

NEW TRAVEL HABITS OF UNIVERSITY STUDENTS IN RELATION TO COVID-19

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1. Introduction

Over the last decade, many tourist destinations have experienced crises, involving terrorist attacks, natural disasters or health crises, e.g. SARS (Chebli and Said, 2020). Nevertheless, the tourism industry has been able to recover, as it has an incomparable capacity for resilience (Tejan and Safaa, 2018). However, the world is now facing an unprecedented crisis. By definition, a crisis is "a low-probability, high-frequency event that develops very rapidly and involves ambiguous situations with unknown causes and effects" (Roberts *et al.*, 2007). Faced with the unexpected, the tourism sector remains vulnerable and faces several challenges to recover, including understanding consumer behavior in response to catastrophic events (Mair *et al.*, 2016).

Since its emergence in late 2019, Covid-19 has rapidly spread beyond nations' borders and caused significant impacts to the livelihoods of people around the world. The spread of this pandemic disease and their intensified impacts have also caused the lock-down of several cities by the authorities and the cancellation of flights and other transport services (Jittrapirom and Tanaksaranond, 2020).

Driven by a relatively strong global economy, a growing middle class in emerging economies, technological advances, new business models, affordable travel costs and visa facilitation, international tourist arrivals grew 4% in 2019 to reach the 1.46 billion. This figure was reached two years ahead of UNWTO forecast. This made the sector a true global force for economic growth and development (Celardo and Iezzi, 2017), driving the creation of more and better jobs and serving as catalyst for innovation and entrepreneurship. In short, tourism helped build better lives for millions of individuals and transforming whole communities (UNWTO, 2020).

2020 turned out to be the worst year for tourism - globally - in terms of international arrivals (-74% compared to the previous year), returning to the levels of 30 years ago. This collapse corresponds to a loss of approximately 1.3 trillion USD - 11 times greater than the decrease recorded during the world crisis of 2009 (UNWTO, 2021).

The customer flow in 2019 in Italy was approximately 436.7 million admissions, up by 1.8 percent compared to 2018, with an average stay of 3.32 nights. In the same year the turnover index in the sector of housing marked an increase of 0.8 per cent (ISTAT, 2019).

In the Italian context, the National Institute of Statistics (ISTAT, 2021) has estimated that the travel of residents in 2020 has reached an all-time low: there are 178 million nights lost compared to 2019 (-43.5%), with a drastic decline in holidays (-44.8%) and business trips (-67.9%).

Most experts think that international tourism levels will not return to pre-Covid levels before 2023. In fact, 43% of respondents point to 2023, while 41% expect a return to 2019 levels will only happen in 2024 or later. Extended scenarios for 2021-2024 indicate that it could take two-and-a-half to four years for international tourism to return to 2019 levels (UNWTO, 2021).

An increase in domestic tourism, close to home, more sustainable and local, is assumed. The brief summer recovery of tourism observed in 2020, due to a temporary relaxation of restrictions, was greater in the younger categories. After months of closed national borders and grounded flights, some countries slowly started to re-open for tourism (Boffey, 2020).

Looking at different studies that have been proposed in the last year, there is optimism that tourism will recover fast. According to them, most people have planned when and where they will travel, that is immediately (0-6 months) after the Covid-19 pandemic ends. Nature tourism will be the most popular attraction with important aspects of safety, cleanliness, and beauty to fulfill tourist demand and the next trend is short-time period tourism (Wachyuni and Kusumaningrum, 2020).

It is generally thought that Covid-19 will influence travel habits, and people will avoid travelling in groups and being surrounded by a group of people. This pandemic has drawn the attention of the public to the issue of hygiene and health, which will become important factors in travel decisions. Faced with a worried clientele, tourism businesses (transport, accommodation, catering, tourist attraction facilities) should further improve their hygiene conditions, to regain confidence (Chebli and Said, 2020). Medical scholars have already developed several scales to monitor "coronaphobia", however, we need tailored scales to measure travel anxiety. Existing tourism-scales on health risk perception are not specific enough. Therefore, with the help of PATS (Pandemic Anxiety Travel Scale), researchers and practitioners could measure how tourists are psychologically affected by pandemic anxiety (Zenker *et al.*, 2021). The hospitality sector's future in this unprecedented time depends on the perception of the shock of the disaster, consumers' beliefs, anticipated emotions and future desires. Consumers' behaviour has been reformed to adapt to the new lifestyle very quickly. The high level of social uncertainty caused by the Covid-19 outbreak leads customers to a higher risk judgement (Foroudi *et al.*, 2021). In addition, these

studies provide the view that basically traveling is currently a human need. Respondents showed a positive response to interest in traveling after a pandemic and showed a negative response to travel anxiety. Therefore, after the end of the pandemics, hygiene-issues must be considered as an important factor in tourists' decision-making process and in the destination choice. The strategy needs to be built to enhance the tourist's trust in the security and health of the destination (Wachyuni and Kusumaningrum, 2020).

Thus, a question arises: once travel resumes, what will be the new trends in travel for the next few years? And how could these categories respond to a change in habits imposed by the current pandemic? As experienced in other cases, after a crisis, new tourist concerns, apprehensions and demands emerge. Therefore, it is considered imperative to predict the trajectory of change in tourist behavior to help tourism managers identify the basis of a strategy to ideally respond to the situation.

This paper presents a descriptive study describing the perception on the current situation, as well as future travel intentions and university students' travel behaviors using statistical analyses. The main objective of this study is to provide a general overview of students' perception on Covid-19 pandemics in relation to tourism behavior, as well as to make predictions about future behaviors in terms of travel choices. Young people are one of the categories that could move back to travelling sooner, in relation to the current pandemic caused by Covid-19. Understanding tourist behavior is a context that guides strategies and actions to provide adequate response measures for the recovery of the tourism industry. The present study therefore also aims to give a practical aid to the hospitality sector, to understand strategies and the best ways to react to the pandemic.

2. Data and methods

According to the purpose of the survey, its target population consist of Italian and foreign university students. Data were collected in a period between April and June 2021. The total of respondents was 232 students, with all data valid to be analyzed in the study. A non-probabilistic sample was chosen, so respondents participated to the survey on the basis of their voluntary engagement. The main limit in collecting the data was that people was not always willing or available to answer to the questionnaire, leading to a non-response bias. Anyway, all questions were mandatory, avoiding bias due to missing data. Concerning the questionnaire administration, it was decided to conduct the survey through a Computer-assisted web interviewing. In fact, considering the selected target, this had many advantages: nowadays more or less all young people have the possibility to connect to the web quickly, it is a cheap method of data-collecting, it was very quick to receive the results and it was possible also to

reach people outside the country. The data collection was implemented by distributing an online questionnaire (implemented on Google Forms platform) through social media, word of mouth and a QR Code. The last-mentioned method was the best considering the difficulties in this period to reach people due to social distancing, therefore the fact to let people scan a code and fill the questionnaire by themselves felt as the less invasive. The authors went to different faculties at the University of Rome “Tor Vergata” and asked random people to scan the code and give their personal contribution. This is why, even without knowing the authors and without direct contacts, using the QR code was the quickest and easiest way to reach most students. The writing of the questionnaire included a test-phase in which all people, except the target, were invited to fill in the questionnaire and give personal opinions about the structure, the understandability of the questions and they were asked to give suggestions.

The questionnaire consists of four sections (Appendix): personal questions, a section concerning the level of information about the current health situation, one about future perceptions and intentions and finally a section concerning a hypothetical future trip, for a total number of 20 questions. The responses were processed and analyzed, in order to identify the main socio-demographic characteristics of the sample and the main perceptions of students about the future travel behaviors in connection with the current sanitary condition. Moreover, we applied Multiple Correspondence Analysis (MCA – Greenacre & Blasius, 2006) to detect and represent underlying structures in the dataset. In particular, we used 10 active variables (see Figure 4). We employed FactoMineR an R package dedicated to multivariate data analysis (Husson *et al.*, 2015).

3. Results

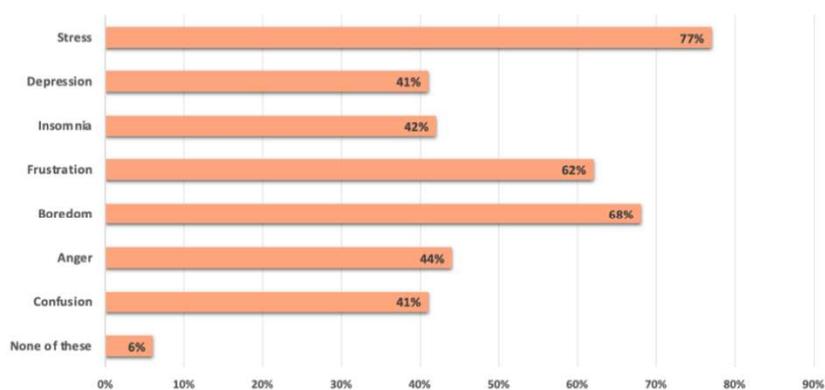
Regarding the first section of the questionnaire, 32% of the respondents were males, while the 68% were females. The majority of people were between 21 and 24 years old (55%), a minor part was between 18 and 20 (16%), between 25 and 29 (19%), 30 or older (10%). Most people that answered to the questionnaire were Italian (80%), but also a share of students of other nationalities was reached (20%).

The section concerning the level of information about the current health situation included a question about the level of information about the Covid-19 issue. Most people said that they feel sufficiently informed to make decisions for their future (54%), or partially informed (30%). A minor part does feel uncertain about so many different sources of information (15%), and just a small percentage does not feel informed at all (1%). If asked about the duration of the current pandemic situation, understood as the duration of the restrictions and the spread of the virus, most people

think that it will last at least one year (41%) or few months (35%), followed by those who think that it will last over one year (22%). A minimal part think that it will last just a few weeks (2%). Students were quite optimistic concerning the scenario for summer 2021, thinking it would be possible to travel, but with significant restrictions (75%). Someone thought that it would be possible to travel without or with very few restrictions (23%) and a small part thought that it would not be possible to travel at all (2%).

The third section, related to future perceptions and intentions, included a question about the manifestation of some emotional states, from March 2020 and for a period of at least two consecutive weeks, due to the health situation and the pandemic. As shown in Figure 1, most people experienced stress (77%), boredom (68%) and frustration (62%). Many people also felt anger (44%), insomnia (42%), depression (41%) and confusion (41%). Only a few people said they didn't feel any of these emotional states (6%).

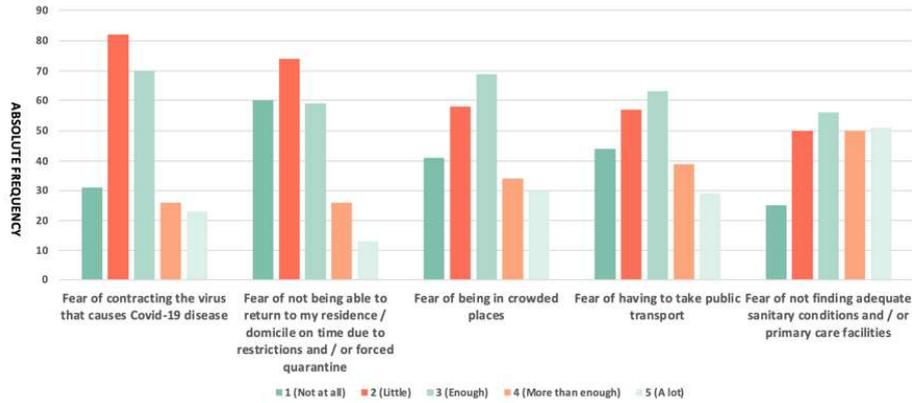
Figure 1 – *Manifestation of some emotional states due to the health situation and the pandemic.*



Source: our elaboration.

Another question investigated how much a list of elements, based on a scale from 1 (not at all) to 5 (a lot), could negatively affect the willingness to return to travel. As shown in Figure 2, the fear of not finding adequate sanitary conditions and/or primary care facilities, the fear of having to take public transport and the fear of being in crowded places are the factors that could most affect negatively the willingness to travel.

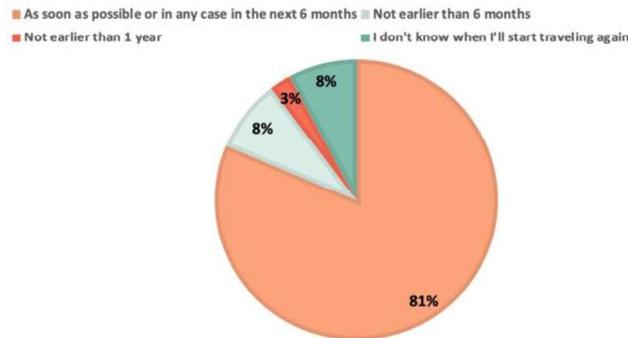
Figure 2 – Scale of factors that could negatively affect the willingness to travel.



Source: our elaboration.

The final section concerned a hypothetical future trip. First of all, people were asked if the idea of travelling in the near future, or in the next 12 months, made them feel anxious. The major part said that they don't feel anxious about travelling (72%), while others responded affirmatively (28%). The next question asked if they thought they would travel in the next 12 months. Here, most people said yes (88%), while just a small part said no (12%). The following questions were answered just by those who said they thought they would travel in the next 12 months and regarded the hypothetical future trip. As shown in Figure 3, the majority of people will travel as soon as possible, or in any case in the next 6 months (81%), while the others will start traveling not earlier than 6 months (8%), 1 year (3%) or just don't know when they'll travel again (8%).

Figure 3 – When people will return to travel.



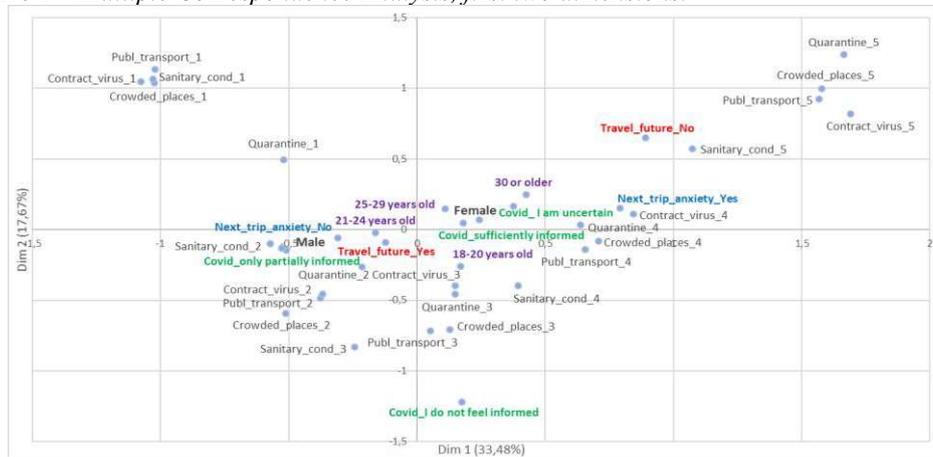
Source: our elaboration.

Concerning the destination of the next trip, most people will travel in the country of residence (54%) or within the European Union (36%). Less people will travel in the region of residence or domicile, enhancing the proximity tourism issue (6%) or outside the European Union (4%). The most chosen destination will be a sea / cruise location (46%), followed by city (25%) and country / lake / river location (23%). Just few people will choose mountain / hill location (4%) or other (2%). Most people will travel with family and/or partner (51%) or with friends (41%). Just a few people will travel alone (5%) or in solutions organizes for groups (3%). The main duration of the trips will be between 4 and 7 days (59%), followed by those who will travel for more than 7 days (31%) and those who will travel from 1 to 3 days (10%). The main means of transport will be plane (40%) and own vehicle (40%). These two are followed by the train (14%), bus (3%) and ship (3%). Regarding the accommodation, most people will choose a house or room for rent (30%), other kind of accommodation facility such as B&B or hostel (28%), or hotel or similar (27%). Less people will choose the home of relatives or friends (8%) or their own home (7%).

3.1 Multivariate statistical analysis

As mentioned before, we implemented Multiple Correspondence Analysis on several variables in order to identify associations among multiple dimensions. The objective was to identify how the future travel propensity of students is connected to the perception of the actual Covid-19 pandemic situation, meaning that we wanted to investigate if the fear of the virus determinates a change in the student travel behavior.

Figure 4 shows the results of the Multiple Correspondence Analysis: females and people between 18 and 20 years old and over 30 years old seem to be more affected by the fear of quarantine, crowded places, taking public transport, sanitary conditions and the fear of contracting the virus that causes Covid-19. They are also less willing to travel again in the next 12 months. On the contrary, males and people in the middle age groups, seems to feel less the impact of these factors. The analysis also enhanced that the level of awareness about the Covid-19 issue does not directly affect the willingness to go back to traveling. In fact, those who do not have anxiety at the idea of traveling in the next 12 months, are also mainly those who feel partially informed, while those who feel sufficiently informed are more affected by the precedent factors.

Figure 4 – Multiple Correspondence Analysis, first two dimensions.

Source: our elaboration.

4. Conclusions

The main objective of this paper was to provide an overview of university students' perception on Covid-19 related to touristic behavior. As results showed, females and generally the younger or the older students could go back to traveling after, as they seem to be more affected by the hygiene-issue and the Covid-19-related restrictions in the decision-making process. However, from the analysis we observed that most people (81%) will return to travel as soon as possible, or at least in the next 6 months. The level of information about the current health situation and the pandemic seems not to be decisive, as most of the people feels sufficiently informed, but those who feel only partially informed are less affected by anxiety at the idea of traveling in the next 12 months.

There are some factors that the hospitality sector has to keep in mind to recover in the best way from this crisis: people will be influenced in their decision-making by the health issue, because the fear of not finding adequate sanitary conditions and/or primary care facilities could affect their willingness to travel. Public transports, and in general crowded spaces, need an increased attention for social distancing and hygiene too, to allow people to feel safe.

Another important aim of this study was to understand tourist behavior in order to make predictions for the future. As shown in the results, people will probably travel in their country of residence or within the European Union, still not getting too far from their residence or domicile, choosing mainly sea or cruise locations. As before the

pandemic due to Covid-19, people will continue traveling with family, partner or with friends, maintaining social distancing and moving in small groups. There will be the trend to make medium-long trips, mainly between 4 and 7 days, mainly using plane or own vehicle as means of transport. According to the accommodation, most people will choose a house or room for rent, decreasing the choice for hotels or similar.

The rationale of this study is to understand the changes in the tourist behaviors, especially among young people. In fact, understanding tourist behavior is a context that guides strategies and actions to provide adequate response measures for the recovery of the tourism industry. The present study therefore also aims to give a practical aid to the hospitality sector, to understand strategies and the best ways to react to the pandemic.

The theoretical contribution of this research is to understand the tourism tendencies in relation to Covid-19 pandemic while the implications for practice of the results of this study are to become a source of information and help for the hospitality industry, that could use these elements to understand how to reorganize and recover in the best way. In fact, the results obtained through this work could help both the hospitality sector and active participants in the industry to understand the main issues and how to move to recover in the quickest and best way from this unforeseen crisis.

Appendix

Questionnaire

Section 1 - Personal questions		
Q1	<i>Gender:</i>	Female/Male
Q2	<i>What age group do you belong to?</i>	18-20 years old/ 21-24 years old/ 25-29 years old/ 25-29 years old/ 30 or older
Q3	<i>What is your Nationality?</i>	
Q4	<i>Which area does your faculty of study belong to?</i>	Humanities sciences/ Medicine and Pharmacy / Engineering and Architecture / Law, Political and Social Sciences / Economics and Statistics / Scientific area / Other
Q5	<i>How many trips for vacation purposes, with an overnight stay of at least one night in accommodation facilities or private paid accommodation, did you on average do every year before 2020?</i>	None / 1 / 2 / 3 / 4 / 5 or more

Section 2 - Information about the health situation		
Q6	<i>Based on your personal opinion, how informed do you feel about the Covid-19 issue?</i>	Sufficiently informed/Only partially informed/ Uncertain about many different sources of information / Not informed at all
Q7	<i>What do you think will be the duration of the current pandemic situation, understood as the duration of the restrictions and the progress of the spread of the virus?</i>	Few weeks/ A few months / At least one year / Over one year
Q8	<i>Considering the current global pandemic situation, what do you think will be the scenario for summer 2021?</i>	Travel without or with very few restrictions / without restrictions / It won't be possible to travel
Q9	<i>Do you think that in the future, when it is possible to return to travel without or with minimal restrictions, the average cost of travel will increase?</i>	Yes, a lot / Yes, but a little / No
Q9a	<i>Do you think it is right that the average cost of travel could increase?</i>	Yes, due to restriction costs / Yes, as service providers will have to recover losses due to the pandemics / No
Section 3 - Perceptions and intentions		
Q10	<i>From March 2020 to today, have you ever manifested any of the emotional states listed below for a period of at least two consecutive weeks, due to the current health situation and the pandemic?</i>	Stress/ Depression / Insomnia / Frustration / Boredom / Anger / Confusion / None
Q11	<i>On a scale of 1 (not at all) to 5 (a lot), please indicate how much each of these factors could negatively affect your willingness to return to travel:</i>	Fear of: (1) contracting the virus that causes Covid-19 / (2) of not being able to return to domicile due to restrictions / (3) of being in crowded places / (4) of public transport / (5) of not finding adequate sanitary conditions
Q12	<i>Does the idea of traveling in the near future make you feel anxious?</i>	Yes / No
Q13	<i>Do you think you will travel in the next 12 months?</i>	Yes / No
Section 4 - Hypothetical future trip		
Q14	<i>When will you make your next trip?</i>	As soon as possible or in the next 6 months / Not before 6 months / Not before 1 year / I don't know when I will travel again
Q15	<i>What will be the destination of your next trip?</i>	Region of residence / Country of residence / In EU / Outside EU
Q16	<i>What will be the main type of destination for your next trip?</i>	Sea / Mountain / City / Country / Other location
Q17	<i>Who will you be making your next trip with?</i>	Groups / Family or partner / Alone / Friends
Q18	<i>What will be the duration of your next trip?</i>	1-3 days / 4-7 days / More than 7 days
Q19	<i>What will be the main means of transport used for your next trip?</i>	Plane / Train / Bus / Ship / Own vehicle
Q20	<i>What will be the main type of accommodation used for your next trip?</i>	Hotel / Other accommodation / House for rent / Own home / Home of friends

References

- BOFFEY D. 2020. Us visitors set to remain banned from entering EU. *The Guardian*. Available at: <https://www.theguardian.com/world/2020/jun/29/us-visitors-set-to-remain-banned-from-entering-eu>.
- CELARDO L., IEZZI D.F. 2017. Travel profiles of family holidays in Italy, *Rivista Italiana di Economia Demografia e Statistica*, Vol.71, No.1.
- CHEBLI A., SAID F.B. 2020. The impact of Covis-19 on tourist consumption behaviour: a perspective article, *Journal of Tourism Management Research*, Vol. 7, No.2, pp. 196-207.
- FOROUDI P., TABAGHDEHI S.A.H., MARVI R. 2021. The gloom of the COVID-19 shock in the hospitality industry: A study of consumer risk perception and adaptive belief in the dark cloud of a pandemic, *International Journal of Hospitality Management*, Vol. 92, No. 102717.
- GREENACRE M., BLASIUS J. 2006. *Multiple Correspondence Analysis*. London: Chapman and Hall/CRC Press.
- HUSSON F., JOSSE J., LE S., MAZET J. 2015. *FactoMineR: Multivariate data analysis and data mining*. R package version 1.29.
- ISTAT. 2019. *Annuario Statistico Italiano 2019*. Available at: <https://www.istat.it/it/files//2019/12/Asi-2019.pdf>.
- ISTAT. 2021. *Viaggi e vacanze in Italia e all'estero – Anno 2020*. Available at: https://www.istat.it/it/files//2021/04/Report_viaggiVacanze_2020.pdf.
- JITTRAPIROM P.; TANAKSARANOND G. 2020. An Exploratory Survey on the Perceived Risk of COVID-19 and Travelling. *Working papers*, University of Maryland: College Park, MD, USA.
- MAIR J., RITCHIE B.W., WALTERS G. 2016. Towards a research agenda for post-disaster and post-crisis recovery strategies for tourist destinations: A narrative review, *Current Issues in Tourism*, Vol. 19, No. 1, pp. 1-26.
- ROBERTS K.H., MADSEN P., DESAI V. 2007. Organizational Sensemaking during Crisis. In: PEARSON C.M., ROUX-DUFORT C. and CLAIR J.A. (Eds.) *International Handbook of Organizational Crisis Management*, Los Angeles: Sage Publications, pp. 109-122.
- TEJAN M.A., SAFAA L. 2018. Crises, learning and resilience: Retrospective analysis of tourist activity in Morocco from 1991 to 2016. Focus on the destination Marrakech, *Caribbean Studies*, Vol. 2.
- 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*, pp. 67-76.
- UNWTO. 2020. *International Tourism Highlights - 2020 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284421152>.

UNWTO. 2021. Covid-19 and tourism – 2020: A year in review. Available at: https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-12/2020_Year_in_Review_0.pdf.

ZENKER S., BRAUN E., GYIM GYIMÓTHY S. 2021. Too afraid to Travel? Development of a pandemic (COVID-19) anxiety travel scale (PATS), *Tourism Management*, Vol. 84, No. 104286.

SUMMARY

New travel habits of university students in relation to Covid-19

Since its emergence, Covid-19 has caused significant impacts to the livelihoods of people around the world. Thus, a question arises: once travel resumes, what will be the new trends? The main objective of this study is to provide a general overview of students' perception on Covid-19 pandemic in relation to tourism behavior, as well as to make predictions about future behaviors in terms of travel choices. The data collection was conducted through a questionnaire, the responses were processed and analyzed using statistical analyses. This study could be useful is to understand the changes in the tourist behaviors, especially among young people. The theoretical contribution of this research is to understand the tourism tendencies in relation to Covid-19 pandemic, while the implications for practice of the results of this study are to become a source of information and help for the hospitality industry, that could use these elements to understand how to reorganize and recover in the best way.

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