Restrictions' acceptance and risk perception by young generations in a COVID-19 context

Claudia Seabra, Miral AlAshry, Kevser Çınar, Irfan Raja, Manuel Reis and Najma Sadiq

Abstract

Purpose – The purpose of this study is to analyze the impact of the acceptance of national governments' restrictions imposed due to the COVID-19 pandemic on the citizens' safety perceptions of daily life and future plans. In particular, the aim is to examine the relationship among the citizens who belong to Generations Y and Z and who represent the future of tourism markets, as tourists and as host communities, in three important receiving countries, namely, Egypt, Portugal and Turkey.

Design/methodology/approach – This pilot project gathers data from three important receiving countries located on two continents involving 348 residents from Generations Y and Z. To identify the factors underlying the "acceptance of restrictions and measures" and the "Impacts of the COVID-19 threat on safety perceptions" a factor analysis was carried out. Notably, Pearson's correlation coefficient and a multiple linear regression analysis allowed to analyze the relationships between the two factors and a Kruskal–Wallis test was used to assess the influence of individuals' country of residence.

Findings – The results reveal that in general, young generations accepted the measures and restrictions imposed by the respective governments. In addition, the present pandemic has a strong impact on their safety perception in daily lives and future plans to travel. Moreover, results prove that between the three countries there are dissimilarities showing that the countries' situation regarding COVID-19 influences those two dimensions.

Research limitations/implications – This study adds to the development of studies on the impacts of health risks in tourism activity, specifically on the safety measures adopted and their impacts on local receiving communities. It shows that the current pandemic is severely affecting the daily lives and plans for the future of citizens and tourists, which is in accordance with previous studies.

Practical implications – The outcome of this study paves the way for policy-makers in the tourism industry because it presents experiences from Generations Y and Z members, future customers and tourist products consumers, but also from receiving communities.

Social implications – The results of this study bring some light on how local communities, specifically, the younger generations, are facing this pandemic period and on the impact it has on the way they face daily life, future plans and on their level of acceptance of a sector as important as tourism.

Originality/value – To the knowledge, besides the relevant studies already conducted on the impact of the COVID-19 crisis on the tourism field, no study has yet been carried out to analyze how residents have reacted and accepted the restrictions and security measures imposed by their national governments and their impact on residents' feelings and perceptions, daily lives and travel plans. Furthermore, the specific impacts of this crisis will have on the younger generations are yet to be analyzed.

Keywords COVID-19 impacts, Residents' perceptions, Safety measures, Risk perceptions, Health risks, Millennials and Generation Z

Paper type Research paper

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1. Introduction

The current pandemic has provided a space for tourism destinations managers to reflect on community protection measures that may be ignored due to mass tourism and to the

economic revenue that it provides. The bright side of such calamity is that it may offer an opportunity to reset the tourism industry (Brouder, 2020; Sigala, 2020) and reshape it by focusing on resilience, prioritizing inclusivity, sustainability and responsibility, especially in the relationship with the residents (UNWTO – United Nations World Tourism Organization, 2020). The destination communities have realized the importance of putting communities first. The reorientation of tourism to be part of a community-centered framework should cater to the legitimate rights and interests of local communities (Higgins-Desbiolles, 2020) to provide a ground for diversification and resilience and enhancing the support of residents and local communities fostering tourism development (Gunasekaran *et al.*, 2009), forecasting for future disruption and crises (Ritchie and Jiang, 2019).

Considering the global nature of the COVID-19 pandemic, the perceived health risks should be addressed by enhancing the safety measures and the health-care infrastructure of destination communities. In this context, it is crucial to understand how tourists and residents face the pandemic, how they perceive their own safety and what are their plans for the future analyzing the social costs of the pandemic (Qiu *et al.*, 2020). In fact, this crisis has considerably changed people's patterns of life whether it involves the way they choose to go to work, communicate with colleagues, eat their food, commemorate festivals or consider a holiday trip abroad. This crisis transformed our lives in a way that has never happened before (Raja, 2020). A long list of studies covering the impacts of COVID-19 on tourism markets have revealed that there will be "long-term severe effects of COVID-19" that will be felt worldwide for years to come (Brouder, 2020; Gates, 2020; Li *et al.*, 2020; Sharma and Nicolau, 2020).

Given that such crises lead to serious economic loss and increase social expenditures, it is crucial to figure out the factors influencing risk perception and post-travel behavior. This is more important since from now on health and safety issues will be more important than ever before (Li *et al.*, 2020; Yang *et al.*, 2020b). Previous studies reveal that health and safety perception are important factors in travel decision-making (Novelli *et al.*, 2018). In fact, tourists are more influenced by the perceived risk than the actual risk (Nagai *et al.*, 2020) and this specific crisis will influence tourists' risk perception profoundly in the next years. To increase supply and demand in tourism, public and private organizations need to ensure health and safety in tourist facilities, recreational areas, hotels, restaurants and public transport (Yu *et al.*, 2020) and governments should refocus and rebuild their strategies to contribute to a new tourism offer and demand era (Dolnicar and Zare, 2020).

The UNWTO considers that at this time of crisis peoples' safety should be the first priority for governments and for all major organizations including the tourism industry (UNWTO – United Nations World Tourism Organization, 2020). Worldwide, countries have imposed lockdowns and quarantines, social distancing, closure of schools/universities, public services and non-essential businesses canceled flights closed borders, imposed travel bans, canceled or postponed global, national, regional and local events (Fong *et al.*, 2020; Gössling *et al.*, 2020). Travel restrictions spread over 90% of the world's population not only at the international but also, in some countries, at the internal level affecting national economies and mainly the tourism industry by impacting negatively the tourism systems both at an international and domestic level (Gössling *et al.*, 2020).

These measures and restrictions saved millions of lives, accounting for three million only in Europe (McCarthy, 2020). However, they also contributed to the spread of global fear fueled by traditional and social media (Depoux *et al.*, 2020) and had a strong impact on citizens' daily lives, mobility, future and travel plans. Several studies showed that COVID-19 had a high prevalence of psychological stress (Yang *et al.*, 2020a) and caused high levels of perceived susceptibility and anxiety (Kwok *et al.*, 2020). Moreover, there is evidence that demographic differences, for instance, notable age are significant to preventive or protective behaviors and reactions to the disease (Nazneen *et al.*, 2020; Yildirim *et al.*, 2020).

To our knowledge, and despite all the relevant studies already conducted on the impact of the COVID-19 crisis on the tourism field, no study has yet been carried out to analyze how residents have reacted and accepted the restrictions and security measures imposed by their national governments and their impact on residents' feelings and perceptions, daily lives and travel plans. Furthermore, the specific impacts of this crisis will have on the younger generations are yet to be analyzed. Hence, considering these considerations in addressing the calls from recent research on citizens' and tourists' perceptions and behaviors during health crises (Gössling *et al.*, 2020; Nazneen *et al.*, 2020; Li *et al.*, 2020; Zenker and Kock, 2020). This study will analyze the impact of the acceptance of National governments' restrictions imposed due to the COVID-19 pandemic on the citizens' safety perceptions of daily life and future plans. In particular, our aim is to examine the relationship among the citizens who belong to Generations Y and Z in three important receiving countries: Egypt, Portugal and Turkey. Those two generations, individuals ranging between 40 and 50 years old, represent the future of tourism markets as tourists and as host communities. In the next 10 years, they will represent the biggest segment of every sector demand and also about 75% of the global workforce (UN, 2019; World Economic Forum, 2016). Moreover, young people became powerful influencers on people of all ages and incomes (Francis and Hoefel, 2018). In this line, the research on the habits and behaviors of these generations is mandatory to understand and foresee tourism industry sustainability.

2. Theoretical framework

Evidence shows that the new coronavirus has left a lasting impact on the world economies that will take decades to convalesce (Sheresheva, 2020). The European tourism industry should be prepared to embrace the "rocky road" that is being created by the effects of the coronavirus epidemic:

COVID19 has provided striking lessons to the tourism industry, policymakers, and tourism researchers about the effects of global change. The challenge is now to collectively learn from this global tragedy to accelerate the transformation of sustainable tourism (Gössling *et al.*, 2020, p. 15).

2.1 Tourism, health risks and (un)safety perceptions

Safety is a basic human need that affects human behavior, especially consumption and buying behaviors (Isaac and Velden, 2018). In the vacation and leisure contexts, safety is an expected requirement (Baker, 2014) as tourists do not want to feel exposed to situations that can threaten their integrity (Seabra *et al.*, 2013).

The study of risk and safety perceptions is a significant topic of inquiry in tourism research mainly because of its theoretical relevance. Notably, the recent events in the tourism industry have been exposed to some negative occurrences that have severely affected the tourism industry, for instance, terrorist attacks, crime and violence, wars and political instability, natural catastrophes, diseases and epidemics (Seabra *et al.*, 2020b).

Previous research proved that the tourism industry is extremely vulnerable to external shocks and crises due to its complexity of multiple relations between people, organizations and events in a variety of subsystems (Aliperti *et al.*, 2019). Traveling and travel decisions have inherent risks that strongly affect the tourism industry (Quintal *et al.*, 2010). Tourism crises bring severe negative impacts to destinations and entire regions, damaging or even disrupting the tourism industry with serious economic and social costs (Chien *et al.*, 2017).

In previous studies, research risks have been placed under two key elements, namely, uncertainty and consequences (Conchar *et al.*, 2004). The uncertainty is related to the several types of risk that for most tourists become travel constraints (Larsen *et al.*, 2009; Wolff *et al.*, 2019). Previous research defines three travel risk dimensions, namely, vacation

risk, physical-equipment risk and destination risk (Seabra *et al.*, 2020a). Physical risks have called the attention of several studies in the last decades, specifically, the health risks, meaning factors bringing physical danger, injury or sickness (Baker, 2014; Jonas *et al.*, 2011). Health perceived risk can be defined as “the negatively valenced likelihood assessment that an unfavorable event related to travel health and safety will occur over a specified time period” (Chien *et al.*, 2017, p. 2). The consequences of risks perceptions are associated with the changes in tourists’ behaviors and decisions because of risk assessment (Sharifpour *et al.*, 2013). In fact, health and wellbeing risk is one of the most impactful risk type leading tourists to enhance self-protective measures and behaviors (Wang *et al.*, 2019).

Past research mainly investigated perceived health risks concerning specific destinations (Chien *et al.*, 2017). The present pandemic context brings attention to measuring the risk perception as a whole independently of the destination, as getting the disease is common to all destinations. In this context, it is sound to analyze general health risk perceptions of individuals irrespective of any travel destinations. Additionally, besides the several epidemics and pandemics in the past decades, “there is surprisingly limited literature on the interrelationships between pandemics and tourism, and its long term implications” (Hall *et al.*, 2020, p. 6).

2.2 Health risks, civil restrictions and the younger generations

Tourists’ risk perceptions during travel decision-making are important predictors of certain behaviors that will lead people to avoid traveling to infected destinations (Cooper, 2008; Zou and Meng, 2019). On the other hand, restrictions derived from health risks will also heavily influence consumer behavior and travel demand. Given that some regions of the world are beginning to emerge out of the crisis, therefore, individual travel must be may be handled carefully to reduce potential health threats and minimize stress for tourists (Fong *et al.*, 2020; Nazneen *et al.*, 2020; Sheresheva, 2020).

The present pandemic brought for the first time in this era civil restrictions to contain the disease spreading never witnessed before. COVID-19 is considered as a global threat that requires a global answer (Chakraborty and Maity, 2020). After the World Health Organizations’ declaration of COVID-19 as a pandemic, almost every countries and territories enacted constraints especially in the citizens’ mobility to slow the disease transmission (Fong *et al.*, 2020; Gössling *et al.*, 2020; Kwok *et al.*, 2020), transforming the conditions of functioning of people and organizations worldwide (Sulkowski, 2020).

Most of the measures imposed by most of the countries included self-confinement, social distancing, borders closure, public services and non-essential businesses shutdown, travel bans, etc (Chakraborty and Maity, 2020; Kwok *et al.*, 2020). In fact, in the absence of an efficient treatment or a vaccine, the non-pharmaceutical interventions (NPIs) were and still are considered as the only solutions to control the pandemic. However, the efficacy of such measures depends on the degree of individuals commitment and acceptance of restrictions to adopt protective behaviors, which depends in turn on their risk perception of the disease threat (Kwok *et al.*, 2020).

Factors like socio-demographics, individual well-being and perceived health risk, etc., influences individuals’ decisions and behaviors (Lee and Chen, 2011). Demographic variables such as someone’s socio-economic status, gender are widely considered key features in predicting health-protective behavior (Bish and Michie, 2010). In addition to these stable and unchanging social health behavior determinants, many cognitive social models suggest that our perception of risk will strongly influence protective behavior. Risk perception is usually based on perceived probability, severity and susceptibility to health threats (Dohle *et al.*, 2020) and greater levels of perceived probability and severity are

important predictors of deterrent behavior during a pandemic (Bish and Michie, 2010; Dohle *et al.*, 2020).

Previous studies have concluded that consumers' age or their generational group are factors that will strongly affect their behaviors (Rivera *et al.*, 2015; Seabra *et al.*, 2020a). Segmentation based on generation is acquiring substantial relevance in the marketing literature (Rivera *et al.*, 2015) based on the assumption that the time an individual was born and the environment and experiences he had during the earlier stages of his life is important factor. The generational perspective also postulates that the individuals' values and behaviors remain relatively constant throughout their lives, representing a very useful segmentation technique for marketing purposes (Pendergast, 2010).

The most consensual classification for generations points out four generational groups: Baby Boomers (born between 1946 and 1964), Generation X (born between 1965 and 1979), Generation Y or Millennials (born between 1980 and 1994) and the younger Generation Z (born between 1995 and 2015) (Bloomberg News, 2016; Benckendorff *et al.*, 2010).

The younger generations are changing the world paradigm. They are playing an increasingly important role in the development of all economic sectors and the name of the tourism industry. Recent studies have confirmed that over the next few years Generation Y will represent about half of the demand for tourism sector services and that, by 2025, they will represent 75% of the global workforce, making them the spending power for the new era (World Economic Forum, 2016).

The members of Generation Y, also known as the "net or web generation," "millennials," "generation next," "echo boomers" or "digital generation" (Benckendorff *et al.*, 2010) were born in the age of technology, are creative, ambitious and motivated (Parment, 2012). Despite some negative representations that have appeared in media and that picture them as lazy, ill-mannered, slackers and cynical mopes, Millennials are also globally conscious, optimist, impatient, multifaceted, group work-oriented, upbeat and full of self-esteem, as well as educated, and are prepared to lead a new wave of volunteerism (Tuglan and Martin, 2001).

The members of Generation Z, or of the "Centennial Generation," are technologically advanced, absorb tons of new information every day, are multitasking and actualize their social lives more and more through smart devices such as mobile phones or tablets (Giresun and Solmaz, 2017). The individuals from this generation possess unique characteristics that, in association with their decision-making habits, social behavior and purchasing preferences, will help them become influencers (Puiu, 2016). Generation Z is environmentally aware and concerned and value an eco-friendly and healthy lifestyle. They have the same consumption habits and share similar characteristics with the Millennials: are innovative and eager to try new products, want to make the best out of life and are always searching for new, authentic and fascinating experiences. That is why tourism products play an important role in their lives, as they search to explore the world, search for new cultures in a relaxed and spontaneous way (Haddouche and Salomone, 2018).

Notably, the Generations Y and Z were brought-up in a protected environment that helped them develop a sense of safety (Gong *et al.*, 2018). However, they have witnessed very traumatic events and grew-up with unfortunate memories of events such as terrorist attacks, natural disasters, pandemics and virus outbreaks, wars and political instability (Debevec *et al.*, 2013). Previous research suggests that a memorable historical event occurring during one's "coming of age years" will shape the long-term core values influencing one's lives, preferences, attitudes and behaviors (Meredith and Schewe, 2002). In this line, it is reasonable to think that the personality and unique structure of young Y's and Z's will be the most impacted by the present crisis.

2.3 Impacts of COVID-19 in three important receiving tourism destinations: Egypt, Portugal and Turkey

2.3.1 Egypt. In the 1980s, the tourism industry in Egypt has faced several crises mainly caused by negative events connected with terrorism, political instability or crimes and violence that have negatively affected the country destination image ([Ahlfeldt et al., 2015](#); [Mansfeld, 1996](#); Wahab, 1996).

Tourism has become a very important sector in the Egyptian economy. Although, there have been a little decline in 2011–2013 due to the Egyptian Revolution and the control of Egypt's Muslim Brotherhood. In 2018, the government approved a strategic plan to develop the tourism sector ([Ministry of Tourism in Egypt, 2019](#)). The results of that effort were brilliant in 2019, with an increase in tourist arrivals to 13 million compared to 11 million in 2018 ([American Chamber of Commerce in Egypt, 2020](#)).

The World Health Organization (WHO) confirmed the presence of COVID-19, already considered a global epidemic. In Egypt, the first case was detected in mid-February, but the level of concern drastically increased when several cases were detected on a Nile cruise ship carrying Taiwanese tourists in mid-March 2020 ([Megahid, 2020](#)). On March 19, the country raised its health alert level at all entry points, which included ports and airports. Each visitor had to undergo a temperature check to screen for fever and the authorities announced the suspension of flights at all airports from that day on as a measure to prevent the spread of coronavirus ([Asmaa, 2020](#)).

The Egyptian government took three major decisions to reduce the spread of the virus and reduce the COVID-19 infection rate among Egyptian residents (ISI, 2020). First, closing airports and preventing international travels from and to Egypt. The government allowed residents or tourists only to leave the country as they wish and with coordination with their governments around the world. Second, closed all government facilities and public transport, roads and trains. Third, closed all hotels following the recommendations of the World Health Organization, and closed the areas visited by tourists and canceled different tourism activities and visits to national tourist attractions. Fourth, closed all schools, universities and mosques, and the authorities disseminated information about the impact of the virus through announcements using all of the platforms to spread awareness to all the citizens ([Gamal, 2020](#)).

According to that, the crisis in the Egyptian tourism industry began in February 2020, despite the increase in visitors and tourism-related revenues registered in January 2020 that represented growth rates of 9.7% and 28.9%, respectively. In March, the country recorded a 63% decline in arrivals and a 36% drop in tourism-related revenues. This led to a decline in the indicators for the first quarter of 2020 by 19% in the numbers of foreign tourists and by 11% in revenue, representing losses estimated at US\$295m ([Ministry of Tourism and Antiquities, 2020](#)).

On 1 April, 2020, the authorities have announced that tourism losses due to the lockdown would reach US\$1bn ([Soliman, 2020](#)) and that the losses caused by flight cancellations would reach 2.25 billion Egyptian pounds (about US\$143m). Compared to the tourism-related losses already felt in Egypt during the first quarter of 2020, current figures point to less than 548 thousand tourists, 3.1 million nights and 295 million in tourism revenues ([Mukhtar, 2020](#)).

2.3.2 Portugal. Over the past 10 years, Portugal's performances regarding arrivals and receipts have been among the highest in Europe and have grown steadily around 11% each year ([UNWTO – World Tourism Organization, 2019](#)). With a huge international recognition, as proven by the several tourism awards granted to its many regions, cities and destinations in Portugal were considered a very safe and peaceful country ([Seabra et al., 2020a](#)).

The first two cases of COVID-19 (imported from Italy and Spain) were detected in the country on March 2. Considering the scenario all over Europe, on March 5, TAP Air Portugal canceled more than 1,000 flights. On March 16, the first death caused by the virus occurred, and the Prime Minister announced that all schools and universities were to be closed. National Museums and most of the public services, the land border with Spain and the ports were closed as well ([Pinto, 2020](#)).

On March 19, the country faced the second death and the President declares the State of National Emergency. A decision was imposed to restrict the citizens' mobility and people were advised to stay at home and to avoid any contact outside their family, almost all services were shut down except for hospitals and security forces, shops were closed except for pharmacies and food shops. Most services, industries and firms urged their employees to work from home to prevent people from leaving home. Portuguese citizens who were abroad at the time were shipped back home with help from their national government and all the foreigners with pending citizenship applications were legalized. All individuals in the Portuguese territory have equal access to health care in hospitals.

The State of National Emergency was extended on April 2 and then on April 18. On May 2, the President declares the end of the third State of National Emergency and declares the State of National Calamity. At this stage, some of the restrictions were alleviated, however, most services remained closed and residents were advised to stay at home when possible. Since then, most of the services, industries and firms have started to open gradually with severe sanitary measures meant to contain the disease.

The tourism sector was severely affected by travel and mobility restrictions. In March and April 2020, 79% of the reservations booked for March-August were canceled (in the case of Azores and Madeira cancellation rate reached 90%). The accommodation sector registered 697.700 guests and 1.9 million overnight stays in March 2020. These figures correspond to a 62.3% and 58.7% decrease respectively and the total income declined by 60.2% and amounted to 98.9 million Euros ([Lusa, 2020](#)). According to the European Central Bank, Portugal is among the Eurozone countries that are most exposed to the reduction of exports in the tourism sector. The forecasts point to a strong decrease that may amount to 40% compared to the previous year. Portugal is only outpaced by Italy (with a 49% drop) and Spain (42% drop) ([ECO 2020 Swipe News, 2020](#)). Regarding international tourism, the biggest decrease appeared in the main urban centers, namely, Lisbon and Porto ([Turismo de Portugal and Sibs Analytics, 2020](#)).

2.3.3 Turkey. Tourism is one of Turkey's most important service sectors and therefore plays a crucial role in the economy of the country. Between 2000 and 2016, the total number of tourist arrivals has grown by an average annual rate of 8.33% and economic activities associated with the travel and tourism industry accounted for 3.8% of the country's GDP ([TURKSTAT – Turkish Statistical Institute, 2020](#)). Over the past decade, Turkish tourism has experienced difficult times due to national and global crises leading to profound economic crises ([Okumus and Karamustafa, 2005](#)).

The first official Turkish COVID-19 case appeared on March 11, 2020. The first death caused by the virus happened on March 17 and from that day on, the number of cases grew rapidly. In 20 days, the number of cases increased to 10.000 and the death toll hit 150. To control the spread of the virus, international and domestic travel were limited by March 21. Quarantine was imposed first for people over 65 and for people suffering from chronic diseases on April 3, and then to people under 20 as well. Vefa Social Support Group was launched to meet the needs of people who had to stay at home and special travel permissions for these people were issued whenever deemed necessary ([Demirbilek et al., 2020](#)).

After school closures, remote learning was introduced on March 16. Turkey's Diyanet banned congregational prayers in the public mosques. Besides, the "Economic Stability

Shield” package was introduced to minimize the impact of the pandemic on the economy (Bostan *et al.*, 2020). One of measure was to tell people that returned from foreign trips to stay at home and avoid meeting guests for 14 days, even if they have no symptoms of illness. People should from now on avoid entering crowded areas, too (Demirbilek *et al.*, 2020). Turkish nationals and their families returned to Turkey from infected countries such as Wuhan or other areas with large numbers of cases. During this time, the foreigners were restricted to enter the country. To minimize the risk of further infections with COVID-19, restrictions are in place such as entertainment areas, theatres, restaurants, cafes, wedding venues, mosques, tea gardens, hairdressers, barbershops, beauty salons, scientific, cultural and artistic venues.

Irregular migrants who have entered Turkey (over the past 14 days) from countries with a high prevalence of the disease are kept under surveillance for 14 days. Posters and brochures on COVID-19 were translated into Arabic, English and Persian to make sure that all people could receive reliable information. Everyone, regardless of whether they are eligible for social security benefits, had access to personal protective equipment, diagnostic tests and medication used for treatment that was provided by the Ministry of Health for protection against the virus (Ministry of Health, 2020).

A COVID-19 alternative scenario estimates that demand is expected to fall between 5% and 53% in Turkey. This means that if the worst-case scenario comes out, this crisis will be one of the worst Turkey has ever experienced. Assuming that expenditure by foreign visitors will remain the same as in 2019 (around US\$642), Turkey’s revenue from foreign visits will drop in 2020 to US\$13.7bn (52.8%), in a worst-case scenario and to US\$27.4bn (5.3%) in a best-case scenario. This means a loss of tourism revenue of over US\$15.2bn in the worst-case scenario and US\$1.5bn in the best-case scenario for 2020 (TURKSTAT – Turkish Statistical Institute, 2020).

3. Study methods

The research setting was built based on a survey applied in three countries, namely, Egypt, Portugal and Turkey. These are important tourist receiving markets, countries whose economies depend heavily on the tourism industry. With different cultural backgrounds, the three countries dealt with the pandemic crisis in different ways and rates. The respondents were young residents (over 18), belonging to Generation Y and Generation Z. The empirical collection was conducted between February 2 and May 30, 2020.

The survey instrument was built based on scales available in the tourism literature. The scales used to study the “Impacts of the COVID-19 threat on Safety Perceptions” were adapted from the works of Huddy *et al.* (2002), Jeuring and Becken (2013) and Seabra *et al.* (2018). The scales used to assess the “Acceptance of Restrictions and Measures” were adapted from the work of Huddy *et al.’s* (2001). The original scales were translated to Portuguese, Arabic and Turkish by native speakers. To avoid translation errors, the questionnaires were back-translated into English.

A snowball sampling approach was used to collect data from residents using social media and mailing lists. Besides, being a non-probability method, snowball sampling through social media channels was the sampling technique considered most appropriate in a period where the majority of the target population was isolated and therefore inaccessible by other means. The questionnaires were self-administrated to ensure the unbiasedness of the data. In total, 835 questionnaires were applied and, of those, 712 were considered valid, 348 came from Generation Y and Generation Z respondents, divided equally between the three countries. The final sample allowed for a good proportion of observations for the 18 indicators (19:1) (see Bentler, 1989, in Westland, 2010).

The sample was equally composed of men and women from Generation Y (56%) and Generation Z (44%). Approximately 90% of them had a university education and 10% had up to 12 years of

studies. As for their occupation, 63% are students, 13.5 are middle and senior managers, 8.6% are administration or commerce workers, about 7% are freelancers/self-employed and the remaining are unemployed businessmen or factory workers. The sample was mainly composed of non-frequent travelers who had undertaken, on average, less than 5 international trips over the last three years (73.9%), 5 to 10 international trips (12.6%), 10 to 15 trips (6.3%). Only 7.2% of the respondents had traveled more than 15 times over the past three years.

4. Results

The results for “Impacts of COVID-19 Threat on Safety Perceptions” indicate that the respondents agree that the pandemic has had a strong impact on their daily lives since they answered that they are afraid they might catch the virus as tourists (84.8%) and as citizens (81.4%), regardless of the country. In general, residents admit that they are bothered and nervous because of COVID-19. The Portuguese seem less nervous (9.6%), than the Egyptians (55.2%) and the Turkish are the most nervous (67.3%). As for the willingness to change daily life habits and travel plans, half of the respondents agree that many aspects of their lives and many of their routines will undergo many modifications that will affect their lives and routines and their travel and vacation plans because of their fear of the virus. Notably, respondents regardless of their country of origin share this opinion.

In the variable “I need more information about how to protect me from coronavirus,” the level of agreement of the Egyptians is higher than those of the Portuguese and the Turkish (61.2%, 33.6% and 40.5%, respectively). As for the concern of catching the disease, the Portuguese show that they are more concerned (89.6%) than the Egyptian (76.8%) and Turkish (50%).

In general, when it comes to the “acceptance of restrictions and measures,” the respondents agree with almost all the measures and restrictions that governments imposed to avoid the spread of COVID-19. Over 80% of the sample, regardless of the country, approves “more control of all countries’ borders” and “mandatory quarantine once the disease is diagnosed.” When asked about the “obligation of all citizens to be examined by medical teams,” more than 50% of the Portuguese respondents admit that they agree with the said measure. The Egyptians and the Turkish’s degree of an agreement are much higher (75% and 77.6%). As for the “Possibility for security forces to randomly stop people on the streets to be examined,” the Portuguese indicate a lower level of acceptance (34.4%) compared with the Turkish (50.9%) and the Egyptians (67.2%).

When they were asked to give their opinion on the control of the borders, over 70% of all respondents admit their complete agreement with such a decision. The Turkish’s degree of the agreement is higher than the Egyptians’ and both have higher degrees of agreement than the Portuguese. Finally, when expressing their view on the possibility of implementing repatriation procedures, 62% of the Egyptian respondents agree with the “repatriation of nationals who are in areas affected by the coronavirus” and 59% of them agree with the “repatriation of foreign citizens to their country of origin when they are diagnosed with the coronavirus. 43% of the Turkish respondents agree with both measures, whereas 44.8% of the Portuguese agree with the former and 38% with the latter, respectively ([Appendix 1](#)).

4.1 Factor analysis

The correlations between the different items of the first scale range between -0.025 and 0.625 and between 0.252 to 0.903 for the second. Those values prove that the items can be included in those different dimensions. The dimensions’ relational structure for “Impacts of COVID-19 Threat in Safety Perceptions” and “Acceptance of Restrictions and Measures” was analyzed using exploratory factor analysis over the correlation matrix and factor extraction was achieved using principal component analysis and varimax rotation.

Several factor analyses were carried out and some variables were removed for showing factor saturations above 0.5 in more than one factor. The final model showed a Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy satisfactory at 0.696 for “Safety Perceptions in Daily Life and Future Plans” and 0.842 for “Acceptance of Restrictions and Measures” (Sharma, 1996). The results obtained from Bartlett’s sphericity test showed that the variables are significantly correlated for both analyses ($p < 0.001$). They also indicated that the use of factor analysis is adequate (Sharma, 1996). Data showed statistical validity and a varimax rotation was performed. Factors were expected to be unrelated (West, 1991). Three factors explained 77.18% of the total variance in the sample for “Impacts of COVID-19 Threat in Safety Perceptions” and 80.43% with four dimensions to the “Acceptance of Restrictions and Measures” (Table 1). Generally, it is agreed that the ideal lower limit for the Cronbach’s alpha is 0.70, but values close to 0.60 can be considered satisfactory (Streiner, 2003).

Table 1 Factor loadings, variance and Cronbach’s alpha of dimensions included in the “safety perceptions in daily life and future plans” and “acceptance of restrictions and measures”

Dimensions	Item	Factor loadings	Communalities	(%) total variance	Cronbach's alpha
Safety perceptions in daily life and future plans					
Citizens and tourists are potential victims	Tourists are likely to be victims of coronavirus	0.866	0.751	28.72	0.769
	Normal citizens are likely to be victims of coronavirus	0.854	0.739		
Nervousness regarding the disease	I have been bothered and feel nervous because of my fear of coronavirus	0.667	0.662	24.87	0.655
	I have had trouble sleeping because of my fear of coronavirus	0.920	0.867		
Changing daily routines and travel plans	I am thinking about changing many aspects of my life and routines because of fear of coronavirus	0.813	0.771	23.59	0.648
	I am thinking about changing travel or vacation plans because of my fear of coronavirus	0.902	0.840		
Total variance explained					77.18
Acceptance of restrictions and measures					
Control and quarantine	More control in all countries' borders	0.799	0.848	19.67	0.870
	Mandatory quarantine in case of disease diagnosis	0.866	0.880		
Medical examination	Obligation of all citizens to be examined by medical teams	0.706	0.706	15.86	0.695
	Possibility for security forces to randomly stop people on the streets to be examined	0.852	0.852		
Limitations in the entry of foreigners	Total closure of borders	0.718	0.689	28.29	0.883
	Limitations in all countries in the reception of migrants and foreigners	0.833	0.853		
	Limitations in my country in the reception of migrants and foreigners	0.826	0.868		
Repatriation	Preventing citizens from areas affected by the disease from entering my country	0.655	0.650	16.61	0.729
	Repatriation of nationals who are in areas affected by the coronavirus	0.863	0.824		
	Repatriation of foreign nationals to their country of origin when diagnosed with coronavirus	0.838	0.813		
Total variance explained					80.43
Source: The authors					

4.2 Relationship between “acceptance of restrictions and measures” and the “safety perceptions in daily life and future plans”

To assess the relationships between the dimensions, Pearson’s correlation coefficient was used ([Appendix 2](#)). To measure how the different dimensions of the “Acceptance of Restrictions and Measures” impacted each dimension of the “Safety Perceptions in Daily Life and Future Plans” a multiple linear regression analysis was conducted ([Appendix 3](#)).

In a global analysis, it appears that the acceptance of *Limitations in The entry of Foreigners* is positively and significantly associated with all dimensions of “Safety Perceptions in Daily Life and Future Plans.” The association with the *Changing Daily Routines and Plans for Travel* dimension has the strongest relationship. That is, an increase in acceptance of *Limitations in the Entry of Foreigners* tends to be accompanied by an increase in the agreement of respondents to the willingness of *Changing Daily Routines and Travel Plans*, the feeling of *Nervousness Regarding the Disease* and the belief that *Citizens and Tourists are Potential Victims*. However, the acceptance of *Control and Quarantine* exhibits significant and positive relationships but just with the disposition of *Changing Daily Routines and Travel Plans dimensions* and with the belief that *Citizens and Tourists are Potential Victims*. The acceptance of measures such as *Repatriation* is significantly related to the belief that *Citizens and Tourists are Potential Victims* dimension and the relationship that is established is negative. That is, an increase in the acceptance of the *Repatriation* measure is associated, on average, with a decrease in the agreement that *Citizens and Tourists are Potential Victims*.

The results of the regression analysis reinforced the correlations conclusions ([Appendix 3](#)). When testing the impact of the four dimensions of “Acceptance of Restrictions and Measures” in the three dimensions of “Safety Perceptions in Daily Life and Future Plans,” the results showed the following:

- Regarding the changing daily routines and plans for travel dimension, the highest relative impact was from control and quarantine.
- In the citizens and tourists are potential victims, the repatriation was the dimension showing a strongest influence.
- The nervousness regarding the threat was more affected by the medical examination.

Considering the correlations by country, there was no significant relationship between the acceptance of *Limitations in the Entry of Foreigners* and the disposition of *Changing Daily Routines and Travel Plans* for Turkey, while in the cases of Portugal and Egypt there is a positive and significant relationship. The regression analysis also showed that in the case of Portugal, the *Limitations in The entry of Foreigners* was the dimension with more relative weight to determine the inclination to *Changing Daily Routines and Travel Plans*.

The acceptance of *Limitations in the Entry of Foreigners* and the belief that *Citizens and Tourists are Potential Victims* was found to be statistically significant and positive for Portugal but was not significant for Egypt and Turkey. On the other hand, the relationship between the acceptance of *Limitations in the Entry of Foreigners* and *Nervousness Regarding the Disease* only proved to be significant, and positive, for Egypt. Again, this dimension of the “Acceptance of Restrictions and Measures” had the highest relative impact in the explanation of the belief that *Citizens and tourists are potential victims* for Portuguese respondents, according to the beta coefficients ([Appendix 3](#)).

The relationship between the acceptance of *Control and Quarantine* and the will of *Changing Daily Routines and Travel Plans* only proved to be significant for Egypt and Turkey, and this association is positive. The regression analysis showed also that the *Control and Quarantine* had the strongest relative influence in the willingness of *Changing Daily Routines and Travel Plans* for those two countries. In the case of Portugal, this model

showed that there was also a significant influence of Control and Quarantine in the disposition of Changing Daily Routines and Travel Plans (Appendix 3). The relationship between the acceptance of Control and Quarantine and the belief that Citizens and Tourists are Potential Victims proved to be only significant, and positive, for Portugal. The association between the acceptance of *Control and Quarantine* and *Nervousness Regarding the Disease* was not found to be statistically significant for any of the analyzed countries.

Regarding *Repatriation* and the will of *Changing Daily Routines and Travel Plans*, the association only proved to be statistically significant for Egypt, and was positive. The association that established between the acceptance of the *Repatriation* measure and the belief that Citizens and Tourists are Potential Victims proved to be statistically significant for all three countries. This association was stronger for Egypt though. Also, the regression model reinforced those results, as it proved that amongst the four dimensions of “Acceptance of Restrictions and Measures,” the *Repatriation* had the highest relative influence in the belief that Citizens and Tourists are Potential Victims for Turkey and Egypt (Appendix 3). However, an increase in the acceptance of *Repatriation* is accompanied by a decrease in the belief that Citizens and tourists are potential victims. The relationship between the acceptance of the *Repatriation* measure and the *Nervousness Regarding the Disease* did not prove to be statistically significant for any of the analyzed countries.

The acceptance of *Medical Examination* and the inclination of *Changing Daily Routines and Travel Plans* proved to be statistically significant, and positive, for Egypt and Portugal. There was no significant association for Turkey. However, the acceptance of the *Medical Examination* measure and the belief that *Citizens and Tourists are Potential Victims* only proved to be statistically significant for Portugal and Turkey, and it was a positive association. The relationship between the acceptance of Medical Examination and the feeling of *Nervousness Regarding the Disease* only revealed to be statistically significant, and positive, for Portugal. The regression model confirmed these results, since among all the dimensions of the “Acceptance of Restrictions and Measures” factor, in the case of Portugal, Medical Examination showed the strongest impact in the *Nervousness Regarding the Disease* (Appendix 3).

4.3 Influence of country of residence in the “safety perceptions in daily life and future plans” and “acceptance of restrictions and Measures”

The Kruskal–Wallis test was used to assess whether or not the “Safety Perceptions in Daily Life and Future Plans” and the “Acceptance of Restrictions and Measures” depended on the individuals’ country of residence. As for the “Safety Perceptions in Daily Life and Future Plans,” it was found that the *Changing Daily Routines and Travel Plans* does not depend significantly on the country of residence (Kruskal–Wallis test, $p = 0.567$). The same is true for the belief that *Citizens and Tourists are Potential Victims* (Kruskal–Wallis test, $p = 0.222$). *Nervousness Regarding the Disease* was found to depend significantly on the individuals’ country of residence (Kruskal–Wallis test, $p = 0.000$). Portuguese feel less nervous about the threat compared not only to the Turkish ($p = 0.002$) but also to the Egyptians ($p = 0.000$).

The level of “Acceptance of Restrictions and Measures” also changed depending on the respondents’ country of residence. It was found that the acceptance of *Limitations in the Entry of Foreigners* was significantly influenced by the country of origin (Kruskal–Wallis test, $p = 0.001$) (Figure 1). Turkey residents have higher levels of acceptance of *Limitations in the Entry of Foreigners* compared to Egyptians ($p = 0.003$) and Portuguese ($p = 0.008$). The acceptance of the *Control and Quarantine* measure also depends significantly on the country of residence (Kruskal–Wallis test, $p = 0.001$). The inhabitants of Portugal have higher levels of acceptance than those who lived in Egypt ($p = 0.001$). Regarding the acceptance of *Repatriation*, there were no significant differences between the countries analyzed (Kruskal–Wallis test, $p = 0.118$). Regarding the acceptance of the *Medical*

Figure 1 Multiple comparisons for the Kruskal–Wallis test: comparisons between pairs of country of origin

Examination, there were significant differences between the countries (Kruskal–Wallis test, $p=0.000$). The Portuguese have a lower level of acceptance than that of the Turkish ($p=0.000$) and of the Egyptians ($p=0.000$). Turkey residents, in turn, have lower acceptance rates than the Egyptians ($p=0.005$).

5. Conclusions and implications

The main goal of this study was to analyze how residents in three important receiving countries have accepted the safety measures imposed by their governments and its impacts of residents' lives and plans for the future. The study focused specifically on the younger generations, Y and Z, taking into account that those will constitute the largest portion of the tourism markets not only as consumers but also as part of the receiving communities.

The results indicate that COVID-19 has increased international public concern, that traveling is now perceived as somehow risky and, that the pandemic has reduced tourism travel plans for the followings months. In addition, it has raised health and safety concerns among tourists. According to our research objective, it is important to highlight three important aspects. First, although the residents' attitudes toward safety measures and the impacts they have on their daily lives and their plans are closely linked to behavioral outcomes, no studies have been yet conducted on the existence of this relationship in the context of these three countries. Therefore, this cross-cultural study provides a new and important research case on the behavioral aspect of safety measures and on their impacts on residents' daily routines and future plans. Second, acceptance of safety measures and their impact on locals are multifaceted and different aspects can lead to different behavioral consequences in different landscapes. This cross-cultural study was able to show that the residents' attitudes toward safety measures and their impacts on their daily lives and their plans depend on cognitive and affective patterns, as well as on their social, political and cultural environments. In a world characterized by globalization and international cooperation, intercultural research is an important tool to facilitate the understanding between people and cultures by enabling institutions to manage and control the aspect related to safety measures and their impacts on people's daily routines and future plans in different social and cultural contexts.

5.1 Theoretical implications

This study adds to the development of studies on the impacts of health risks in tourism activity, specifically on the safety measures adopted and their impacts on local receiving communities. It shows that the current pandemic is severely affecting the daily lives and plans for the future of citizens and tourists, which is in accordance with previous studies ([Bostan et al., 2020](#); [Depoux et al., 2020](#); [Dolnicar and Zare, 2020](#); [Gates, 2020](#); [Gössling et al., 2020](#); [Kwok et al., 2020](#); [Li et al., 2020](#); [Nazneen et al., 2020](#); [Qiu et al., 2020](#); [Sheresheva, 2020](#); [Yang et al., 2020a](#); [Yıldırım et al., 2020](#)). In the discourse around the influence of perceived risk on tourists' travel decisions ([Nagai et al., 2020](#)), the actual and real risk brought by COVID-19 made the researches to question the tourism industry future.

The severity and extent of this global crisis make it an event to be remembered for a long time. The memorable historical events are identified to have a significant influence on the lives, preferences, attitudes and behaviors of young people ([Meredith and Schewe, 2002](#)). The members of Generations Y and Z feel the impacts of COVID-19 in their daily lives and future plans according to three dimensions: Citizens and Tourists are Potential *Victims*, *Nervousness Regarding the Disease* and *Changing Daily Routines and Travel Plans*. The residents in Egypt, Portugal and Turkey understand the restrictions and measures imposed by their national governments regarding the pandemic in four dimensions: *Control and Quarantine*, *Medical Examination*, *Limitations in the Entry of Foreigners* and *Repatriation*.

In general, the results show that young residents from Egypt, Portugal and Turkey agree with the measures and restrictions their respective governments have imposed in the context of the pandemic. Nevertheless, this study findings indicate that the different measures taken by the three governments had different impacts on the safety perceptions in younger generations' daily lives and plans.

The evidence clearly shows that the residents in Turkey show higher levels of agreement than the Egyptians and the Portuguese. This is maybe connected with the fact that the Turkish Minister of Health daily broadcasted public speeches on national TV channels and used social media platforms to effectively communicate information about the protective measures including "moral persuasion" to convince the public through rhetorical appeals aiming at strengthening voluntary compliance (e.g. "stay at home," self-quarantine and social distance) ([Bakir, 2020](#)). This reality proves that simple but repeated health education

through social media is important to promote protective behavior, especially for the young generations always connected, confirming previous research ([Kwok et al., 2020](#)).

Besides, the citizens of the three analyzed countries indicate that the COVID-19 pandemic had a huge impact on their daily lives and plans; once again, there is a pattern that shows that the young citizens of Turkey are more concerned with the pandemic effects than the Egyptian. Portuguese are those who are less concerned with said effects. This interesting result shows that the younger generations in Turkey are more concerned with the disease. The reason for this concern is exactly related to the fast and indiscernible transmission degree of COVID-19, as well as the morbidity and mortality rates ([Ahorsu et al., 2020](#)). This finding also explains why they are more willing to accept the restrictions imposed, in a sense because they feel that those measures will help control the disease. The growing number of COVID-19 related cases that placed Turkey in the list of the 15 countries most affected by the outbreak is surely a sign of the severity of the situation they are witnessing firsthand. Besides, a long-winded communicative strategy as a political tool was presented in Turkey to influence public behavior, attitudes and decisions, presenting the COVID-19 pandemic as an existential “threat” and “enemy” to be “dealt with” through “solidarity.” Therefore, a set of key policy tools became more effective ([Bakir, 2020](#)). In contrast, Portuguese youngsters feel less comfortable with the restrictive measures because are less concerned with the disease. This fact confirms the existence of carelessness patterns and a certain difficulty to accept self-isolation and social distancing that the European young people have to face nowadays.

The level of acceptance of the restriction measures imposed by national governments is also quite different among the young residents of the three countries. Turkish younger generations show higher levels of acceptance than the Portuguese or the Egyptians when they were asked to give their opinion on Limitations in the Entry of Foreigners. [Bostan et al. \(2020\)](#) also found that those in the age group of 29 and below in Turkey were more sensitive and more likely to take protective measures than other groups. An interesting and surprising result is the fact that for the Portuguese young residents this specific measure was so impactful, Limitations in the Entry of Foreigners revealed to be the dimension that had the highest weight to determine the willingness of Changing Daily Routines and Travel Plans and the belief that Citizens and tourists are potential victims. This can be explained by the 900 years of history of a people that opened up to the world from an early age and that is used to be visited by inhabitants of various nations without any kind of restrictions or visa ([Henley/IATA, 2020](#)). The country was one of the first signatories of the Schengen agreement in 1985 and belonged to the first group of countries of the EU. During the lifetime of Portuguese Millennials and Gen Z's they never witnessed the boarder's closure before, explaining the strong influence of the specific measure.

On the other hand, the Egyptians exhibit the highest levels of acceptance for Medical Examination, followed by the Turkish respondents. This result can be derived from the fact that the Egyptian government dealt severely with the epidemic to avoid the disease spread in a population above 102 million. With a low number of hospitals and doctors, the best solution was to use security forces to stop people on the streets to be examined ([Gamal, 2020](#)). The Portuguese show the lowest level of acceptance of Medical Examination, furthermore this specific dimension showed a high impact in explaining the Nervousness Regarding the Disease. Again, this reveals the difficulty of the young generations in Portugal to accept more restrictive and invasive measures provoking further stress regarding the disease.

Additionally, the Portuguese young residents are more willing to accept the Control and Quarantine measure than the Egyptians are. Control and Quarantine was the first measure that most Eastern European countries imposed after the negative reality of Italy, the most affected European country in the first pandemic phase. This measure was considered necessary and the only one possible to contain the disease spreading; this can explain the

high acceptance by the Portuguese youngsters. Even though the results showed the control and quarantine measure revealed to be very significant in the relationship with Changing Daily Routines and Travel Plans dimension for the three countries. This indicates the fact that the younger generations have been confronted during their lifetime with various epidemic and pandemic situations, so they believe that control and quarantine will last over time.

Globally, the level of acceptance of the measures and restrictions imposed by the pandemic is positively associated with the impacts that COVID-19 will have on the safety perceptions of the young residents of the three countries and that will affect their daily life and their plans for their future. The results indicate a negative association between the Repatriation measure and the belief that Citizens and Tourists are Potential Victims. This result shows that the younger generations in the three countries believe that the mobility of citizens should be avoided, since, in their opinion, it will have a direct and negative impact on the spread of the disease among citizens and tourists alike.

Additionally, these results are in line with previous research studies since they stress that the health risks perceived by tourists due to the COVID-19 pandemic have a significant negative impact on their decision to travel (Engle *et al.*, 2020; Fong *et al.*, 2020; Kwok *et al.*, 2020; Li *et al.*, 2020; Nazneen *et al.*, 2020; Qiu *et al.*, 2020). This became evident, as the young residents of Egypt, Portugal and Turkey have recognized that the COVID-19 pandemic is affecting not only their daily lives but also their safety perception and travel plans.

5.2 Managerial implications

The DMO and the stakeholders of the tourism industry must be prepared for the post-COVID environment. There are different scenarios for the sector recovery, new challenges and standards to be imposed, who are more likely to travel, which products and services will change. Therefore, stakeholders should be able to create different action plans for each scenario, which will be implemented after recovery.

The effect of lockdown and restricted mobility on the touristic earnings of local businesses is evident. In spite of everything, the crisis also provided an opportunity for these businesses to become connected with their respective local community. With the absence of tourists, the food and hospitality services reframed their activities by providing accommodations to commuting health workers and meals for the local population. The revenue streams that were not embedded within the essential economy of host communities are now being revamped (Lapointe, 2020). However, the sustainability of any solution would depend on the measures that governments are taking to respond to the health and economic needs of the local communities. In any case, all crises come with a prospect, that is, to contemplate and overhaul the existing systems.

The current crisis triggered by the new coronavirus is seriously affecting the tourism industry. However, managers should look at this crisis as a rare opportunity to rebuild, restructure and redirect the global tourism system more so it can meet the SDGs (Brouder, 2020; Gössling *et al.*, 2020) by reconnecting tourists with the receiving communities (Lapointe, 2020) and giving due priority to the wellbeing and balance of both (Higgins-Desbiolles, 2020), putting the emphasis on safety in their marketing strategies (Wang and Lopez, 2020). People have to realize that remodeling tourist destinations should not be achieved by raising more walls that will further isolate communities. This global issue can be resolved, if people and communities are capable of adopting a global mindset and work together. A certain kind of tourism involving higher control and strict health measures will have to be implemented at least until we find a cure for the virus. However, the consequences of this outbreak may have a long-lasting effect on tourism activities even

after the pandemic has ended. The restructuring and revamping of the tourism industry should focus much more on inclusivity than exclusivity.

To make this change possible, researchers and managers should work together more than ever before. Moreover, to make this change possible, researchers and managers should work together more than ever before. This engagement would help in the identification and anticipation of new challenges and their corresponding preemptive measures. These strange times we are going through raised several questions: will the pandemic support nationalism and create tighter borders? How are local communities facing the changes occurring in their lives and what are the impacts of those alterations on their level of acceptance of tourists? Will the concern with safety during the pandemic create more inequalities in terms of tourist acceptance in travel destinations? Will tourism communities accept tourists after a period when the travel industry was the main vehicle of contagion? How will tourism demand react to the sanitary and health requirements? Will domestic tourism have a significant impact on the recovery of destinations? Will embedding the tourism business in local economies balance the economic needs of local businesses that are essential for their survival in the end? These and many other questions need an answer to help tourism destinations and organizations become more resilient and sustainable (Dahles and Susilowati, 2015; Orchiston *et al.*, 2016) and to recover from this crisis in a sustainable way (Reddy *et al.*, 2020).

The results of this study bring some light on how local communities, specifically the younger generations, are facing this pandemic period and on the impact it has on the way they face daily life, future plans and on their level of acceptance of a sector as important as tourism. The outcome of this study is ideal to pave the way for policy-makers in the tourism industry because it presents experiences from Generations Y and Z members, future customers and tourist products consumers, but also from receiving communities. The results indicate that destination managers should take into account that young residents are willing to accept the measures and restrictions imposed by national governments in different ways and that this will have significant impacts on labor markets, demand patterns and social dynamics.

Due to COVID-19, the safety concern while traveling is brought to the surface as the central concern. In this scenario, the challenge for the tourism industry would be to bring back tourists' travel confidence by introducing measures that ensure their safety against the present health crisis. The skepticism brought by the pandemic will make tourists question not only the hygiene conditions of the travel destinations but they may also be looking for clarity regarding emergency services and general infrastructure. Now the tourists may be looking for the industry to answer their queries and concerns beyond the services and hospitality that they are offering. Therefore, the managers in the tourism industry may be required to work with the government at the national and local levels to address the concerns that may not be directly under their domain but are affecting the industry due to new demands of tourism in the view of COVID. They also have to engage more with the local community to create an atmosphere of trust for the tourists.

In this line, the image of the destination should also be re-positioned taking into account safety, health and hygiene requirements. All stakeholders should also ensure that they have a risk and crisis management plan and a sound financial structure to strengthen its future sustainability.

5.3 Implications for policymaking

The COVID-19 disease has entered into a new next phase that governments and the health institutions have branded as the second wave of coronavirus. Now, the challenge ahead is how to minimize the spread and to save vulnerable lives. Notably, around the globe, each country has implemented a unique way of handling the second wave of COVID-19. For instance, according to The Guardian report, twenty mainland European nations have

implied “varying measures to control the spread of COVID-19” including “mandatory mask-wearing,” “restrictions on bars, restaurants and gatherings” (The Guardian, 15 October 2020). So far, scientists and researchers have been abortive to develop a vaccine to cure the COVID-19 virus. Henceforth, for many social scientists, the best remedy to deal with the coronavirus is “prevention” (Casadevall and Pirofski, 2020; Courtet, 2020; Sanders, Monogue *et al.*, 2020).

Although, prevent seems a useful strategy, however in context to the younger generations some critics believe that they are not taking enough measures to stop the spread. Many critics endorsed the view that the irresponsible behaviors of young people accelerated the disease. Reports of the World Health Organization concludes that most patients admitted to hospitals in America and Italy are young people in their twenties and thirties (Guina, 2020). However, in contrast, some voices argue that even though the younger generations are accused of the spread of the virus in some vicinities, however, “they are bearing the greatest burden of poverty and the brunt of the transmission a risk that comes with keeping the economy going, all with little help insight” (Renner, 2020).

This study finding can help policymakers and relevant officials to better understand the links between certain government demographic and safety measures and their perception by local communities, especially the younger generations. The results presented can enable governments to develop strategies to promote psychologically resources that can help young people participate in prevention activities and develop effective ways to deal with the COVID-19 pandemic.

Social attitudes can change over time. Therefore, authorities must adopt a transparent and informative attitude to maintain and even strengthen social trust among the young generation and the media should broadcast about COVID-19 paying attention to social psychology. Perhaps the most crucial thing is to provide information or take action to strengthen social trust associated with economic measures (Bostan *et al.*, 2020).

5.4 Implications regarding the city and urban tourism

The social distancing measures of COVID-19 have turned tourism into a 6-feet tourism. The social detachment coupled with people’s fear of large crowds is affecting urban tourism significantly. For safety in social encounters and spaces, the mandatory 6 feet distance is required to be maintained. This, in turn, is reducing the usable spaces in tourist attractions, hotels and restaurants. Tourism destinations, cities and historical centers and recreation spaces were places highly sought by tourists, consequently adding the revenues of tourism organizations. The introduction of empty spaces will have financial consequences that may affect both the industry and tourists. The cost of business is increasing for all the stakeholders. With the increased cost and new expectations from tourists, the tourism industry has to identify its unique selling proposition to attract and engage tourists. Furthermore, because of the resetting nature of the COVID-19, a new design, more sustainable policies and strategies for the city and urban planners through a participatory approach are required.

Since Millennials are known for their volunteerism (Tuglan and Martin, 2001), by actively involving them in policy-making and community-led initiatives, sustainable measures regarding tourism can be taken. To revive tourism, the urban tourism planners would be required to reach a compromise of a win-win nature for tourists, the tourism industry and the local community.

5.5 Limitations and further research

While there is still much uncertainty and discomfort in the investigation of risk perception, one conclusion is unquestionable: instead of assessing risk using a single formula, people

generally use a set of multiple characteristics, many of which have a standard meaning. Future studies are essential to bring further clarity to the topic.

One of the limitations relating to the empirical work is that a larger sample with respondents from other generations would possibly allow for a better contrast between the empirical results. Further research on the generational groups and on their behaviors related to the tourism activity is crucial (Seabra *et al.*, 2020a). Additionally, other countries can also be compared and a longitudinal study could bring a more in-depth understanding of the COVID-19 crisis assessment. Finally, the antecedents and consequences of the acceptance levels of the measures, restrictions and safety perceptions should also be considered. It would be important to assess such issues as the perceived impacts on tourism, the perception of the quality of life, other travel risks beyond health and pandemics, etc.

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Statement of contribution. This cross-cultural study contributes to deepen the research on COVID-19 pandemic impacts, specifically in younger generations from three important receiving tourism markets: Egypt, Portugal and Turkey. Results show that the residents' attitudes toward safety measures and their impacts on their daily lives future plans depend on cognitive and affective patterns, as well as on their social, political and cultural environments. It offers a social science perspective mainly on geography, marketing and management. the research focus specifically on the consumer behavior in the presence of health risks with the generational segmentation approach. The outcomes help policy-makers in the tourism industry presenting experiences from Generations Y and Z members, future customers and tourist products consumers, and also part of receiving communities. Young residents are willing to accept the measures and restrictions imposed by national governments in different ways and that this will have significant impacts on labor markets, demand patterns and social dynamics.

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Appendix 1

Table A1 Country of residence * Safety Perceptions in Daily Life and Future Plans Scale from 1 (totally disagree) to 5 (totally agree)

Item		1(%)	2(%)	3(%)	4(%)	5(%)
Tourists are likely to be victims of coronavirus	Egypt	7.80	0.90	4.30	8.60	78.40
	Portugal	0.90	5.20	6.90	17.20	69.80
	Turkey	4.30	3.40	12.10	11.20	69.00
	Total	4.30	3.20	7.80	12.40	72.40
Normal citizens are likely to be victims of coronavirus	Egypt	8.60	0.00	6.90	13.80	70.70
	Portugal	0.00	2.60	12.90	15.50	69.00
	Turkey	1.70	6.90	16.40	6.90	68.10
	Total	3.40	3.20	12.10	12.10	69.30
I have been bothered and feel nervous because of my fear of coronavirus	Egypt	12.10	13.80	19.00	8.60	46.60
	Portugal	11.20	18.10	31.00	26.70	12.90
	Turkey	6.90	11.20	14.70	30.20	37.10
	Total	10.10	14.40	21.60	21.80	32.20
I have had trouble sleeping because of my fear of coronavirus	Egypt	37.90	21.60	20.70	5.20	14.70
	Portugal	58.60	17.20	14.70	7.80	1.70
	Turkey	41.40	19.00	19.80	6.90	12.90
	Total	46.00	19.30	18.40	6.60	9.80
I am thinking about changing many aspects of my life and routines because of my fear of coronavirus	Egypt	11.20	8.60	22.40	15.50	42.20
	Portugal	16.40	17.20	17.20	26.70	22.40
	Turkey	11.20	14.70	25.90	23.30	25.00
	Total	12.90	13.50	21.80	21.80	29.90
I am thinking about changing travel or vacation plans because of my fear of coronavirus	Egypt	14.70	13.80	12.90	4.30	54.30
	Portugal	12.10	16.40	12.90	19.00	39.70
	Turkey	6.90	6.00	13.80	23.30	50.00
	Total	11.20	12.10	13.20	15.50	48.00
I need more information on how to protect myself from coronavirus	Egypt	11.20	9.50	18.10	12.10	49.10
	Portugal	11.20	25.00	23.30	19.80	20.70
	Turkey	20.70	19.00	26.70	19.80	13.80
	Total	14.40	17.80	22.70	17.20	27.90
I am concerned that I or someone in my family could be a victim of coronavirus	Egypt	11.20	5.20	6.90	7.80	69.00
	Portugal	1.70	2.60	6.00	22.40	67.20
	Turkey	12.90	13.80	23.30	18.10	31.90
	Total	8.60	7.20	12.10	16.10	56.00

Table A2 Country of residence * Acceptance of Restrictions and Measures Scale from 1 (Definitely No) to 5 (Definitely Yes)

Item		1(%)	2(%)	3(%)	4(%)	5(%)
More control in all borders	Egypt	6.90	6.00	6.90	7.80	72.40
	Portugal	2.60	1.70	6.90	14.70	74.10
	Turkey	3.40	1.70	3.40	10.30	81.00
	Total	4.30	3.20	5.70	10.90	75.90
Mandatory quarantine in case where the disease is diagnosed	Egypt	8.60	6.90	1.70	6.00	76.70
	Portugal	0.00	0.00	5.20	11.20	83.60
	Turkey	2.60	0.90	4.30	6.00	86.20
	Total	3.70	2.60	3.70	7.80	82.20
Obligation of all citizens to be examined by medical teams	Egypt	6.90	4.30	13.80	6.00	69.00
	Portugal	9.50	10.30	26.70	22.40	31.00
	Turkey	3.40	5.20	13.80	16.40	61.20
	Total	6.60	6.60	18.10	14.90	53.70
Possibility for security forces to randomly stop people on the streets to be tested	Egypt	10.30	3.40	19.00	8.60	58.60
	Portugal	27.60	15.50	22.40	17.20	17.20
	Turkey	12.90	11.20	25.00	13.80	37.10
	Total	17.00	10.10	22.10	13.20	37.60
Total closure of borders	Egypt	15.50	5.20	10.30	7.80	61.20
	Portugal	12.90	16.40	12.10	18.10	40.50
	Turkey	10.30	2.60	10.30	4.30	72.40
	Total	12.90	8.00	10.90	10.10	58.00
Limitations in all countries to receive migrants and foreigners	Egypt	7.80	8.60	13.80	11.20	58.60
	Portugal	5.20	8.60	19.80	19.00	47.40
	Turkey	2.60	4.30	10.30	12.10	70.70
	Total	5.20	7.20	14.70	14.10	58.90
Limitations in my country to receive migrants and foreigners	Egypt	9.50	8.60	8.60	7.80	65.50
	Portugal	5.20	9.50	19.00	18.10	48.30
	Turkey	3.40	5.20	7.80	8.60	75.00
	Total	6.00	7.80	11.80	11.50	62.90
Forbidding citizens from areas affected by the disease from entering my country	Egypt	9.50	6.00	8.60	10.30	65.50
	Portugal	7.80	13.80	15.50	19.00	44.00
	Turkey	2.60	5.20	14.70	9.50	68.10
	Total	6.60	8.30	12.90	12.90	59.20
Repatriation of nationals who are in areas affected by the coronavirus	Egypt	10.30	7.80	19.80	10.30	51.70
	Portugal	13.80	16.40	25.00	20.70	24.10
	Turkey	14.70	13.80	23.30	12.10	36.20
	Total	12.90	12.60	22.70	14.40	37.40
Repatriation of foreign citizens to their country of origin when they are diagnosed with the coronavirus	Egypt	21.60	9.50	18.10	7.80	43.10
	Portugal	22.40	15.50	24.10	14.70	23.30
	Turkey	17.20	12.90	21.60	8.60	39.70
	Total	20.40	12.60	21.30	10.30	35.30

Source: The authors

Appendix 2

Table A3 Correlations between the “Safety Perceptions in Daily Life and Future Plans” and “Acceptance of Restrictions and Measures” dimensions. globally and by country

		<i>Changing daily routines and plans for travel</i>	<i>Citizens and tourists are potential victims</i>	<i>Nervousness regarding the threat</i>
Global	Limitations in the entry of foreigners	0.275**	0.122*	0.194**
	Control and quarantine	0.305**	0.123*	-0.005
	Repatriation	0.077	-0.186**	0.049
	Medical examination	0.248**	0.065	0.240**
Egypt	Limitations in the entry of foreigners	0.246**	0.076	0.324**
	Control and quarantine	0.442**	0.098	0.056
	Repatriation	0.270**	-0.220**	-0.008
	Medical examination	0.297**	-0.034	0.065
Portugal	Limitations in the entry of foreigners	0.411**	0.328**	0.132
	Control and quarantine	0.098	0.165*	0.083
	Repatriation	-0.029	-0.180*	0.072
	Medical examination	0.317**	0.179*	0.372**
Turkey	Limitations in the entry of foreigners	0.061	0.016	0.074
	Control and quarantine	0.361**	0.136	0.009
	Repatriation	0.002	-0.173*	0.028
	Medical examination	0.101	0.156*	0.116

Notes: *The correlation is significant at the 0.05 (one-sided). **The correlation is significant at the 0.01 (one-sided)

Source: The authors

Table A4	Multiple linear regression analysis measuring the effects of the dimensions of the “Acceptance of Restrictions and Measures” factor in each “Safety Perceptions in Daily Life and Future Plans” dimensions, globally and by country											
Dependent variable (Y)	Limitations in the entrance of foreigners (x ₁)			Control and quarantine (x ₂)			Repatriation (x ₃)			Medical examination (x ₄)		
	Constant	Coefficient	Beta coefficient	Coefficient	Beta coefficient	Coefficient	Coefficient	Beta coefficient	Coefficient	Coefficient	Beta coefficient	F
Global												
Changing daily routines and plans for travel	−1.36E-17	0.275 ***	0.275	0.305 ***	0.305	0.077	0.077	0.077	0.248 ***	0.248	26.52 ***	
Citizens and tourists are potential victims	3.02E-16	0.122 **	0.122	0.123 **	0.123	−0.186 **	−0.186	−0.186	0.065	0.065	6.34 ***	
Nervousness regarding the threat	5.94E-17	0.194 ***	0.194	0.005	−0.005	0.049	0.049	0.049	0.240 ***	0.240	9.30 ***	
Egypt												
Changing daily routines and plans for travel	−0.044	0.184 **	0.165	0.273 ***	0.322	0.233 **	0.190	0.190	0.272 ***	0.216	11.78 ***	
Citizens and tourists are potential victims	0.161	0.093	0.073	0.137	0.142	−0.352 ***	−0.251	−0.251	−0.087	−0.060	2.31 *	
Nervousness regarding the threat	0.171	0.369 ***	0.336	−0.022	−0.026	−0.052	−0.043	−0.043	0.100	0.081	3.524 ***	
Portugal												
Changing daily routines and plans for travel	0.038	0.457 ***	0.512	0.402 ***	0.247	0.017	0.016	0.016	0.330 ***	0.331	14.23 ***	
Citizens and tourists are potential victims	0.096	0.296 ***	0.426	0.366 ***	0.290	−0.117 *	−0.141	−0.141	0.142 **	0.183	9.04 ***	
Nervousness regarding the threat	−0.181 **	0.140 **	0.202	0.164	0.131	0.079	0.095	0.095	0.291 ***	0.377	6.29 ***	
Turkey												
Changing daily routines and plans for travel	0.048	0.058	0.052	0.352 ***	0.366	0.035	0.044	0.044	0.115	0.112	4.77 ***	
Citizens and tourists are potential victims	−0.115	0.007	0.006	0.130	0.128	−0.119	−0.144	−0.144	0.147	0.137	1.89	
Nervousness regarding the threat	0.105	0.093	0.070	0.016	0.014	0.045	0.048	0.048	0.147	0.120	0.581	
Notes: Model used $Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \varepsilon$; * statistically significant at 0.10; ** statistically significant at 0.05; *** statistically significant at 0.01												
Source: The authors												

Notes: Model used $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$; * statistically significant at 0.10; ** statistically significant at 0.05; *** statistically significant at 0.01

Source: The authors

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