

Travel and Sustainability; Will Covid -19 change the trajectory - the case of Croatia

Kolić, Ana

Undergraduate thesis / Završni rad

2021

Degree Grantor / Ustanova koja je dodijelila akademski / stručni stupanj: **RIT Croatia / RIT Croatia**

Permanent link / Trajna poveznica: <https://urn.nsk.hr/urn:nbn:hr:229:446139>

Rights / Prava: [In copyright](#) / [Zaštićeno autorskim pravom.](#)

Download date / Datum preuzimanja: **2024-03-28**



Repository / Repozitorij:

[RIT Croatia Digital repository - Rochester Institute of Technology](#)



Travel and Sustainability;
Will Covid -19 change the trajectory – the case of Croatia

Ana Kolić

RIT Croatia

HSPT 490: Senior Capstone Project

Prof. Rebecca Charry

Dr.sc. Besim Agušaj

May 2021

Abstract

Sustainability in tourism has been brought to attention significantly than ever before. It is essential to realize that both travelers and hosts need to benefit and have a positive image about it. Due to the fact that Covid-19 disrupted many industries including the travel industry, the aim was to find out whether people have a positive attitude towards travel being more sustainable in the future. This paper examined how age, gender and education affect the attitudes and behaviors towards sustainable travel after Covid-19 pandemic. An online survey was distributed to 1320 participants from Croatia. Results suggested that those who were frequent travelers before are more inclined to an increased consideration of sustainable based travel. In addition, female population is also more considerate of sustainable based travel after Covid-19. Consequently, younger and older population as well as those lower or higher educated population will consider sustainability in the same manner without any significant statistical difference. Furthermore, there will be no change in their travel in terms of means of transportation. They will use cars, planes, ships in the same manner as before but slightly leaning towards the positive side. The biggest leaning towards the positive side was when asking them will they travel abroad in the future. Which indicated that Croatian participants are looking forward to travel after the pandemic is under control.

Keywords: *Travel Trends, Travel Preferences, Sustainability, Covid-19*

Travel and Sustainability

Hospitality is one of the most vibrant and dynamic industries, at least this was the case so far. However, the Covid-19 crisis has moved the industry on the brink of its existence with many businesses being seriously impacted since travel is not possible. Governments and hospitality industry professionals are trying to mitigate and reduce the damages caused by this unprecedented event. Equally important, we should be able to understand whether travel in future will be “*business as usual*” or the industry will have to change and adjust to new reality. Therefore, we need to address questions like: Will travel in future be the same as before Covid-19? Do we want it to be the same as it has been before? Is this an opportunity to rethink and restructure travel industry in a way that would be more sustainable?

According to Qian et al. (2018) sustainability in travel is fundamentally about protecting and improving the prospects for future development and having a positive impact on environment and societies that are accommodating travelers. In this context, the purpose of this paper is to find out whether travelers’ behaviors will change after the pandemic and what are the new, potential travel trends and preferences that may emerge. More specifically, we will explore how different demographics for instance age, gender, education etc. affect the attitudes and behaviors towards travel and sustainability.

Our research project will be based on YouGov - Cambridge Globalism Project, an annual study that explores, among other phenomena, the state of public globalization. The Cambridge Globalism Project contains national samples of 23 countries, but Croatia is not one of the countries included in the project. This is why we deem valuable for this senior project to utilize a multidimensional survey and correlate attitudes and behaviors within travel and sustainability framework and with post Covid-19 Croatia in mind. However, YouGov survey will be adjusted to better meet the needs of our study.

The following hypothesis will be tested:

1. Frequency of travel is positively related to an increased consideration of sustainable based travel after Covid-19 pandemic
2. Higher levels of education are more inclined to an increased consideration of sustainable based travel after Covid-19 pandemic than lower levels of education
3. Younger population is more inclined to an increased consideration of sustainable based travel after Covid-19 pandemic than older population
4. Female population is more inclined to an increased consideration of sustainable based travel after Covid-19 pandemic than male population

Sustainable tourism

According to Qian et al. (2020) During the past thirty years much more information has become available on the notion of sustainability and its effects on travel industry. Tourism is a fast growing industry because of many aspects that it is consisted of, whether they are directly or indirectly connected to it. Author added that the topic of sustainability was introduced almost forty years ago when the concept was firstly mentioned by the International Union for Conservation. Not long after that, the concept was mentioned in the sense of sustainable tourism. Similarly, it was stated that sustainable tourism as such should be appropriate to both sides (tourists and hosts) as well as being able not to endanger the present or future aspects of the industry. In addition, according to the author the mass tourism disrupted many popular destinations and its attractiveness, the concept of sustainable tourism was brought to attention more significantly than ever before. Sustainability is viewed as a positive thing because of many benefits that are left on the travelers and hosts but, indicated by Nickerson et al. sustainability is sometimes not viewed as a positive thing in the industry because introducing sustainability into a destination brings many additional cost associated with it and in the end minimizes the overall revenue (as cited in Petriconi, 2016). Jones & Comfort (2020) The experience of living in Covid-19 crisis has emphasized the importance of sustainability in tourism sector. There are many conflicts between the environmental aspects and socio-economic costs that arise and due to that many destinations are more hesitant to accept the more sustainable way to develop tourism after the pandemic. According to Liu & Jones Sustainability's goal in the first place is not to expand rapidly, it's to be noticed and valued through a significant period of time. Also, to be introduced into the area that needs to be

developed in such a way that both industries as well as smaller firms realize its importance (as cited in Zhenhua 2003). Another problem is in the word sustainable. Berno (2001) It can be and in many cases is misunderstood, many people connect it with the idea of “green” but it doesn’t have to be. Many national parks and natural areas are not being sustainable. This distinction between mass and sustainable tourism and the values that are seen in each are dividing the society because it is been considered that the notion of sustainability is too vague and broad. “Such vagueness is not necessarily a problem, although it does give rise to a number of fundamental questions, including: what should be developed sustainably (personal wealth, national wealth, human society, ecological diversity)? Against what baseline can sustainable development be measured? Who is responsible for sustainable development? And, under what political-economic conditions is sustainable development viable? Frew et al. (2014) “True sustainability will only occur when it is valued as a part of the taken-for-granted daily life of individuals and cultures across the globe.” Galvani et al. (2020) which is stated in addition to their point of including the consciousness of people towards sustainability in tourism and the lack of understanding of the term itself.

The impact of covid-19 on sustainable tourism

Romagosa (2020) published a paper in which he described the opportunities for sustainable tourism after Covid-19 pandemic. Romagosa (2020) paraphrased the words of Roman naturalist “the only certainty right now is uncertainty”. He pointed out that many changes are likely to happen and we feel like nothing in the travel sector can be predicted after this crisis anymore. He argues that many aspects starting from consumer behavior and travel trends will change due to the pandemic. According to an investigation done by author the UN World Tourism Organization has discovered that there is a significant decrease in the percentage of international arrivals. On the other hand author stated one very interesting fact at that is the notion of *tourismophobia* translated to a state of fear that potential future tourists are seen solely as transmitters of the virus. However, it was lately shown by the author that places who were overcrowded before are now under crowded, which can be seen as a potential to shift tourism in a way that could be more regulated towards sustainable tourism. Author stated that

the travel flow can be regulated towards more sustainable tourism even though it has been said that no regulations can be put to preserve the destination. He also pointed out that after the pandemic is over people will more likely to choose destinations that are closer to the county they are from. Because of the impacts that Corona virus has left on peoples safety concerns, they believe that it would be a lot safer and more financially suitable for them to travel somewhere not so far away from their home. Romagosa (2020) added that the tourism product should now (because of the pandemic) become more resilient, that a destination cannot be dependent on tourism only. He also contributes with the idea that those popular destinations should still be active but try to lower down the numbers of visitors and try to make a balance with poorer destinations who could welcome more people than they did before.” Sustainability tells us to look for balances (i.e. between the environment, society and the economy).”

Galvani et al. (2020) have indicated that many businesses of today will be moved by this unprecedented event and it will be the trigger of making them think in a different way than before, which will be hopefully turned more towards the sustainability. In addition, not only businesses will create such behaviors and attitudes towards being conscious about sustainability but also those who are keen to traveling. Those who travel more are more aware of different destinations and problems within each of them. Those who travel more are more sensitive and are better observant. Galvani et al. (2020) also described how sustainable development cannot come to life unless people are paying attention to it as well as learning more and incorporating it into their lives. Ioannidesa & Gyimothy (2020) have proposed that even those working in educational sector should include the sustainability in their curriculum to ensure that the future leaders will know how to deal with it.

Post pandemic travel trends and preferences

The results of a published paper by Canina & McQuiddy-Davis (2020) have shown that in the first months after the pandemic there is a higher percentage of those who will travel for leisure than those who are business travelers. Also, interestingly not more than 5% of people have said that they will not travel anywhere. In addition, it turned out that leisure travelers are more oriented towards booking apartments rather than hotels, which is not a case when asking

the business travelers the same question. They didn't change their travel preferences and will continue to book popular hotel brands. Traveling by airplane slightly decreased in both leisure and business segment. What is also decreasing is people's willingness to be accommodated in bigger cities which raised their positive image about booking an accommodation in suburban areas and remote destinations which could be positively linked to making some areas more sustainable than they have been in the past.

Shannon (2020) published a paper in which she described the possible travel trends in the post Covid-19 travel times. Her paper has revealed that in 2021, most of the travel plans will have a purpose behind it. With getting to know other cultures and customs more, the purpose will be to help the certain community to be better off in many aspects that are being negative as for now. Author traces the development of women traveling more, and often times by themselves in order to focus on their own wellbeing and getting away from the hectic life that they run. Author raised several concerns about people over 50 years of age, they suggested that it is important for them to travel in post Covid-19 times because they want to experience and see things that they have not yet seen and now is the perfect opportunity for them. Similarly, younger individuals reported that they are willing to travel because of the missed opportunities they had in 2020. And now will be their time to "revenge". There is an increase in demand for private adventures including the eagerness of the traveler to find out more about different cultures and their customs and habits. Being quarantined they developed a strong sense of self and now are willing to slow things down and see the destinations in some other point of view that they haven't got the chance yet. Mackenzie & Goodnow (2020) have emphasized the significance of the outdoor activities that were not possible during the pandemic and will most surely take place after the pandemic is over. Travelers will be much more adventurous and are in seek for short travels that are located nearby but are highly experiential with lots of meaning. Those kinds of travel are ought to be a distance between humans and inevitable technology of nowadays, which enables the traveler to do bodily activities such as just biking, hiking etc. but also Ianioglo & Rissanen (2020) there is an increase in Wellness and health oriented travel. In addition and from another point of view Ianioglo & Rissanen (2020) there will be an increase in global digitalization which describes the trends not only in traveler's aspect, but also tourist offer. Many industries including the hospitality and tourism have seen the importance of digitalization in times of covid-19 crisis and are willing to continue using it. Fortunately, many people have imposed value on the revival of nature and sustainability that happened during the pandemic. Now, almost half of

the people surveyed are willing to look for tourist offers that are oriented towards sustainable destinations where both locals and traveler benefit.

Post pandemic travel behaviors

Study done by the Li et al. (2020) found that travel behaviors will gravitate towards the feeling of safety. In addition to that, their study showed that more and more people will be using their private cars for travelling and will have negative attitude towards traveling with the public transportation. The results revealed that more people will wait more than few months after the pandemic is under control to travel somewhere. Their travels will be manifested in shorter period of time than they used to be before the pandemic. Interestingly, it was lately shown by author that the older the individuals are and the higher education they have they are more likely to travel as soon as they can, and will not shorten them. Those results can also be linked with the purchasing power of certain individuals. According to Wachyun & Kusumaningrum (2020) people will choose nature oriented destinations and they will firstly choose the destinations that had the smallest number of Covid-19 cases, as well as traveling to visit closest destinations (Terziyska & Dogramadjieva, 2020). Additionally, being a frequent traveler or not, has an influence over your travel intentions and behaviors in the post Covid-10 world.

Sekhar Das & Tiwari (2020) pointed out that those who were keen to travel before Covid-19 will most likely to have a positive image about it. They will be eager to return to traveling because of many aspects that contribute to the feeling they have while being away from home. Similarly, those who were travelers pre, during and post other pandemics before Covid-19 are more likely to be associated with the first ones to travel after this pandemic is over. Peoples view on different aspects in regarding travel is closely linked to their inner trigger to travel. Not being safe and secure is largely connected to their travel canceling and postponing the initial travel decision, as well as seeking out to find information in order to possibly return their travel plans to the initial state.

Method

A survey is a research tool with which we ask for people's attitudes, behaviors or opinions towards a certain subject. We can examine the entire nation or just a segment of it (Navarro-Rivera & Kosmin 2011). Surveys are most convenient when collecting a large number of data

in a shorter period of time (Rowley 2014). It can be described as a tool to gather information from the individuals, whether it is done in person, through phone calls or emails. "Surveys gather information from only a portion of a population of interest—the size of the sample depending on the purpose of the study" (Scheuren 2004). This is why survey will be used in this case, not only because of the result turnaround, but also because in this paper a large sample will be needed in order to generate results that will be applicable to the nation researched. The aim was to create and achieve a snowball effect which is commonly used when the sample suitable for the paper is hard to reach (Etikan et al. 2015.) or in this case also large in numbers. The significance of snowball effect lies in the assumption that the person who receives the survey will share it with the next person that may or may not be similar to them. Researcher's goal is to be included in the connection among various groups in which he had the initial connection with only one individual from the group (Dusek et al 2015). Evans & Mathur (2005) argue that potential weaknesses of online survey methods are the surveys being placed in the "junk mail".

Also, survey being done by a person who is not intended to be a part of a sample; which is resulting in the results not being accurate enough. Furthermore, the number of the wanted sample is depending on how many individuals will be able to open the online survey due to the technical issues and inability to convert the survey in the wanted format in order to fill it out. Another possible concern is low response rate as well as unclear answering instructions which many time leads to not finishing the survey entirely. Strengths, in the other hand are that it can have (if needed) a global reach in case the topic of a research is a world concern.. Moreover, it can be easily shared and solved due to its convenience and timeliness. It is chosen by many researchers not only because of its flexibility of solving the survey whenever it is suitable for the participant but also the ease of data entry and analysis. In addition, (Gillham 2007) online surveys are not costly. The participant is not under pressure to do it on the spot or in case of interviews have an answer right away. Strength of an online survey is that participants are not being influenced by the person who is handing the survey. Many times it has been seen that participants answers are being influenced by the examiners age, gender, education etc.

Participants of an online survey appreciate the anonymity and feel more free and relaxed while taking the survey. The sample will be based on age, gender and level of education. The variables are set so in order to create a very diverse sample which will create results that are going to be applicable to the general population of Republic of Croatia. This survey is based

on YouGov survey that was done among 23 countries and Croatia was not included in the project. Survey for this senior project was distributed among 1320 participants by using e-mail or social media channels. First four questions of eight in total were questioning participant's travel intent and the remaining four were sustainability oriented. In seven out of eight questions the five point Likert scale was used and the remaining one was a statement "Thinking about the environment... In general, which of the following statements, if any, describes your view? Humans are..." and the answers range from "*Mainly responsible for the climate change*" to "*Climate is not changing*". In the last section of the survey demographic questions were asked in order to gain information about participants age, gender, education and employment and its impacts on travel and sustainability.

Sample

Survey was conducted in an online form and distributed to the participants who are residents of Republic of Croatia via email and social media. From a sample of 1320 completed surveys the majority of participants were female (79.2%). In addition, most of the participants fell into the second category which is from 26-39 years of age (31.9%) closely followed by the 18-25 age group (30.4%) and 40-55 (28.3%). Next, most of the participants were college graduates (57.4%) and 25.7% of participants were employed in hospitality and tourism. (Table 1)

Table 1 Participants' demographic data

	N	%
Gender		
Male	274	20.8%
Female	1046	79.2%
Age		
18-25	402	30.4%
26-39	422	31.9%
40-55	373	28.4%
Older than 55	123	9.3%
Education		
Elementary school	1	0.2%
High school	336	25.4%
Graduate	758	57.4%
Masters and PhD	225	17%
Employment		
Hospitality and tourism	339	25.7%
Education	175	13.2%
Health care	147	11.1%
Finance and Insurance	111	8.4%
Scientific or Technical services	99	7.5%
Government and Public Administration	78	5.9%
Arts, Entertainment and Recreation	41	3.1%
Telecommunications	20	1.5%
Other	310	23.6%

Source: Author

Results

The results are based on 1320 survey responses. After analyzing all data available we tested our four hypothesis and the results are as follows;

H1: Frequency of travel is positively related to an increased consideration of sustainable based travel after Covid-19 pandemic.

The fourth question in our survey was asking participants to state whether they will travel more or less after the Covid-19 pandemic is over, essentially asking them to state the anticipated frequency of their travel intentions. On a Likert scale from 1 to 5 (1 being *will travel much less*, and 5 being *will travel much more*) the mean value for this question is 3.32 and the mean value for the question number eight “*After the Covid-19 pandemic is over, will you consider sustainability before your travel decision?*” is 3.25.

These two variables (intent to travel abroad for holidays and considering sustainability in future travel) were combined by using correlation analysis to yield results for the first hypothesis.

Testing the assumption of positive correlation between the two variables (H1) indicated a high statistical significance since $p \text{ value} < 0,01$. $P \text{ value}=0.004752599$. Therefore, H1 is confirmed.

H2: Higher levels of education are more inclined to an increased consideration of sustainable based travel after Covid-19 pandemic than lower levels of education.

Descriptive statistics (Means and Standard Deviation) for survey respondents with lower (elementary and high school) as well as higher education (undergraduate and graduate degrees) are presented in the Table 2.

Table 2. Descriptive Statistics (Mean, SD) educational level

	Lower education	Higher education
Mean	3.19	3.27
Standard deviation	0.965	0.964

Source: Author

In order to examine whether the arithmetic averages difference between two data sets (higher vs. lower education) were statistically significant we tested our second hypothesis using the Z-test method since Z-test is recommended when samples are large.

The null hypothesis = there is no significant difference between two means and their increased consideration of sustainable based travel after Covid-19.

After running the Z-test the P value = 0.172446645. We therefore concluded that there is no significant difference between these two means, and the null hypothesis in this case is confirmed (Table 3). Consequently, our hypothesis H2 is not confirmed.

Table 3
Z-Test: H2

	Variable 1	Variable 2
Mean	3.19047619	3.273652085
Known Variance	0.93113	0.929104
Observations	336	983
Hypothesized Mean Difference	0	
z	-1.364384305	
P(Z<=z) one-tail	0.086223322	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.172446645	
z Critical two-tail	1.959963985	

Source: Author

H3: Younger population is more inclined to an increased consideration of sustainable based travel after Covid-19 pandemic than older population.

Descriptive statistics (Means and Standard Deviation) for younger survey respondents as well as older survey participants are presented in the Table 4.

Table 4. Descriptive Statistics (Mean, SD) Age groups

	Younger	Older
Mean	3.25	3.24
Standard deviation	0.920	1.031

Source: Author

In order to examine whether the arithmetic averages difference between two data sets (younger vs. older participants) were statistically significant we tested our third hypothesis using the Z-test method since Z-test is recommended when samples are large.

The null hypothesis = there is no significant difference between two means and their increased consideration of sustainable based travel after Covid-19.

After running the Z-test the P value = 0.885514917. We therefore concluded that there is no significant difference between these two means, and the null hypothesis in this case is confirmed (Table 5). Consequently, our hypothesis H3 is not confirmed.

Table 5

Z-Test: H3

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	3.256097561	3.248
Known Variance	0.847643	1.064625
Observations	820	500
Hypothesized Mean Difference	0	
z	0.143981704	
P(Z<=z) one-tail	0.442757458	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.885514917	
z Critical two-tail	1.959963985	

Source: Author

H4: *Female population is more inclined to an increased consideration of sustainable based travel after Covid-19 pandemic than male population.*

Descriptive statistics (Means and Standard Deviation) for female survey respondents as well as male survey are presented in the Table 6.

Table 6. Descriptive Statistics (Mean, SD) Gender

	Female	Male
Mean	3.29	3.08
Standard deviation	0.942	1.026

Source: Author

In order to examine whether the arithmetic averages difference between two data sets (female vs. male participants) were statistically significant we tested our fourth hypothesis using the Z-test method since Z-test is recommended when samples are large.

The null hypothesis = there is no significant difference between two means and their increased consideration of sustainable based travel after Covid-19.

After running the Z-test the P value = 0.001939979. We therefore concluded that there is a significant difference between these two means, and the null hypothesis in this case is not confirmed (Table 7). Consequently, our hypothesis H3 is confirmed.

Table 7

Z-Test: H4

	Variable 1	Variable 2
Mean	3.297504798	3.086330935
Known Variance	0.887391	1.053892
Observations	1042	278
Hypothesized Mean Difference	0	
z	3.099270429	
P(Z<=z) one-tail	0.000969989	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.001939979	
z Critical two-tail	1.959963985	

Source: Author

Discussion

The primary focus of this research was to find out did the Covid-19 left an impact on people's attitudes and behaviors towards travel and its association with sustainability. In addition, with this research the author was trying to find out how those aspects vary considering different participants demographics such as age, gender and level of education. Furthermore, to determine if those contribute to any possible future travel trends and preferences that may arise after the Covid-19 pandemic. Likewise, will those travel trends and preferences be connected with the notion of sustainability, and was this world crisis an initiator of a tourism that will be more sustainable than it was before. To understand how different demographics affect the attitudes and behaviors in travel and their consideration of sustainability, four hypotheses were tested in this research.

The first hypothesis tested showed a positive correlation between frequency of travel and consideration of sustainable based travel after Covid-19 pandemic. This hypothesis was chosen because of the nature of travelers and the results are realistic and anticipated from the beginning. This was also mentioned in a research done by Terziyska & Dogramadjieva (2020) and Sekhar Das & Tiwari (2020) who indicated that if you were or were not a traveler before; will influence your travel intentions post Covid-19 pandemic. Also, those who were likely to travel before will have a more positive image about travelling abroad after the pandemic. One additional study done by Ianioglo & Rissanen (2020) is in line with our results with saying that more than half of their survey respondents said that they will be looking for more sustainable destinations where both tourists and locals benefit from the experience.

The second hypothesis tested showed that there isn't a significant difference between more and less educated participants and their consideration of sustainability in travel. This hypothesis was set according to authors anticipation that in Croatia people with higher education will return back to travel more quickly and will consider sustainability due to their heighten awareness. In our research this was not the case. Our research finding is therefore differing to the one done by Li et al. (2020) who indicated that more educated people would return to travelling faster than those less educated and will not shorten they stay due to the higher purchasing power. Therefore, we can conclude that even those who are more educated will in this case not prolong their stay. It could be due to the difference in purchasing powers of examined individuals and their safety concerns.

Similarly, the third hypothesis tested showed that there isn't a significant difference between younger and older survey participants and their consideration of sustainability in travel. This hypothesis was set on the assumption that younger individuals will return back to travel more quickly because many of their lives have changed during pandemic lockdowns. Consequently, their will to travel will rise and they will choose their destinations wisely. This also interferes with the Li et al. (2020) study who mentioned that older generations will return to travel more quickly than younger ones. In addition, Shannon (2020) similar with the third hypothesis with stating that both younger and older generations have their own unique set of reasons for returning back to travel.

The last hypothesis tested showed that there is a positive relation with females being inclined to an increased consideration of sustainability in travel. The hypothesis was set due to the assumption that females take more things into consideration before deciding to travel. Thus, females will consider sustainability among other factors more than male population will (which is ultimately proven to be correct by this research). Which also contributes to the paper done by Shannon (2020) where she traces signs of female respondents being more in favor of travelling alone to experience things in a more calmly way with a focus on their well-being.

Having in mind that this research was done based on YouGov- Cambridge Globalism Project where Croatia was not among 23 countries surveyed the intention was to survey Croatian citizens and examine their answers. Therefore it is interesting to compare Croatia to other countries surveyed. 1320 participants were surveyed and based on the first statement *Travelling by car after the Covid-19 pandemic is over*. Croatia had more than half of the respondents saying that there will be *no change* ($\approx 60\%$), with the slight leaning towards positive statements *will do a little more* ($\approx 19\%$). Comparing to other countries that were initially surveyed it had similar or exact percentage like Sweden, Denmark, Poland, Great Britain and Japan

The second statement *Travelling by airplane after the Covid-19 pandemic is over*. Croatia had the highest score on *No change* which is also the highest percentage among all countries but is similar to results from Hungary, Spain, Greece, Australia, Brazil, and Turkey who are all leaning towards positive attitudes towards travelling by airplane after the pandemic. Unlike Italy and Canada who are more in favor of negative responses to the same question.

The statement *Travelling abroad for holidays after the Covid-19 pandemic is over*. Is again mostly connected to the *No change* answer but more than before leaning to an increased percentage in *will do a little more/will do much more*. Which is similar to country of Denmark and Nigeria.

Lastly, the question *Thinking about the environment... In general, which of the following statements, if any, describes your view? Humans are...* Answers ranging from *mainly responsible for the climate change* to *climate is not changing*. Croatia is among majority of countries who think that humans are mainly responsible for the climate change. Those countries are Spain, Italy, Greece, Poland, Brazil, Mexico, Turkey, India, Thailand and South Africa. In addition, the remaining countries believe that humans are responsible along with other factors which is also a positive answer when considering implementing sustainable tourism in the near future.

Limitations

Limitations of this research are mostly connected to the survey sample and participants. Preferably, there should be an equal percentage of male and female survey participants or close to an equal number. In this case there are almost 80% of female participants along with approximately 20% of male participants. Having in mind that the overall sample of this research is 1320 it is to be concluded that the sample is large by itself. The number of male participants in this case is close to 300 and it is a number significant on its own to be supposed that the overall distribution among participants is valid.

References

Ali, Alisha & Frew, Andrew. (2014). Technology innovation and applications in sustainable destination development. *Information Technology & Tourism*. 14. 10.1007/s40558-014-0015-7.

Alina Ianioglo & Marko Rissanen (2020) Global trends and tourism development in peripheral areas, *Scandinavian Journal of Hospitality and Tourism*, 20:5, 520-539

Berno, Tracy & Bricker, Kelly. (2001). Sustainable tourism development: The long road from theory to practice. *International Journal of Economic Development*. 3.

Canina, Linda; McQuiddy-Davis, Nicole (2020) Pre- and Post- COVID Travel Preferences

Dimitri Ioannides & Szilvia Gyimóthy (2020) The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path, *Tourism Geographies*, 22:3, 624-632,

Dusek, G. A., Yurova, Y. V., & Ruppel, C. P. (2015). Using social media and targeted snowball sampling to survey a hard-to-reach population: A case study. *International Journal of Doctoral Studies*, 10, 279-299.

Etikan, I., Alkassim, R., & Abubakar, S. (2016). Comparision of snowball sampling and sequential sampling technique. *Biometrics and Biostatistics International Journal*, 3(1), 55.

Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet research*.

Francesc Romagosa (2020) The COVID-19 crisis: Opportunities for sustainable and proximity tourism, *Tourism Geographies*, 22:3, 690-694,

Galvani, Adriana & Lew, Alan & Perez, Maria. (2020). COVID-19 is expanding global consciousness and the sustainability of travel and tourism. *Tourism Geographies*. 22. 1-10. 10.1080/14616688.2020.1760924.

Gillham, Bill. (2008). Developing a Questionnaire; Real World Research.

Jones, P. and Comfort D. (2020), “The COVID-19 crisis and sustainability in the hospitality industry” *International Journal of Contemporary Hospitality Management*, Vol. 32 No.10, pp. 3037-3050.

Li, J., Nguyen, T., & Coca-Stefaniak, J. A. (2020). Coronavirus impacts on post-pandemic planned travel behaviours. *Annals of tourism research*, 102964. Advance online publication.

Navarro-Rivera, Juhem and Barry A. Kosmin,”Surveys and Questionnaires “in *The Routledge Handbook of Research Methods in the Study of Religion* ed. Michael Stausberg and Steven Engler (Abingdon: Routledge, 16 Nov 2011), accessed 16 Apr 2021 , Routledge Handbooks Online.

"Overseas Adventure Travel Reveals Top 6 Trends for the Future of Travel." *PR Newswire*, Jan 04 2021, *ProQuest*. Web. 16 Apr. 2021 .

Petriconi, Luca Marcello (2016) Sustainability and travel experience

Qian, Jianwei & Shen, Huawen & Law, Rob. (2018). Research in Sustainable Tourism: A Longitudinal Study of Articles between 2008 and 2017. *Sustainability*. 10. 590. 10.3390/su10030590.

Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 37, 308-330.

Scheuren, F., & American Statistical Association. (2004). *What is a survey?*. Washington: American Statistical Association.

Sitanshu Sekhar Das & Aviral Kumar Tiwari (2020) Understanding international and domestic travel intention of Indian travellers during COVID-19 using a Bayesian approach, *Tourism Recreation Research*,

Susan Houge Mackenzie & Jasmine Goodnow (2021) Adventure in the Age of COVID-19: Embracing Microadventures and Locavism in a Post-Pandemic World, *Leisure Sciences*, 43:1-2, 62-69,

Terziyska, Ilinka & Dogramadjieva, Elka. (2021). Should I stay or should I go? Global COVID-19 pandemic influence on travel intentions of Bulgarian residents. *SHS Web of Conferences*. 92. 10.1051/shsconf/20219201048.

Wachyuni, S. S., & Kusumaningrum, D. A. (2020). The Effect of COVID-19 Pandemic: How are the Future Tourist Behavior?. *Journal of Education, Society and Behavioural Science*, 33(4), 67-76.

Zhenhua Liu (2003) Sustainable Tourism Development: A Critique, *Journal of Sustainable Tourism*, 11:6, 459-475,

Appendix

TRAVEL AND SUSTAINABILITY

Still thinking about a possible time in the future, when the Covid-19 pandemic is over... Generally speaking, do you think **you will do more or less** of each of the following statements compared with how you traveled before Covid-19 pandemic, or there will be no real change either way? (Please select one option in each row)

1. Travelling **by car** after the Covid-19 pandemic is over.

I Will do much less	I Will do a little less	No change	I Will do a little more	I Will do much more

2. Travelling **by airplane** after the Covid-19 pandemic is over.

Will do much less	Will do a little less	No change	Will do a little more	Will do much more

3. Going on a **cruise ship** after the Covid-19 pandemic is over.

Will do much less	Will do a little less	No change	Will do a little more	Will do much more

4. Travelling abroad for holidays after the Covid-19 pandemic is over.

Will do much less	Will do a little less	No change	Will do a little more	Will do much more

5. Thinking about the environment... In general, which of the following statements, if any, describes your view? Humans are...

mainly responsible for the climate change	partly responsible along with other factors	Not responsible for the climate change	The climate is not changing

6. Tourism up until now was not environmentally sustainable.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

7. Is this an opportunity to rethink and restructure travel industry in a way that would be more sustainable?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

8. After the Covid-19 pandemic is over. Will you consider sustainability before your travel decision?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

State your gender.

1. Male
2. Female

What is your age?

1. 18-25
2. 26-39
3. 40-55
4. >55

What is your level of education?

1. Less than a high school certificate
2. High school certificate
3. Higher diploma
4. Bachelor's degree
5. Master's degree
6. Doctorate (PhD)

I'm employed in...

1. Hospitality
2. _____ (other)