.n636>
- The New York Times. (2021). COVID-19 Fact Check: Does a mask protect me from the infection if I am the only person wearing one indoors? [online]. Available at: <https://www.firstpost.com/health/covid-19-fact->

check-does-a-mask-protect-me-from-the-infection-if-i-am-the-only-person-wearing-one-indoors-9986661.html [Accessed at: 05 October 2021].

- Ton, D., Duives, D.C., Cats, O., Hoogendoorn-Lanser, S. and Hoogendoorn, S.P. (2019). Cycling or walking? Determinants of mode choice in the Netherlands, *Transportation Research Part A: Policy and Practice*, 123, pp. 7-23.
- Troko, J., Myles, P., Gibson, J., Hashim, A., Enstone, J., Kingdon, S., Packham, C., Amin, S., Hayward, A., Nguyen Van-Tam, J. (2011). Is public transport a risk factor for acute respiratory infection? *BMC Infectious Diseases*, 11 (16), pp. 1-6.
- UNWTO. (2021). *COVID-19 and Tourism | 2020: A year in review*. [online] Available at: <<https://www.unwto.org/covid-19-and-tourism-2020>> [Accessed 22 October 2021].
- UNWTO. (2021). *Vaccines and reopen borders driving tourism's recovery*. UNWTO. [online]. Available at: <https://www.unwto.org/taxonomy/term/347> [Accessed October 10, 2021].
- Wachyuni, S. and Kusumaningrum, D. A. (2020). The Effect of COVID-19 Pandemic: How are the Future, *Tourist Journal of Education, Society and Behavioural Science*, 33, pp. 67-76.
- Wang, W., Tang, T. and Wei, F. (2020). Updated understanding of the outbreak of 2019 novel coronavirus (2019-nCoV) in Wuhan, China. *Journal of Medical Virology*, 92 (4), pp. 441-447.
- Wen J., Kozak M., Yang S. and Liu F. (2020). COVID-19: potential effects on Chinese citizens' lifestyle and travel. *Tourism Review*, Vol. ahead-of-print No. ahead-of-print.
- WHO World Health Organization. (2021). *WHO Coronavirus (COVID019) Dashboard*. [online] Available at: <https://covid19.who.int/> [Accessed 05 October 2021].
- WTTC. (2020). *Travel & Tourism. Global Economic Impacts and Trends*. [online] Available at: <https://wttc.org/Portals/0/Documents/Reports/2020/Global%20Economic%20Impact%20Trends%2020.pdf?ver=2021-02-25-183118-360> [Accessed at: 05 October 2021].
- Wyman, O. (2020). To Recovery & Beyond. The future of travel & tourism in the wake of COVID-19. *World Travel and Tourism Council*.

Annex

The set of questions found in the distributed survey were designed as follows:

1. What is your age?
 - a) 18-20
 - b) 21-25
 - c) 26-30
 - d) 31 and over
2. What is your gender?
 - Male
 - Female
 - Prefer not to say
3. What University are you studying at?
 - Open question
4. What is your current educational degree?
 - Bachelor student
 - Master student
 - PhD student
5. What is your monthly income?
 - None
 - Less than 1500LEI
 - Between 1500LEI to 2500LEI
 - More than 2500LEI
6. Since the beginning of the pandemic, did you get infected with the COVID-19 virus?
 - Yes
 - No
 - Prefer not to say

7. On a scale from 1-5, could you evaluate the impact that the virus had upon your health status?

- 1-No impact
- 2-Low impact
- 3-Medium impact
- 4-High income
- 5-Very high impact

8. Do you suffer from a chronic disease such as diabetes, heart or respiratory disease?

- Yes
- No

9. Our study focuses on travelling behaviors in pandemic times. Can you tell us which is your preference when choosing between travelling inside or outside the country?

- Inside the country
- Outside the country

10. Do you hesitate making future reservations for holidays in the following year?

- Yes
- No

11. How often did you use to travel INSIDE the country before vs during the COVID-19 pandemic?

	Every week	Every month	Every few mont...	Every year	Every few years
pre-pandemic p...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
during pandemi...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. How often did you use to travel OUTSIDE the country before vs during the COVID-19 pandemic?

	Every week	Every month	Every few mont...	Every year	Every few years
pre-pandemic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
during pandemic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Do you consider travelling inside the country as being a better option during pandemic times than travelling outside borders?

- Yes
- No

14. If you answered YES to the previous questions, please explain your choice:

- It is safer
- It implies lower costs
- It can be time-saving
- It supports local economy
- I want to discover tourist attractions of my own country
- Other

15. Please rate the importance of the following factors when choosing your next travel destination:
- The rate of infection in the area
 - Possible occurring restrictions) imposed self-isolation, closing borders)
 - The necessity to present a negative test/green certificate
 - The price of the destination
 - As close to home as possible
16. Compared to pre-pandemic times, would you now consider travelling by your personal vehicle a better alternative than taking the airplane?
- Yes
 - No
17. If you answered YES to the previous question, please choose between the following reasons:
- My financial status changed and I can no longer afford travelling in the same way
 - I don't feel safe/comfortable to share close space with strangers for long time
 - My priorities changed and I no longer want to invest in travelling
 - Travelling by car is more flexible
18. Do you consider the existence of a health insurance as being more important when travelling as compared to the pre-pandemic situation?
- Yes
 - No
19. On a scale from 1 to 5, please rate the perceived risk associated with the following international travel destinations during current times:
- A theme park experience such as Disneyland or PortAventura
 - A summer festival such as Tomorrowland
 - A week-long stay at a hotel/resort
 - A mountain climbing trip
 - A 3 days cultural city-break visiting museum
 - A nature-based vacation at a rental property