# TOURISM SECURITY AND TAKING RESPONSIBILITY IN THE SHADOW OF THE COVID19 PANDEMIC - WHO IS RESPONSIBLE?

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Abstract: Today's tourism is undergoing radical changes. Until 2020, the number of people participating in tourism had grown steadily, and no one would have thought that the globally dominant economy would experience such a shock. Many tourism businesses were forced to suspend their activities and not all of them could continue in the future as they had to look for other sources of livelihood. But businesses that succeed in surviving the economic collapse must be prepared to meet the changing needs of tourists after a reopening. The aim of our research is to assess the attitudes of potential tourists towards the issue of tourism security. Within the topic, we sought answers to what responsibilities, if any, they assume related to health security. In our research, we also looked at whether potential tourists expect them to provide their security. Responsible behaviour, as an expectation, is directed primarily at service providers or they may feel safe in a destination due to actions taken by other actors (including the travellers themselves). In a study based on an online questionnaire survey of almost a thousand people, the results were processed by statistical data analysis. Those wishing to travel do not even see the situation created by the current pandemic as a barrier to traveling. When it comes to security, public safety is considered to be paramount, and the public sector is expected to create it. Health security is only in second place, but the results suggest that the responsibility lies with service providers in this regard. Based on the obtained results, both tourism service providers and destination management organizations can place more emphasis on tourism security and its marketing communication.

Key words: tourism security, health security, responsible tourism, pandemic, tourist attitude

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#### INTRODUCTION

Today's tourism is undergoing radical changes. Until 2020, the number of people participating in tourism had grown steadily, and no one would have thought that the globally dominant industry would experience such a shock. According to the World Tourism Organization (UNWTO), in 2019, international tourist travel reached 1.5 billion, which was a remarkable number compared to previous years. Prior to the outbreak of the SARS CoV-19 epidemic, forecasts for 2020 still projected growth (UNWTO, 2020a), however, the epidemic significantly rewrote this, and according to Gössling et al. 2020, tourism itself greatly contributed to the spread of the epidemic (Gössling et al., 2020). The pandemic caused a 22 percent drop in international tourist arrivals in the first quarter of 2020, leading to the loss of millions of jobs and halting progress on Sustainable Development Goals (UNWTO, 2020b). Suddenly, travel habits changed, nearby destinations and domestic trips came to the fore. Many tourism businesses have been forced to suspend their activities and not all of them will be able to continue in the future as they had to look for other sources of livelihood. But businesses that survive the economic collapse need to be prepared to meet the changing needs of tourists after the reopening. The aim of our research is to assess the attitudes of potential tourists towards the issue of tourism security. Within the topic, we sought answers to what responsibilities, if any, they assume in relation to health security. There are obviously mandatory requirements for tourism service providers, but in our research, we also examined whether potential tourists expect them to provide their security. Responsible behaviour, as an expectation, is directed primarily at service providers or they possibly feel safe in a destination due to actions taken by other actors (including travellers themselves) (Mihalic et al., 2021). The question arises whether the COVID-19 pandemic had an impact on the importance of tourism security factors among travellers. In addition, the question is whether individual responsibility appears to tourists in relation to health security?

#### THEORETICAL BACKGROUND

#### **Emergence of tourism security in the literature**

Tourism security is an even less researched topic in Central and Eastern European countries, despite the fact that it can influence the travel decisions and destination choices of potential tourists (Zsarnoczky et al., 2016). Although some authors have criticized some elements of the well-known Maslow (1943) hierarchy of needs (King-Hill, 2017), the need for

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security after the level of basic physical needs cannot be questioned, whereas when an individual feels threatened, the defensive instinct awakens. As a result, if a traveller thinks he will not feel safe in a destination, it can deter him from that place. In today's information-rich world, it may occur that the tourist cannot be able to get enough information (for example, due to a lack of quality information, digital illiteracy) or he gets too much contradictory information, which creates uncertainty in him. Of course, with the mass movements of tourism, the security risk is increasing, so not only the weight of news and information that can be accessed instantly via the World Wide Web has increased, but also the weight of conscious branding and marketing management. Of course, many things can influence a potential tourist's travel decision. Preconception (Péter et al., 2018), and such important factor as cognitive ability also affects the level of objective risk perception of tourists (Cui et al., 2016). Michalkó (2012) defines security factors as a general condition of tourism, including institutionalized threats, public health conditions, and standard of living thresholds. If these factors are not appropriate, it will have a negative effect on the tourist traffic and economy of the area. At this point, it is necessary to state that we are not talking about those tourists of a special segment who are specifically looking for danger, challenge, to achieve elevated adrenaline levels during their leisure trips, such as those looking for extreme sports.

In connection with tourism related travels, the grouping of the various elements of security is not uniform in the literature either. Some authors classified these factors into six risk groups examining inbound tourism in the People's Republic of China: terrorism, crimes (endangering public security: theft, robbery, sexual harassment, etc.), health risk (risk of infection such as cholera, typhoid, malaria, hepatitis A, sexually transmitted diseases: HIV/AIDS, dengue fever, etc.), road safety, natural disasters, political situation (Breda and Costa, 2006).

Michalkó (2020, 25) similarly grouped the most important factors of tourism security. In his work, he highlighted five factors that can be used to assess the security of tourists (whether an adverse event to their detriment or caused by them): public security, health security, consumer security, technical safety, and navigation safety.

In the literature, there are studies focusing on single risk factors, such as public security (Pizam, 1999; Tarlow, 2011; Hua et al., 2020) and its impact on tourism in a destination, such as a more reprehensible crime (Brown, 2015), or just a comparison between the tourist-preferred districts of a city and other parts of the city based on the number of crimes (Williams, 2010). In the mid-1980s, quite a few acts of terrorism occurred in popular destinations, causing a decline in tourism indicators (Edgell and Swanson, 2018, 293). Furthermore, it is not surprising that the relationship between tourism and terrorism has received increasing attention since the early 2000s, since the attacks on the World Trade Center in New York on 11 September 2001 have drawn global attention to the importance of the issue (Floyd et al., 2003). The impact of terrorist acts on tourism is considered to be clearly negative by many researchers (Pizam 2002, Pizam and Fleischer, 2002, Tarlow, 2006, Freyer and Schroder, A. 2007, Henderson, 2007, Hall et al., 2012, Edgell and Swanson, 2018), however, we could also come across such research findings according to which the impact of risk is smaller and typically only influences tourists' travel decisions in the longer term (Rittichainuwat and Chakraborty, 2008). Furthermore, there was an opinion that the intensification of international terrorism and related threats have only a regional impact and less influence on the global processes of tourism (Tőkés and Lenkey, 2019). According to Tőkés and Lenkey (2019), geoeconomics related effects are much stronger, so the economic factor has a greater impact on the development of tourism than the security policy factor. Food security is a factor considered less risky that influences tourists' travel decisions, but according to some studies, it is greatly influenced by, for example, demographic affiliation (Yeung and Yee, 2020).

According to a research, a negligible proportion of tourists in Hungary become registered offenders, but at the same time they become victims more often, although it should be added that this number has decreased in the last decade both in Hungary and worldwide. One of the repercussions of this is that it positively influences the travel decision if a destination has good criminal statistics (Mátyás et al., 2020). Csapó and Törőcsik (2019) examined the security-related attitudes related to the travel habits of the Hungarian population. Based on their results, they found that the pursuit of security is much more important for women. The issue of security plays the biggest role in the travel decision of the low-educated, and the preference for safe destinations increases with the age regarding the generations (Csapó and Törőcsik, 2019).

## Health security and tourism

Tourists' decision can be influenced by what health risks they may be exposed to in a destination and, if they consider it dangerous, it negatively affects their willingness to travel (Jonas et al., 2011). The importance of this has become increasingly important as tourism has become global. At the same time, "the chances of epidemics starting in each country becoming pandemic have increased; and the fact that the global tourist is increasingly moving from a passive participant in tourism to an active participant in tourism, which increases both the risks and the responsibility for safety" (Kővári, 2012, 476).

At the time of the 2003 SARS epidemic, it has already become clear how important transport is, as an inherent part of travel, in order not to see health risks like this as a local problem. Tourism involves mobility, so measures at the time (screening at airports, inspections, travel restrictions) could provide lessons for dealing with similar situations (Gu and Wall, 2006, Wilder-Smith, 2006) and the need for international cooperation (McKercher and Chon, 2004). One study examined the impact of communicable diseases on the flow of tourism between countries and found that its negative impact was (statistically and economically) significant. According to their results, a 10% increase in the confirmed number of SARS infections caused a decrease of about 4.5% in international tourism, which was an 8% decrease for developing countries only. The extent of the negative impact on tourism in an epidemic country depends on the income level and health infrastructure of the given country (Cevik, 2021). It is important to examine the negative effects of the COVID-19 epidemic in 2020, as actors in the tourism sector need to adapt to the demand. U.S. survey experts emphasize the importance of mediating destination health risk reduction strategies in communications. The change in travel attitudes can

also be seen in the fact that the COVID-19 epidemic has changed the cognitive perception of tourists. If tourists believe a destination has a higher health risk, it increases their perceived insecurity and affects their mental well-being (Chua et al., 2021). It is important to note that the issue of responsibility and accountability in relation to health security is already addressed in the Global Code of Ethics for Tourism (GCET):

"(6) Tourists and visitors have the responsibility to acquaint themselves, even before their departure, with the characteristics of the countries they are preparing to visit; they must be aware of the health and security risks inherent in any travel outside their usual environment and behave in such a way as to minimize those risks." (UNWTO, n.d.)

This document is well known among tourism professionals, but the traveling public encountered it less. Thus, its contents, including the cited article, serve only as a guide for a narrow traveling segment. In reality, tourism service providers face the fact that tourists expect undisturbed experiences in exchange for their financial expenditures. In reality, this is often achieved in such a way that some guests are not always willing to follow the basic rules required by the service provider if they feel they are minimally constrained. Tourists included in a 2004 U.S. study were prepared to travel to a destination with a higher health risk (malaria, yellow fever, etc.) and they were fully aware of this. They were aware that the vaccine needed for immunization was available to prevent the disease, yet only a small proportion of them had vaccinated themselves to avoid infection (Hamer and Connor, 2004). This shows that the responsibility for health security is weak on the part of tourists.

#### MATERIALS AND METHODS

#### Sample and data collection

As no research is known on the topic of COVID-19 pandemic and tourism health security, we reviewed the methodology of similar studies in the literature to perform qualitative research, of which we relied in part on the studies of Csapó and Törőcsik (2019) and Jonas et al. (2011) as a starting point. In the continuation, during the field research, the aim was to develop a series of questions focusing on the topic. Prior to compiling the planned questionnaire for the survey, we conducted an unstructured interview with tourism service providers who operate their business in the field of accommodation and hospitality. Based on these, a questionnaire was compiled, which was distributed online at the end of 2020 due to the pandemic situation. Of course, this also means that we have only been able to reach and involve in research those who use the Internet. The target group of the survey is over 18 years of age, with residence in Hungary.

The survey was conducted between November 2020 and January 2021. The survey instrument was a self-administered questionnaire. In the first group of questions, we asked about demographic characteristics, followed by questions related to participants' travel for tourism purposes. The third group of questions concerned tourism security. Examining the issue of tourism security, Karl and Schmude (2017) pointed out that a real picture of the security factors influencing the travel decision of potential tourists can only be formed if we do not examine them separately. Thus, in the questionnaire survey, related to seven security factors (public security, political instability, consumer security, health security, safety of the natural environment, technical and transport safety, navigation safety (Michalkó, 2020), we measured their importance among the respondents on a five-point Likert scale. At the end of the questionnaire, we also raised questions about the respondents' travel plans in the shadow of the pandemic, with particular reference to health security.

#### Data analysis

In a study based on an online questionnaire survey of almost a thousand people (n: 927), we sought to use closed, decisive, and ranking questions. The results were processed by statistical data analysis using SPSS software.

To examine the perception of different risk factors of potential tourists and investigate the relationships between risk factors and some demographic indicators, various statistical tools were used. Frequency analysis was employed to get the demographic information of the sample. ANOVA was applied to investigate how travelers perceive different risk factors according to different tourist characteristics (Error! Reference source not found.).

#### General demographic features of tourists involved in the survey

For the results of the questionnaire survey, the responses of a sample of 927 people were processed. We asked demographic questions at the beginning of the questionnaire. 65.6% of respondents were women and 34.3% were men. In terms of age, the majority of respondents were 31-45 years old, their proportion was 36.2%, 46–60-year-olds accounted for 30.3%, 18-30 years old accounted for 21.8%, and 0.4% did not answer the question about age. In terms of distribution by place of residence, most of them lived in cities (31.7%) and county seats (30.9%), 16.6% in the capital, 12.5% in villages, 8.2% in municipalities, and 0.1% on homesteads. By occupation, most of them were intellectual employees (25.1%), while 22.9% of them were manual workers, 14.5% retirees, 12.6% students, 12% entrepreneurs, 9.7% senior employees, 0.5% homemakers, 2.5% job seekers and 2.5% of them chose the "other" option. Based on the highest level of education, 38.8% of the survey participants graduated from college or university, 31.6% graduated from grammar school or vocational high school, 20.0% graduated from vocational training or vocational schools, 8.2% were currently in higher education, while 1.2% graduated from primary school, and 0.2% of respondents did not want to answer this question.

#### RESULTS AND DISCUSSION

Typical travel motivations of survey participants and the impact of SARS CoV-19 on their tourism related travels After the demographic profile, we asked participants to answer tourism-related questions.

We assessed what is the most typical motivation for research participants for their tourism related travels. For this, sixteen options were listed, several of which could be checked. Sightseeing was a motivation for 36.5%, and 61.6% of the

respondents aimed to relax and recharge during their trips. Hiking and close-to-nature destinations motivated roughly one in four respondents to travel, with 28.4% saying this is among their most typical destinations.

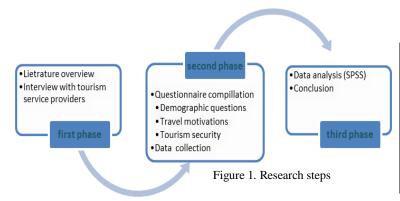


Table 1 Age distribution of the postponement of planned trip (Data source: own research)

|       | -     | -            |       |       |        |
|-------|-------|--------------|-------|-------|--------|
|       |       |              | Yes   | No    | Total  |
| Age   | 18-30 | Count        | 69    | 130   | 199    |
|       | 18-30 | % within Age | 34.7% | 65.3% | 100.0% |
|       | 31-45 | Count        | 141   | 193   | 334    |
|       |       | % within Age | 42.2% | 57.8% | 100.0% |
|       | 46-60 | Count        | 125   | 154   | 279    |
|       |       | % within Age | 44.8% | 55.2% | 100.0% |
|       | 61-75 | Count        | 48    | 56    | 104    |
|       |       | % within Age | 46.2% | 53.8% | 100.0% |
| Total |       | Count        | 383   | 533   | 916    |
|       |       | % within Age | 41.8% | 58.2% | 100.0% |

Wellness relaxation was among the most typical motivations during travel: it was marked by 28% of respondents. Recreation for tourism related to gastronomy motivated 16.5% of the respondents to travel, and gaining cultural experiences was one of the most typical destinations for one in four respondents (24.8%). Visiting friends and relatives (VFR) was a motivation to travel among almost one-fifth of the research participants (19.2%). Business travel and conference attendance were marked by very few, only 2.8% of research participants. Learning and study trips as a travel incentive were common to only 1.9% of research participants. The next possible motivation examined was the sport and hobby category, such as cycling and water tourism, which was among the most common motivations in roughly one in ten respondents (10.2%). Attending an event, such as a festival or concert, was among the most common travel destinations in a quarter of respondents (23.2%). Using a health and beauty service was one of the less popular travel motivations, typical of only 1.4% of respondents. Visiting a spa was among the most common travel motivations for roughly one in ten respondents, with 12.6% marking this, while religious motivation was the main motivation for only 0.4% of respondents. Shopping was indicated by 5% of respondents. The "other" option was chosen by 0.2% of respondents. Based on the answers, the most typical motivations related to travel for tourism are the followings: relaxation, recharging, sightseeing, hiking and close-to-nature destinations, as well as wellness recreation. The least common motivations are religious motivation, using health and beauty services, learning and study trips - as well as "other" motivations.

Subsequently, we were interested about whether respondents had abandoned their travel plans due to the emerging Sars-Covid19 epidemic. Most of them, 57.5% did not give up their travel plans due to the situation caused by the pandemic, but 41.7% did. 0.8% of respondents did not answer this question. We examined whether there was a difference based on gender in the proportion of respondents who cancelled their travel plans. As can be seen in the cross table, 43.5% of women cancelled their travel plans due to the epidemic situation, while this rate was lower for men, as only 39.2% cancelled their travel plans. We also looked at whether there was an age difference in whether respondents gave up their travel plans. Examining the four age groups, the youngest age group, those between the ages of 18 and 30, adhered the most to their travel plans, with only one-third (34.6%) giving up on them (Table 1). As we examine the older age groups, the proportion of those who have given up their travel plans due to the viral situation is increasing. However, there is not much difference between the other three age groups examined: 42.2% of those aged 31 to 45 gave up their travel plans, compared to 44.8% of those aged 46 to 60, while this value is the highest for those aged 61 to 75, at 46.2%.

Using the following question, we examined what respondents consider important for tourism security in connection with a destination when making their travel decision. I have listed seven factors: public security, political instability, consumer security, health security, safety of the natural environment, technical and transport safety, and navigation safety, and I asked them to indicate for each factor how important that factor is to them. The importance of each factor was measured on a five-point Likert scale, where 1 was not important at all and 5 was very important.

The first factor examined was public security, for which I wrote verbal and physical atrocity, robbery, and theft as examples. Of the 927 respondents, 905 gave an answer to the question, with a mean value of 4.7381, which means that public security is very important to research participants when making their travel decision about a destination, so they prefer destinations where they do not have to fear verbal or physical atrocity, robbery. The mode is 5.00, which means that most of the respondents gave the answer that public security is very important to them when deciding where to travel. The standard deviation is 0.59211, which means that the importance of each answer deviates from the mean by so much, that is there was not much difference between the answers. The second factor examined is the unstable political situation, terrorist acts. Only two people did not answer this question. The mean is 4.0065, which means that they consider this factor as more important, and most respondents also stated that the unstable political situation is more important for them when choosing their destination. The standard deviation is 0.91640, which means that this factor divides respondents more than the question of public security and, as the standard deviation shows, has less influence on their decision when it comes to a travel destination.

The third factor we examined is consumer security, such as the problem of overbilling and poor-quality products. 8 people did not answer this question, while the mean of respondents was 3.8400, which means that it is more important to them - although less important than public security and the uncertain political situation. The 4.00 mode means that most respondents stated that this factor was more important to them, while the 0.94136 standard deviation indicates that the

difference between the responses was relatively larger. We then asked the participants about the importance of health security, which is how important it is for them not to be at risk of an epidemic or infectious disease in the destination. 10 people did not answer this question. The mean of the responses was 4.4286, so this factor is important to the respondents. The mode is 5.00, so most have stated that health safety is very important to them when choosing their destination. The standard deviation is 0.74219, which is higher than for public security, but the importance of health security among respondents is less divisive than the uncertain political situation and the importance of consumer security.

Fifth, we examined the safety of the natural environment, which means the extent to which environmental problems, pollution and disasters influence respondents' travel decisions. This question was answered by all 927 people, with a mean of 3.6850 of their answers, which means that it is more important for them, but this mean is close to the one category lower importance, so although this factor is important, the respondents do not care much about it. However, mode is 4, so for most respondents, the safety of natural environment is more important. The standard deviation is the highest among the standard deviations of all the factors examined so far (0.98915), so this is the most divisive factor so far.

In the followings, we examined the importance of technical and transport safety, such as the safety and reliability of public transport. Only 1 person did not answer this question. The mean is 3.6004, which is very similar to the mean for the safety of the natural environment, but even less: it is on the border of more important and important but not deal with it. The mode is 4.00 for this factor as well, that is technical and transport safety is more important for most respondents. The standard deviation is the largest for this factor (1.10828), so here the results differ the most. Lastly, we asked the research participants about the importance of navigation safety, that is, what is the access to local information, local rules, and standards. Everyone answered the question: the mean is 3.2244, which means that navigation safety is considered important by respondents, but they do not deal with it - and the mode is 3.00, so most respondents are of this opinion. The variance was relatively large for this factor, as it was only higher for technical and transport safety. Based on the responses, therefore, the three main security-related factors that influence research participants when deciding on their destination are public security, health security, and the unstable political situation, terrorist acts. The ones that have the least impact on this decision are the navigation safety, the technical and transport safety, and the safety of the natural environment.

The current situation caused by the SARS-CoV-2 pandemic is related to health security, which is very important for respondents when choosing their future destination, and almost half of the respondents cancelled their planned destination due to the SARS-CoV-2 pandemic, so health security is really important for them affecting their decision. We examined whether more of the respondents had cancelled their planned trip due to the pandemic for whom health security was very important when deciding on a destination. Research participants' cancellation of their travel plans due to a pandemic, according to their responses, is not in line with how important health security is to them when choosing a travel destination. The results show that the highest proportion of those (47.1%) gave up their travel plans for whom health security is of medium importance, and the second highest proportion (41.7%) was those who thought it is rather not important. 43% of those who consider health security to be very important gave up their travel plans due to the pandemic, while 38.6% of those who consider it more important.

## The relationship between the highest level of education and the importance of the health security factor

We examined whether there is a relationship between how important the health security factor is to respondents and what their highest level of education is. Variance analysis was used for this because this statistical technique can be used to examine the effect of one or more independent variables on one or more dependent variables. In this case, the independent variable is the highest level of education, while the dependent variable is the importance of the health security factor.

Based on the Case Processing Summary table, we were able to include 917 of the 927 respondents in the study.

The following table shows how important health security is for people with different qualifications:

- > primary school: For primary school graduates, 4.5455 is the importance of the health security factor, which means it is very important to them overall. Of the 917 individuals, 11 represented this group, with a standard deviation of 0.82020 in their case.
- ➤ vocational training, vocational school: In the case of graduates of vocational training and vocational schools, the mean is 4.3352, which means the health security factor is more important for them when traveling for tourism purposes. The standard deviation is similar to the standard deviation of primary school graduates, 0.81612, and 182 people represented this group.
- > grammar school, vocational high school: The number of graduates of grammar schools and vocational high schools is 289, and their mean is 4.4118, which means the health security factor is more important for them, and it is more important than for those graduating from vocational training and vocational schools. The standard deviation is lower in their case: 0.74068.
- > currently students in higher education: Higher education students have the lowest mean, 4.2237, but health security is also more important to them. 76 people represented this group, with a standard deviation of 0.88842.
- > college/university: Most people belong to this group, 357 people. The group mean is 4.5266, which means that the health security factor is very important to them, almost as important as it is for primary school graduates. The standard deviation of the group is the lowest excluding those who did not respond only 0.65127.
- ➤ do not want to answer: Two respondents did not give the highest level of education, but their mean health security factor was 5, which means that health security is very important to both of them when planning their travel for tourism and deciding on a destination.

Using ANOVA analysis of variance, we tested the null hypothesis of the health security factor with test F, according to which the highest level of education does not affect the importance of the health security factor for the participants when

planning their trips for tourism purposes. The table shows that the ratio of intergroup and intragroup squared differences is 3.344 (Table 2). The significance level for test F is 0.005, which is less than 0.05, so we reject the null hypothesis, because the category means are significantly different from each other, so the importance of health security is not the same for people with different educational level. Finally, we examined the closeness of the relationship between the two factors using the eta-square indicator. The values of the indicator vary between 0 and 1, if the values are closer to 0, it means a weaker relationship, while the values closer to 1 mean a stronger relationship. In this case, the value of the eta-square indicator is 0.018, which is very close to zero, so this relationship is not very strong and educational level has little effect on the importance of the health security factor alone.

Table 2 The result of F-test for the null hypothesis of the health security factor (Data source: own research)

| 9. When making your travel decision, what do you consider |                           | Sum of Squares | df  | Mean Square | F     | Sig. |
|---|---------------------------|----------------|-----|-------------|-------|------|
| important for your safety in relation to a destination?   | Between Groups (Combined) | 9.095          | 5   | 1.819       | 3.344 | .005 |
| (Health security (communicable diseases, epidemics, etc.) | Within Groups             | 495.477        | 911 | .544        |       |      |
| *5. What is your highest level of education?              | Total                     | 504.571        | 916 |             |       |      |

#### Relationship between age and importance of security factors

The relationship between age and the importance of each security factor was also examined using analysis of variance. In this case, age was the independent variable, while the dependent variables were individual security factors. For each security factor, the proportion of participants I can include in the analysis differs: 97.2% for the public security factor, 99.4% for the unstable political situation factor, 98.7% for the consumer security factor, 98.5% for the health security factor, 99.6% for safety of natural environment factor, 99.5% for technical and transport safety, and 99.6% for navigation safety. Mean and standard deviation for each age group for different security factors:

- ▶ public security: The means in the four age groups studied are very close, the lowest for those aged 31-45 is 4.7262, while the highest is 4.7500 for those aged 46-60. There is not much difference between the variances, so public security is very important for all age groups.
- > unstable political situation: The mean for this factor is also very similar for the four age groups, with the lowest for those aged 31-45: 3.9940, and the highest for those aged 18-30: 4.0743. The standard deviations are higher than in the case of the public security factor, the standard deviation is the lowest in the 61-75 age group, and the standard deviations are very similar for the other three age groups. This factor is more important for each group.
- rightly larger: the lowest mean is 3.7638 for the 18-30 age group, while the highest is 3.9119 for the 61-75 age group. The standard deviation is lowest in the 61-75 age group, and slightly higher in the other three age groups.
- ➤ health security: This factor is also more important for all groups, and the means are also close to each other: 4.35 is the lowest mean for the 18–30 age group, and 4.50 is the highest for the 61–75 age group. There is no significant difference between the groups in terms of standard deviations.
- ➤ safety of the natural environment: This factor is more important for each group, with the lowest for the 61-75 age group: 3.5385 and the highest for the youngest age group: 3.7822. The standard deviations are relatively high, however, there is no large difference between the groups in terms of standard deviation.
- > technical and transport safety: This factor is more important for all groups, where the lowest mean for those aged 31-45 is 3.5119, and the highest mean is 3.7367 for those aged 41-60. The standard deviations are high and there is not much difference between the groups in terms of standard deviations.
- ➤ navigation safety: This factor is moderately important for all groups, with no large difference between the means: the lowest for those aged 61–75 years is 3.1827, and the highest for those aged 18–30 years is 3.2871. The standard deviations are high for all groups.

Test F yielded the following results for each factor:

- ▶ public security: According to the null hypothesis, age does not affect how important public security is to respondents. The ratio of intergroup and intragroup squared differences is 0.082, and the significance level for the F test is 0.970, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.
- > unstable political situation: According to the null hypothesis, age does not affect how important the unstable political situation is for respondents. The ratio of intergroup and intragroup squared differences is 0.502, and the significance level for the F test is 0.681, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.
- respondents. The ratio of intergroup and intragroup squared differences is 0.699, and the significance level for the F test is 0.553, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.
- ▶ health security: According to the null hypothesis, age does not affect how important health security is to respondents. The ratio of intergroup and intragroup squared differences is 1.162, and the significance level for the F test is 0.323, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.
- > safety of the natural environment: According to the null hypothesis, age does not affect how important the safety of the natural environment is for respondents. The ratio of intergroup and intragroup squared differences is 1.868, and the significance level for the F test is 0.133, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.

- ransport safety: According to the null hypothesis, age does not affect how important technical and transport safety is for respondents. The ratio of intergroup and intragroup squared differences is 2.331, and the significance level for the F test is 0.073, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.
- respondents. The ratio of intergroup and intragroup squared differences is 0.440, and the significance level for the F test is 0.725, which is greater than 0.05, that is the null hypothesis cannot be rejected, as the category means do not differ significantly.

The eta-square indicator is as follows: 0.000 for public security, 0.002 for unstable political situation, 0.002 for consumer security, 0.004 for health security, 0.006 for the safety of natural environment, 0.008 for technical and transport safety, and 0.001 for navigation safety. In all seven cases examined, the value is very close to zero, so the relationship is very, very weak in each case in terms of the relationship between age and individual security factors.

Respondents were then asked who is expected to create the security factor they consider important, whose job it would be to provide it in a destination. Research participants were able to choose from four options, and most of them, three-quarters, believed that it would be up to the public sector to create the security factor. According to 23.1% of the respondents, service providers and entrepreneurs have to take care of the security factor. Only very few of them chose NGOs and local society on this issue.

## Relationship between the highest level of education and the respondents' opinion about whose responsibility it is to ensure the health security of tourists

To analyse the relationship between the two factors, I chose the analysis of variance again. In this case, the independent variable was the highest level of education, while the dependent variable was the answer about who is responsible for ensuring health security, according to the respondents. Based on the Case Processing Summary table, I was able to include 99.9% of the research participants in the analysis.

As can be seen in the (Table 3), the lowest mean of 1.5 can be observed for those who did not declare their education, primary school and university, college graduates had similar means, as the means for graduates of vocational schools, vocational training schools, vocational high schools and grammar schools were also similar. The mean is highest for those currently in grammar school. The variances are high in all cases, which means that respondents with the same level of education also differed in whose responsibility they think it is to ensure the health security of tourists.

| Table 3 The relationship between educational attainment and whose responsibility                         |
|--|
| it is to ensure the health security of tourists according to the respondents (Data source: own research) |

| 12. Who do you think is responsible for ensuring the health safety of tourists? 5. What is your highest level of education? | Mean   | N   | Standard Deviation |
|---|--------|-----|--------------------|
| Primary school  | 2.9091 | 11  | 1.86840            |
| Vocational training, vocational school  | 3.0598 | 184 | 1.67649            |
| Grammar school, vocational high school  | 3.0375 | 293 | 1.62450            |
| I am currently a student in higher education  | 3.2500 | 76  | 1.59269            |
| College/University  | 2.9028 | 360 | 1.71962            |
| I do not want to answer   | 1.500  | 2   | .70711             |
| Total   | 3.0022 | 926 | 1.67203            |

The null hypothesis in this case is that educational attainment has no effect on whose responsibility respondents consider creating health security for tourists. According to the ANOVA table, the ratio of intergroup and intragroup squared differences is 0.988. The significance level for test F is 0.424, which is greater than 0.05, that is the null hypothesis cannot be rejected, as means do not differ significantly from each other. The value of the eta-square indicator is 0.005, which confirms the result obtained with the help of the ANOVA table, which means there is a very, very weak relationship between the highest level of education and the respondents' opinion about whose responsibility it is to ensure the health security of tourists. The research also examined whether survey participants were more concerned about their health security when planning their trip due to the COVID 19 epidemic than before the epidemic. Based on the results obtained, the majority of respondents are more concerned about health security, however, they have not much more proportion than non-worrying respondents: their ratio is 55.8%, while the proportion of those who are not so concerned is 44.1%.

We also wanted to know who the respondents said was responsible for ensuring the health security of them. Most of them, about a third of respondents (34.6%) believe that this is primarily the responsibility of public organizations and tourism service providers. Approximately the same number of participants consider only public organizations (27.4%) and tourism service providers alone (25.8%) to be responsible, while the joint responsibility of tourism service providers and tourists, as well as the responsibility of tourists, occurred in much smaller proportions: the rate is 9.9% for the former and 2.2% for the latter. Overall, it can be said that almost 90% of the respondents believe that health security should be created by the tourism sector and public organizations - most of them say that the two groups work together.

In the next question, we examined whether the participants complied with the epidemiological standards requested by tourism service providers and what was the reason for their behaviour in this regard. Slightly more than half of the respondents said that they always pay attention to compliance with epidemiological regulations, while a quarter of them only comply with the rules if these are prescribed by public health bodies. An additional 6.1% of respondents also adhere to the restrictions, but they are only motivated to do so to avoid punishment. 6.9% stated that they sometimes follow the regulations and only those that do not cause them any inconvenience. Nearly 10% of respondents do not want to comply

with epidemiological regulations, 5.3% of them because they do not believe they can be infected in such a place, while 4.1% of them because they do not think it is their job to comply with epidemiological regulations.

We then asked research participants whether the pandemic situation changed their destination preferences. Respondents were very divided on this issue: for most of them, 38.7%, the pandemic situation has partly changed their destination preferences because they wanted to stay safe. A quarter of them answered with a definite yes, as they wanted to avoid the crowd. The other two options examined were roughly the same: 17.9% want the same as before, so the pandemic situation did not change the preferences of the destination, while 17.7% changed their destination preferences due to the pandemic, however, only because they longed for new excitement. Thus, it is clear from the responses that the majority include those for whom the pandemic situation changed their destination preferences, at least to some extent. We also asked respondents what destinations are now in their plans. Previously, more than one answer could be given to the question on the most typical motivations, but only one to this question. As can be seen in the table, sightseeing is the main motivation for 17.3%, relaxation and recharging for 6.7%, hiking and visiting close-to-nature destinations for 22.9%, while gastronomy for 3.5%. Gaining cultural experiences was mentioned by 9.5%, visiting friends and relatives (VFR) by 5.2%, business trips and participation in conferences by 1.5%, sports and hobbies by 7.4%, while learning and study trips by only 0.2%. 7.8% of respondents stated that their main motivation was to participate in events, 0.8% to use health and beauty service, 4.3% would visit a spa, while the proportion driven by religious motivation was 1.3%, and shopping planners represented 1%.

As can be seen from the answers, the most typical motivation is currently hiking, visiting destinations close to nature - one-fifth of the respondents would travel with this motivation. The other three most common motivations are sightseeing, relaxation, recharging, and gaining cultural experience. In the last question of the questionnaire, I asked the participants about where they plan to travel for tourism related purpose this year: domestically, abroad, both domestically and abroad, or do not plan to travel for tourism related purpose this year. Most respondents, 45% of them, would like to travel domestically and abroad for tourism related purpose this year, while nearly a third (31.2%) do not plan to travel either domestically or abroad for tourism related purpose. 16.9% of the respondents plan domestic destinations, while 6.9% plan foreign destinations.

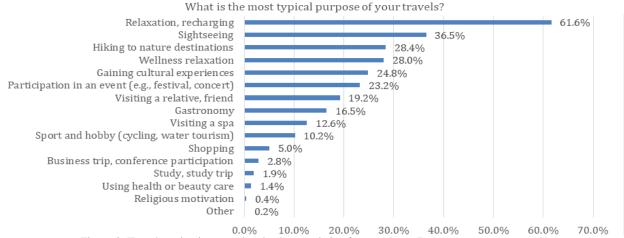


Figure 2. Travel motivations previously characteristic of respondents (Data source: own research)

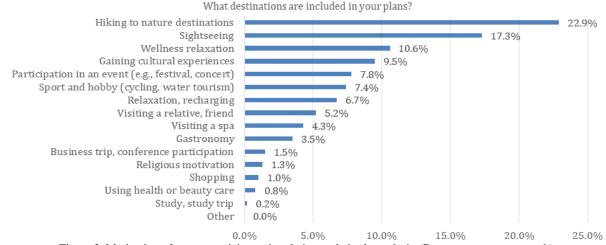


Figure 3. Motivation of survey participants in relation to their planned trip (Data source: own research)

### Changes in motivation structure due to the COVID19 epidemic

In the primary research, we examined what is the most typical motivation for respondents' travel and what destination is included in their plans. For the most typical travel destination question, we asked the respondents to choose all the motivations that are true in their case - while for questions about future plans, I examined what the main motivations are for

them currently, as they could only choose one answer to this question. As can be seen in Figure 2, for most of them, relaxation and recharging are the main reasons, followed by sightseeing, hiking and close-to-nature destinations, wellness recreation, gaining cultural experiences and participation in events - these destinations were mentioned by at least one-fifth of the respondents as the most typical destination for their travels. The least common destinations are business trips or conferences, learning and study trips, health and beauty services, religious motivation, and other destinations.

And the following chart shows the motivation with which they are currently planning their trip (Figure 3). For most, hiking, close-to-nature destinations appeared as a future plan - while previously this program was only the third most common among respondents. The Covid-19 pandemic can also play a major role in increasing the popularity of hiking and nature destinations, as there are far fewer tourists in nature than in case of sightseeing or relaxing in a wellness hotel, so people who want to travel but changed their plans because of the virus and they want to stay safe will probably choose one of the close-to-nature destinations. Of course, the desire to get rid of long-term confinement contributes to this. In second place, there is sightseeing, with 17.30% planning to do so: this destination was also in second place among the most typical destinations, and it is still in the plans of many. The third most popular program is wellness relaxation, which was in fourth place among the most typical destinations. The first five also include gaining cultural experience and attending events, which are the fifth and sixth places in the list of the most typical destinations.

Relaxation and recharging was the most typical motivation mentioned by 61.60% of respondents, but it is now only ranked seventh - preceded by sports and hobbies in addition to the previous ones. The fewest respondents plan the followings: religiously motivated travel, shopping related trips, using health and beauty services, travelling related to learning or study trips. Respectively, business trip and attending conferences was one of the five most typical destinations so far, but now it was removed from the list for future destinations. The results of the questionnaire thus illustrate that the majority of research participants have an impact on the travel and travel plans of the pandemic, but the proportion of those who cancelled their travel plans is not much higher than that of those who do not, so we cannot state that the pandemic situation prevents respondents from traveling. In terms of security factors, public security is paramount to them, and they believe that public security should be created by the public sector. Health security is the second most important security factor, while the unstable political situation is in third place. Most of the participants in the research adhere to epidemiological regulations at least to some degree, but their motivations are different: some are motivated by their health, and some are motivated to avoid punishment, while there are those who follow only the rules prescribed by health authorities, and there are also those who only follow regulations that are not inconvenient for them.

#### CONCLUSION

Tourism is a security-sensitive industry, so it is absolutely necessary to constantly monitor the development of security factors and the reactions of tourists, both globally and regionally. The present research showed that there are security factors to which potential travellers are increasingly sensitive, which is not surprising given that most people travel with their family members, so the tourists fear not only their own safety but also the safety of their close relatives. Those wishing to travel do not even see the situation created by the current pandemic as a barrier to traveling. When it comes to security, public safety is considered to be paramount, and the public sector is expected to create it. Health security is only in second place, but the results suggest that the responsibility lies with service providers in this regard. The majority of respondents are willing to cooperate with tourism service providers, but they would only comply with the restrictive measures that health/epidemiological authorities are obliged to impose. It is still not planned to spend the resting and recharging time in a destination different from the previous ones, although they are more interested in close-to-nature destinations. The survey not only pointed out that the issue of security is important for those wishing to travel, but also that health security is a factor which only partially influences the travel decision.

The research provides valuable information to those on the supply side of the tourism sector, as after the lifting of restrictions due to the COVID19 pandemic, when tourism is restarted, service providers will face a new competitive situation. Based on the obtained results, both tourism service providers and destination management organizations can place more emphasis on tourism security and its marketing communication. The COVID-19 epidemic, which became global in 2020, has changed our globalized world, highlighting the fragility of our countries and the world economy. It has shocked people out of their normal way of life, and it is likely to have long-term effects in the future. It is clear that the global impact of the COVID-19 epidemic on tourism (and other industries) cannot yet be determined, not least because many countries are still struggling with the pandemic. This also means that increased attention to health risks is important not only because of the travel of tourists, but also because of the population of the destination.

#### REFERENCES

Breda, Z., & Costa, C. (2005). Safety and Security Issues Affecting Inbound Tourism in the People's Republic of China. In Mansfeld, Y. & Pizam, A. (ed.), Tourism Security and Safety: From Theory to Practice. Elsevier Butterworth—Heinemann, Burlington (USA) - London (UK) 187-209

Brown, B.C. (2015). Tourism, crime and risk perception: An examination of broadcast media's framing of negative Aruban sentiment in the Natalee Holloway case and its impact on tourism demand. *Tourism Management Perspectives*, 16, 266-277. https://doi.org/10.1016/j.tmp.2014.12.001

Cevik, S. (2021). Going Viral: A Gravity Model of Infectious Diseases and Tourism Flows. *Open Econ Review*, 32 (2), https://doi.org/10.1007/s11079-021-09619-5

Chua, B., Al-Ansi, A., Lee, M.J., & Han, H. (2021). Impact of health risk perception on avoidance of international travel in the wake of a pandemic. *Current Issues in Tourism*, 24(7), 985-1002. https://doi.org/10.1080/13683500.2020.1829570

Csapó, J., & Törőcsik, M. (2019). Turizmus és biztonság: a magyar lakosság utazási szokásaihoz köthető, biztonsággal kapcsolatos attitűdök reprezentatív vizsgálata. [Tourism and security: a representative survey of security-related attitudes linked to the travel habits of the Hungarian population] *Turizmus Bulletin*. 19 (3), 13-20.

- Cui, F., Liu, Y., Chang, Y., Duan, J., & Li, J. (2016). An overview of tourism risk perception. Natural Hazards: *Journal of the International Society for the Prevention and Mitigation of Natural Hazards*, 82(1), 643-658. https://doi.org/10.1007/s11069-016-2208-1
- Edgell, D.L., & Swanson, J.R., (2018). *Tourism Policy and Planning: Yesterday, Today & Tomorrow*, Routledge, 3rd Edition, London & New York, 348 p.
- Floyd, M.F., Gibson, H., Pennington-Gray, L., & Thapa, B. (2003). The Effect of Risk Perceptions on Intentions to Travel in the Aftermath of September 11, 2001. In Hall, M. C., Timothy, J. D., and Duval, D. T. (eds). Safety and Security in Tourism: relationships. *Management and Marketing*. 1st ed. Routledge. London&New York. 19-37.
- Freyer, W., & Schroder, A. (2007). Tourism and Terrorism: an Analytical Framework with Special Focus on the Media. In E. Laws, B. Prideaux, K.S. Chon. *Crisis Management in Tourism*, CAB International, Oxon, 129-141.
- Gössling, S., Scott, D., & Hall, C.M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. https://doi.org/10.1080/09669582.2020.1758708
- Gu, H., & Wall, G. (2006). SARS in China: Tourism Impacts and Market Rejuvenation. Tourism Analysis, 11, 367-379.
- Hall, C.M., Timothy D.J., & Duval, D.T. (2012). Security and tourism: Towards a new understanding? Safety and Security in Tourism: Relationships, *Management, and Marketing*. Routledge, London. 1-18.
- Hamer, H.D., & Connor, A.B. (2004). Travel Health Knowledge, Attitudes and Practices among United States Travelers. *Journal of Travel Medicine*, 11(1), 23-26.
- Henderson, J.C., (2007). Tourism Crisis: causes, consequences and management. Butterworth Heinemann, Oxford.
- Hua, N., Li, B., & Zhang, T.C. (2020). Crime research in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 32 (3) 1299-1323. https://doi.org/10.1108/IJCHM-09-2019-0750
- Jonas, A., Mansfeld, Y., Paz, S., & Potasman, I. (2011). Determinants of Health Risk Perception Among Low-risk-taking Tourists Traveling to Developing Countries. *Journal of Travel Research*. 50(1) 87-99. https://doi.org/10.1177/0047287509355323
- Karl, M., & Schmude, J. (2017). Understanding the Role of Risk (Perception) in Destination Choice A Literature Review and Synthesis. *Tourism: An International Interdisciplinary Journal*, 65 (2), 138-155. Download from hrcak.srce.hr/183753
- King-Hill, S. (2015). Critical analysis of Maslow's hierarchy of need. *The STeP Journal* (Student Teacher Perspectives). 2 (4), 54-57. Download from: h t t p://insig h t.c u m b ria. ac.uk/id/e p rin t/2 9 4 2/
- Kővári, I. (2012). Egy fogalom látványos karrierje A turizmusbiztonság fogalmának átalakulása az elmúlt évtizedben. [The spectacular career of a concept The transformation of the concept of tourism security in the last decade] In: Aubert, A., Gyuricza, L. & Huszti, Zs. (Eds): *A kultúra turizmusa A turizmus kultúrája*. [The tourism of culture The culture of tourism] PTE. IDResearch Kft., Publikon, Pécs. 678 p.
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–96. http://psychclassics.yorku.ca/Maslow/motivation.htm
- Mátyás, S., Németh, J., & Ritecz, G. (2020). A turizmusbiztonság társadalmi és gazdasági összefüggéseinek statisztikai vizsgálata [Statistical analysis of the social and economic contexts of tourism safety], *Területi Statisztika*, 60 (5), 567–580. https://doi.org/10.15196/TS600503
- McKercher, B., & Chon, K. (2004). The over-reaction to SARS and the collapse of Asian tourism. *Annals of Tourism Research*. 31(3), 716–719. https://doi.org/10.1016/j.annals.2003.11.002
- Mihalic, T., Mohamadi, S., Abbasi, A., Dávid, L.D. (2021). Mapping Sustainable and Responsible Tourism Paradigm: A Bibliometric and Citation Network Analysis. *Sustainability*, 13, 853. https://doi.org/10.3390/su13020853
- Michalkó, G. (2012). Turizmológia, [Tourismology] Akadémiai Kiadó, Budapest, 266 p.
- Michalkó, G. (2020). A biztonság szerepe a turizmus rendszerében. [The role of security in the system of tourism] In: Michalkó, G., Németh, J., & Ritecz, G. (eds): *Turizmusbiztonság* [Tourism Safety] Dialóg Campus, Budapest. 15-28
- Péter, E., Németh, K., & Lelkóné Tollár, I. (2018). Turizmusbiztonság, mint újonnan felmerülő fogyasztói igény. [Tourism security as an emerging consumer need] *Turizmus Bulletin* 18 (2), 30-37.
- Pizam, A. (1999). A comprehensive approach to classifying Acts of crime and violence at tourism destinations. *Journal of Travel Research*, 38(1), 5-12.
- Pizam, A. (2002). Editorial: tourism and terrorism. International Journal of Hospitality Management, 21, 1-3.
- Pizam, A., & Fleischer, A. (2002). Severity versus Frequency of Acts of Terrorism: Which Has a Larger Impact on Tourism Demand? Journal of Travel Research, 40(3), 337–339. https://doi.org/10.1177/0047287502040003011
- 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
- Tarlow, P.E. (2006). Terrorism and tourism. In J. Wilks, D. Pendergast, & P. Leggat (eds.) *Tourism in turbulent times towards safe experiences for visitors*. Oxford, Elsevier, 80–92.
- Tarlow, P.E. (2011). Crime and Tourism. In J. Wilks, D. Pendergast, & P. Leggat (eds.) *Tourism in turbulent time (Towards Safe Experience for Visitors)*, London, Elsevier, 93-101.
- Tőkés, T., & Lenkey, G. (2019). A turizmus fejlődése korunk geopolitikai és geoökonómiai történéseinek függvényében. [The evolution of tourism in the context of geopolitical and geo-economic events of our time] In: Kátay, Á., Michalkó, G. & Rátz, T. (eds) *Turizmus 3.0* Turizmus Akadémia 10. Kodolányi János Egyetem, MTA CSFK Földrajztudományi Intézet, Magyar Földrajzi Társaság. Orosháza–Budapest, 15-26.
- Wilder-Smith, A. (2006). The severe acute respiratory syndrome: Impact on travel and tourism. *Travel Medicine and Infectious Disease*, 4(2), 53-60. doi.org/10.1016/j.tmaid.2005.04.004
- Williams, K.H. (2010). An Analysis of crime statistics to tourist areas and non-tourist areas in New Orleans. *Caesars Hospitality Research Summit*. 10, 1-9.
- Zsarnoczky, M., David, L., Mukayev, Z., & Baiburiev, R. (2016). Silver Tourism in The European Union. Geojournal Of Tourism And Geosites 18(2), 18109-215, 224-232.
- Yeung, R.M.W., & Yee, W.M.S. (2020). Travel destination choice: does perception of food safety risk matter? *British Food Journal*, 122(6), 1919-1934. https://doi.org/10.1108/BFJ-09-2018-0631
- \*\*\* World Tourism Organization UNWTO (2020a). World Tourism Barometer N°18 January 2020. Download: https://www.unwto.org/world-tourism-barometer-n18-january-2020, viewed 4. April 2021.
- \*\*\* World Tourism Organization UNWTO (2020b). International Tourist Numbers Could Fall 60-80% in 2020, UNWTO Reports. Download: https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020, viewed 4. April 2021.
- \*\*\* World Tourism Organization UNWTO (n.d) Global Code of Ethics for Tourism: resolution / adopted by the General Assembly. Download: https://www.unwto.org/global-code-of-ethics-for-tourism viewed 10 December 2018