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Tourists' travel confidence under the coronavirus pandemic

LEI LEI

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ABSTRACT

Whether the Covid-19 could kill tourism industry or not depend on the recovery of tourists' confidence. However, only few papers study the impact of epidemics on tourist confidence. From the literature on the impact of Covid-19 to tourism industry, it can be inferred that tourists' confidence must be hit heavily now. The objective of this research is to analyse the attitudes and feelings of tourists to any destinations and pay attention to tourists who planned to travel to Balearic Islands. Through online individual interview and questionnaires, this research will combine correlation analysis method and difference analysis method to explore the potential relationship between different socioeconomic factors with tourists' confidence under the impact of Covid-19. The results show that tourists are not very confident about traveling, but female and British tourists have the highest travel confidence. Qualitative method will be used to explain the results. In the conclusion, based on the previous study, what is positive policy to improve the confidence is discussed.

1. INTRODUCTION

In 2020, Covid-19 undoubtedly changed the lives of people around the world. The rapid spread of Covid-19 in China is mainly due to the transmission of trains, while the international cases are mainly spread by international flights. Some countries reacted to it quickly, such as the United States, that choose to cut off flight routes with China, and the United Kingdom advised citizens not to travel to China for tourist purposes (Rodríguez-Morales, MacGregor, & Kanagarajah, 2020). Similar international transport restrictions were made by governments around the world to some serious affected countries, it had a huge impact on the tourism industry, and tourists' travel confidence was seriously hit by the outbreak of public safety issues.

The main reason to put a research on travel confidence is that the Covid-19 is now the crisis that has the biggest impact on the tourism industry. It has disrupted the cash flow of tourism companies, and many orders have been temporarily cancelled. But at the same time, companies have to pay wages, taxes, and it is very difficult to operate (Yu, 2020). Also, as an important part of the tourism industry, the catering industry has suffered a huge impact due to the sudden decrease in demand (Liang Peng & Xing Lixia, 2020). Tourism as a service industry has the characteristics of simultaneous product and consumption. Tourism products cannot be stored like manufacturing products. This means that under the state of national emergency control, tourism has reached the point of surviving to alive. The consumption of tourism products must require tourists to appear in the destination, otherwise tourism industry employees will not be able to provide products and services. Therefore, the study of tourist confidence has a strong practical significance and is also necessary for the current situation of tourism industry. Also, it is important to discuss the potential recovery of travel confidence to restore tourism in the future.

More specifically, this paper studies the effect of Covid-19 on the travel confidence of tourists, with special attention to tourists who planned to visit the Balearic Islands. Firstly, the paper studies how the Covid-19 is affecting tourists' behavior and how socioeconomic factors link with confidence. Then, the research analyses the attitudes and feelings of tourists to travel to their destinations.

The reason why jobs of people make difference is that the differentiation in socioeconomic position may lead to different anti-risk capabilities among lower class, middle class and upper class (Jalan & Ravallion, 1999). Tourism demand is not a basic need for human survival, but a relatively high level of demand to satisfy people's spiritual enjoyment, and there is a positive correlation between higher income and tourism frequency (Aguilera & Proulhac, 2015). Ages is analysed because, for example, the impact of the Covid-19 on young people is smaller than that of the elderly, and the mortality rate of young people is much lower than that of the elderly. People of different ages may have different fears of the Covid-19 (Young, 2020), this is likely to lead a difference in the situation of recovery in their travel confidence. Gender and nationalities are those variables affecting tourists' behavior, but how to influence the specific results need to be analyzed according to the survey data. The main objective of the research is firstly to test the hypothesis that whether travel confidence is linked to

sociodemographic variables and socioeconomic status. And then to analyse whether there is a relationship between different socioeconomic factors with tourist confidence.

To achieve the objectives, this research obtains information from tourists through questionnaires and interviews. Based on the results, this paper is suspected to provide practical advice in order to actively promote the recovery of tourism after the epidemic, both government and tourism companies will benefit from marketing or policy advice.

2. LITERATURE REVIEW

According to Ayittey & Chiwero (2020), tourism around the world has been greatly affected. As one of the world's major tourist source countries, during the Lunar New Year holiday in 2019, 6.3 million Chinese tourists travelled abroad, but this year the number has dropped sharply. Vietnam's tourism industry is expected to lose as much as \$ 7.7 billion in the first three months of this year. According to McKercher, & Chon (2004), similar to Covid-19, SARS in 2003 had a devastating blow to the Asian tourism industry as a result of the lack of coordination and exchanges between governments, the panic caused by SARS has hit the tourism industry seriously. According to Wilder-Smith (2006), tourists became the medium of SARS transmission, and finally the tourism industry became the victim of infectious diseases. The depression of the international tourism industry caused by the psychological panic of tourists from various countries far exceeds the spread of the epidemic.

As Croce (2016) mentioned, qualitative research methods can be used in research to use sentiment as an index to predict travel confidence and predict travel demand. Hall (2010) believes that tourism is greatly affected by the economy, terrorist attacks, natural disasters, etc. Although tourism can bring foreign exchange income, it may lead to increased income instability. Lim (2017) believes that crisis events will lead to a decline in tourism confidence, but through active marketing activities, this situation can be changed. Carlsen & Liburd (2008) believe that to recover the tourism, Destination Marketing Organization (DMO) can be used for risk assessment and remarketing of tourist destinations. According to Hu Tao (2020), the rise of non-contact services such as the use of 5G technology to develop robot food delivery may reduce the impact of epidemics on tourist confidence.

Niewiadomski (2020) believes Covid-19 has weakened neoliberalism by inverting globalization and stopped the process of space-time compression. The impact on international tourism is far greater than financial crises, wars, terrorist attacks, and natural disasters. The aviation industry in many countries has recovered to a limited extent inbound, but it is difficult to transport international tourists to what they originally intended vacation destinations which indicates that border policy is an important factor in determining international tourists' travel. Wachyuni, & Kusumaningrum (2020) study based on Theory of Planned Behavior (TPB), uses a questionnaire to study how long tourists return to original tourism confidence level after the end of the epidemic, and it measures the anxiety level of tourists by Likert scale. Factors considered in the study include age, gender, marital status, income, education level, lifestyle, personal values, and travel motivation, because those are potential factors that could affect tourist behavior. In addition, the conditions of tourist destinations, such as facilities and resources, have also become a factor to consider. Tourists may have various emotions such as panic, suspicion, anxiety, and nervousness when traveling under Covid-19. While looking at the results of the survey, it turned out that people were very positive about starting tourism after the epidemic. Most people wanted to restart the originally planned tourism within six months. At the same time, natural tourism is favoured, and researchers believe that this may be related to the pressure caused by the long-term isolation of tourists. In addition, short-term tours within five days are more

popular than a long day vacation. Finally, researchers believe that tourist destinations should increase their safety level to gain tourists' trust in health and reduce their anxiety. Prideaux, Thompson, & Pabel (2020) believe that in the future, recovery of tourism should start from domestic tourism first, followed by international tourism. This is because only after the advent of the vaccine and people can be vaccinated universally, it then would be possible for international tourism to totally resume. It can be seen from this that in addition to the state's policy influence on opening borders and international tourists, the corresponding development level of anti-epidemic medicine is also a factor that affects tourists' willingness to travel. In addition, the author believes that the economic recovery model from the impact of Covid-19 will be different from the impact of terrorist attacks or SARS on the regional economy. This recovery of tourism will be affected by the growth of green economy in the long run. In the short term, it will be affected by the speed of global economic recovery. Gössling, Scott, & Hall (2020) compare the impact of the epidemic that occurred in the past on tourism with the impact of Covid-19 on tourism, and believe that the impact of Covid-19 on tourism is unprecedented, exceeding MERS and SARS. Sadly, due to the lack of effective drugs, people can only respond to this outbreak in the oldest way, isolation. The impact of Covid-19 on the tourism industry is due to the increase in global mobility of people in recent years and the dependence on the aviation industry. Therefore, the aviation industry and the accommodation industry have been greatly affected by the epidemic. The aircraft cannot be fully occupied and a series of grounding policies have caused the accommodation industry to receive very few tourists, and then in the tourist destination catering industry and retail industry has also been hit by chains. However, through a survey of tourists from China, the United Kingdom, Spain, and the United States, they found that after the epidemic, their consumption enthusiasm was very high, and their interest in environmental protection and green tourism was increasing. This shows that in the post-epidemic era, tourism with less impact on the environment may become a factor to increase tourists' willingness to travel. Chen, Huang, & Li (2020) use content analysis to analyze the Chinese media's coverage of Covid-19 on tourism. As a result, it is found that tourists look forward to producing more intelligent new tourism products in the future by suppliers, and it also found that their interest in ecotourism is increasing. The reason why Chinese tourists will be interested in intelligent tourism is because in the process of fighting the epidemic, intelligent products have developed a series of lifestyles with reduced contact, such as electronic robot delivery and electronic harvesting cabinets. Some hotel chain managers have also begun to try the feasibility of unmanned hotels. The front desk will set up robots to help visitors who have already booked online to get their room cards. Tourists will not touch any hotel staff from check-in to check-out, which makes tourists feel more security and their travel confidence to destination increases. Yu, Li, He, & Zhou (2020) focus on the connection between the health crisis and the tourism crisis, and through reading a large number of tourists' comments on social media, using dual content analysis to analyze the risk perception of tourists, it was found that under the influence of the media, tourists' feelings have changed from worry to panic, and Asian tourists' awareness of the risk of racial discrimination has increased significantly. The main analysis targets of the paper include some OTA (Online Travel Agency) platforms such as TripAdvisor. And, it turns out that the cancellation of itineraries and air tickets disappointed tourists, but at this time if airlines or travel agencies provide good and convenient

services, it will finally strengthen their brand loyalty and make tourists feel confident with travel to the same destination in the future. Tourists' fear of isolation prompts some people to travel to areas with fewer infections. Some tourists are sceptical of mass media such as newspapers and news, and this distrust is increasing. In short, the life cycle of a health crisis is sharper than the life cycle of a traditional crisis. Korstanje (2011) uses the knowledge of psychology and sociology to explain the theory of risk perception and try to apply it in the field of tourism safety. The researcher believes that the factors that may affect tourists' safety perception are: age, residency, education, professional and personal satisfaction, number of travels done in destination, types of destinations, preferred means of transport, travel history and status, pre-travel payment and booking form, the concept of security and the impact of newspapers or TV shows. Age is related to a person's maturity and the degree of anxiety he feels after leaving the country. Changes in residence, especially if a person has experienced such movements many times before they grown up, decreases the sensitivity of the danger they perceive after leaving the residency. The factor Education represents the degree of tourists' understanding of the destination. The easier it is to obtain information from destination, the more information they obtain from the destination, the lower the danger to the destination they feel about. Tourists who are frustrated at work may feel more anxious about traveling. Tourists who repeatedly arrive at a certain tourist destination experience less anxiety than tourists who first explore an unknown destination. Tourists' preferences on destinations represent their different personalities and habits, which will affect their perception of risk. Transportation also affects the anxiety level of tourists. The 911 terrorist attacks incident used to make tourists feel more anxious about airplane travel for a period of time. It can be imagined that Covid-19 will make tourists feel more anxious about public transportation in confined spaces than usual. Tourists accompanied by family members or friends are less likely to feel anxious, but tourists who have experienced injuries on the road are more likely to be anxious. The payment method will also affect the anxiety of tourists. Some all-inclusive tourists who pay in advance may not be easily anxious. The media and public opinion also affect tourists' perception of the safety of the destination. Facing the impact of the epidemic, different tourists' confidence in tourism is affected by internal and external factors. Lim (2017) points out that when a disaster occurs, tourist confidence and tourist intentions will decline. However, the crisis of Malaysia Airlines did not have much impact on the Malaysian tourism industry, and the tourism industry even grew in that unlucky year. The main measures are to increase tourists' confidence in the destination by raising safety standards and introducing various safety measures, and then to stimulate potential tourists' tourism intentions through marketing methods that sponsor well-known events. Lepp & Gibson (2003) discuss tourism risk perception theory and find some factors that can affect tourists' perceptions of different risks such as health, terrorist attacks, cultural differences, etc. Factors such as travel experience, age, gender, nationality, and travel role have also been the subject of research. The results of the study show that the role of travel is the factor with the largest difference in tourists' perception of health risk. The types of tourist roles refer to the four types of organized mass tourists, independent mass tourists, explorers and wanderers. Generally speaking, the latter two types of tourists are less sensitive to risk perception. This has a very practical reference for marketing. The destinations in United Kingdom once been hurt by infectious diseases such as hand, foot and mouth

disease, which is similar as Covid-19. Through advertising for explorers and wanderers, the marketing results have become more prominent. Akerlof (1978) believes that in the trading market, if the uncertainty of commodity's quality continues to increase, inferior goods will eventually occupy the market. The reason is that the buyer cannot determine the quality of the seller's product. The quality of the product is very uncertain for the buyer, so the buyer is more willing to lower the price and trade at the average quality of the product to avoid loss. It will prevent the seller from charging inferiorly. But sellers who sell second-hand goods are very clear about the quality of their goods. If the price given by the buyer does not meet their psychological expectations, the seller will choose not to sell the goods. As a result, there are fewer and fewer high-quality products in the market, and the phenomenon of bad money driving out good money appears. The dishonesty of some merchants will increase the distrust of the entire market. The result is that it is difficult for buyers to buy good-quality products, and sellers tend to sell more products of poor quality, because of the asymmetry of information, buyers are difficult to judge the true quality of goods during the transaction correctly. For tourist destinations, the higher the trust of tourists in their products, the better the integrity of the merchants selling tourist products, and the lower the uncertainty of product quality, the higher the quality of local tourism development. Viscusi (1978) discusses that in the lemon market, those sellers with higher product quality can continue to stay in the market in a price discrimination manner by paying additional quality certification costs. Khosravi (2020) believes that the public's risk perception is determined by how severity and vulnerability of the disease threats health. Factors such as social background, educational level, values and demographic characteristics all have an impact on it. The results of the study show that older non-white women with higher education are the most willing to take protective measures. In addition, improving information transparency and reporting the epidemic honestly and in a timely manner will effectively reduce public anxiety and increase people's trust to travel. Kourgiantakis, Apostolakis, & Dimou (2020) indicate that Crete relies heavily on tourism as its source of income, and tourism contributes nearly half of the economy. At this stage, when travel restrictions have been partially removed, this article uses online questionnaires to study tourists' travel confidence. The questionnaire asked the respondents' age, gender, marital status, annual income, education level, and whether they were parents. The results show that nearly one-third of tourists directly cancelled their travel plans, and less than one-fifth of tourists intend to continue traveling. Tourists in Greece or closer to the destination are more willing to go to the destination. And the financial situation actually has a little effect on tourists' travel confidence. Tourists prefer private high-end residences, and their enthusiasm for traditional group tours declines. Nearly half of people are unwilling to pay extra for health services. Nguyen, & Coca-Stefaniak (2020) use planning behavior theory to explore how Covid-19 change tourists' views and attitudes on travel planning. The theory is that Covid-19 changes the travel intention of tourists through subjective norm, attitude and perceived behavioural control. The results of the study show that the willingness of tourists to use public transportation has decreased and the popularity of private car travel has increased. In addition, most tourists plan to travel more than half a year when the pandemic ends. Tourists' perception of the crisis obviously affects their travel intentions, and some tourists who are sensitive to the crisis will reduce their travel plans. The young people with higher education level are relatively insensitive to crisis.

Brough, Freedman, & Phillips (2020) examine the behavior of Americans during the Covid-19 epidemic, and believe that low-income people and less educated groups use more public transportation during Covid-19 because they can only afford cheaper transportation. Zhu, & Deng (2020) study, through the establishment of models (risk, risk perception, risk avoidance), analyses different dimensions of risk such as physical risk, psychological risk, cost risk, social risk. The results show that married men are the group most willing to travel. On the one hand, the social pressures in their lives encourage them to have a stronger willingness to travel. On the other hand, men are more inclined to underestimate the risks than women. Marinao, Chasco, & Torres (2012) used a scale of questionnaires and survey to propose the tourist trust model that takes beaches or lakes as destinations and measures the impact of different factors on the trust of tourists. The results suggest that local residents and institutions have a significant impact. In addition, the image of the destination also affects the trust of tourists. For example, the local slogan "Natural Mallorca" will give tourists an impression of expectation and satisfaction. If the tourists are confirmed during the actual travel, their trust to destination will increase. Tourists' familiarity with the destination and the reputation of the destination are also two factors tested. The more familiar a visitor is with a place, the better the reputation and image of the place in his perception, the higher the trust. In order to increase the trust of tourists, all local residents and institutions should be involved. For example, training practitioners, whether he is working in a hotel or a travel agency, because the destination should ensure that tourists receive high-quality services in every aspect of tourism. At the same time, it is necessary to inspire local residents to make them treat visitors more friendly and provide tourists with a kind and warm feeling. Government agencies should fulfil their promises and slogans, maintain the image of destinations, and create a safe environment. In addition, it is possible to improve the familiarity of tourists through social media and local multilingual guides. Jensen, & Svendsen (2016) believe that social trust is a potential factor that affects tourists' perception of destination risk, and the emergence of public authorities such as the police to maintain social order actually makes tourists feel uneasy. The factor that determines whether tourists trust the destination is the friendly local residents in a society. This research will study the confidence of tourists to travel under Covid-19.

3. METHODOLOGY

In this study, since the objective of this research is to study the tourists' confidence travelling under Covid-19, especially to explore the feelings and attitudes of tourists, a questionnaire was developed for collecting basic information and tourists' behaviors. Scales developed by Bearden et al. (2001) and Kim, Dong and Leong (2005) were also adapted in the questionnaire for measuring traveller's confidence and the perception of risk issues. The biggest advantage of the questionnaire survey

method is that time and space restrictions can be ignored; it is very practical in the background of the Covid-19.

Based on the objective, hypotheses have been put forward:

H1. There will be a significant negative correlation between confidence and travel anxiety or perceived risk;

H2. Sociodemographic factors like age, gender, marital and socioeconomic status, will have a relationship with tourism confidence

The questionnaire was designed to meet the requirements of the research hypothesis. It contains 5 parts: (a) sociodemographic information; (b) tourist behaviours, preferences of choices; (c) attitudes towards destination under Covid-19; (d) a Likert scale to measuring tourists' level of confidence; and (e) a Likert scale to measuring perception of risks. The sociodemographic information included questions asking age, gender, education level, jobs, social status, marital status, nationality, and income level, in order to explore how different variables impact different respondent's travel behaviour and confidence under the Covid-19. In the second part of this questionnaire, this research studies respondent's travel habits and preferences: (a) transportation/accommodation way and organizational form in the original plan, (b) motivation of the trip, (c) travel frequency (also to abroad), (d) travel budget, (e) whether they prefer individual or group trip, (f) expected travel duration after the pandemic, and (g) preference on types of tourism products. In the third part of this questionnaire, feelings about the destination under Covid-19 were studied: (a) feelings after discovering more positive cases in destination, and (b) attitudes towards hospital and hotels under Covid-19. In the last parts of this questionnaire, a 22 item with Likert scale was applied to measure tourists' confidence and risk perception. In the scale, 1 indicated that the respondents did not agree with the description of the question, and 5 indicated that the respondents agreed with the description of their feelings. Those items related to confidence were adapted from Bearden et al. (2001) consumer self-confident scale: (a) Tourists' confidence to obtain information, and (b) tourists' confident regarding making personal decisions. Those items related to risk perception applied with Likert scale were adapted from Kim, Dong and Leong (2005): social risk, time risk, financial risk, performance risk, physical risk, psychological risk, and security risk.

Having into account the potential difficulty in finding participants, the snowball sampling method was used. According to Goodman (1961), Snowball sampling is not a probability sampling, and it can help investigators to contact a large number of qualified samples, and can save investigation time. The sample objects may come from acquaintances or online solicitation, and they will recommend the questionnaire to people they know. This method is conducive to quickly find samples. The respondent can choose to be anonymous, which not only protects his or her privacy but also helps this research to obtain real answers.

SPSS 26.0 was used to analyze the data. Descriptive statistics, Pearson correlation analysis, independent sample t-test and one-way ANOVA were used to achieve the purpose of this study. First

of all, the distribution of demographic data of the respondents and the frequency statistics of their tourism situation are studied. Then, the reliability of the scale is analyzed, descriptive statistics and Pearson correlation analysis are carried out to obtain the correlation coefficient of tourism confidence. Using independent sample t test or one-way ANOVA, this paper analyzes the differences of tourism confidence among different demographic variables such as nationality, gender, marital status and age.

Qualitative research method will be used to explain the results of the questionnaire in this research. An individual interview was designed to get deeper information regarding tourists' feelings, perceptions and confidence. The qualitative research method can deeply explore and describe the factors analysed in this research. Internet video was used to communicate with 5 respondents from different countries about the impact of the new outbreak on their confidence.

The questionnaire was distributed in mid-August, and collected 319 valid samples. It was posted on the questionnaire star website, and links were shared with different respondents via email or social media like WeChat and Whatsapp. Initial 40 samples were taken at random, and the respondents then shared the questionnaire with people they knew who meet the requirements of the research. All the questionnaires were completed online. Once participants had completed the questionnaire, the website would automatically turn to a lottery page, and some lucky respondents would receive RMB reward, which is particularly attractive to Chinese respondents. This incentive measure helps to obtain more samples for this study. Some European samples are obtained mainly through a travel agency staff by sending messages to consumers who had made hotel or airline reservations before the outbreak.

4. RESULTS

Descriptive statistics of demographic variables

In the process of travel confidence survey, 340 questionnaires were distributed and 328 questionnaires were returned. At the same time, the invalid questionnaires were disposed and a total of 319 valid questionnaires were obtained. The sample characteristics collected in this questionnaire are shown in Table 1.

Table 1. Descriptive statistics of demographic variables

Variable	Category	n	%
Nationalities	China	103	32.3
	UK	40	12.5
	Germany	31	9.7
	Poland	15	4.7
	France	14	4.4
	Netherlands	12	3.8
	Luxembourg	12	3.8
	Italy	13	4.1
	Belgium	9	2.8
	Greece	9	2.8
	Portugal	7	2.2
	Spain	7	2.2
	Other	47	14.7
Situation of life	Not allowed to go out even for shopping	3	0.9
	Not going out except for shopping or other special needs	22	6.9
	Allow to go out, but social distancing must be maintained for example in restaurant or public transportation	240	75.2
	Allow to go out, no need for social distancing	54	16.9
Gender	Male	168	52.7
	Female	135	42.3
	Don't want to answer	15	4.7
	Other	1	0.3
Age	Less than 26	31	9.7
	26-35	114	35.7
	36-45	138	43.3

	46-55	19	6.0
	Over 55	17	5.3
Education	Below junior high school	13	4.1
	High school or technical secondary school	16	5.0
	College	60	18.8
	Undergraduate	158	49.5
	Master degree and above	72	22.6
Marital status	Single	52	16.3
	Not married but has boyfriend or girlfriend	40	12.5
	Married	206	64.6
	Divorced	21	6.6
Having children	Yes	197	61.8
	No	122	38.2
Occupation	Student	20	6.3
	Civil servants, employees of government	51	16.0
	Employees of state-owned enterprises	40	12.5
	Small or big private company employees	67	21.0
	Self-employed persons	25	7.8
	Freelancers	32	10.0
	Retired people	40	12.5
	Part-time worker in small or big company	13	4.1
	I do not have a job	31	9.7
Part-time / full-time	Part-time	39	12.2
	Full-time	280	87.8
Monthly income	Below 500 euros	15	4.7
	500-800 euros	23	7.2
	800-1200 euros	44	13.8
	1200 -1600 euros	51	16.0
	1600 -2200 euros	72	22.6
	2200 -2800 euros	63	19.7
	2800 -3600 euros	37	11.6
	3600 -4600 euros	9	2.8
	Above 4600 euros	5	1.6

Source: own elaboration from survey

According to table 1, the number of Chinese respondents in the survey is the largest, accounting for 32.3%. Then, UK tourists accounting for 12.5%, and German tourists ranked third, accounting for 9.7%. From the perspective of situation of life, 75.2% of the respondents are allowed to go out, but social distance must be maintained for example in restaurant or public transportation, followed by those who are allowed to go out and no need for social distance, accounting for 16.9%. Only a few people are not allowed to go out even for shopping, according to the record of the websites, those 3 respondents are from Xinjiang province, the whole area was sealed off in August because of the outbreak, and daily necessities were delivered to everyone's door by volunteers. From the perspective of gender, male accounted for 52.7%, female accounted for 42.3%, the number of male respondents was significantly higher than that of female. From the perspective of age, the number of tourists aged 36-45 was the largest, accounting for 43.3%, followed by tourists aged 26-35, accounting for 35.7%. From the perspective of education level, the number of tourists with the degree of undergraduate was the largest, accounting for 49.5%, followed by the number of people with master degree and above, accounting for 22.6%. From the perspective of marital status, the number of married respondents was the largest, accounting for 64.6%, followed by single tourists, accounting for 16.3%. And 61.8% of them have children. From the perspective of occupancy, small or big private company employees accounted for 21.0%, followed by civil servants and employees of government, accounting for 16.0%. The number of tourists with full-time jobs accounted for 87.8%, and the proportion of part-time tourists accounted for 12.2%. The number of respondents with monthly income ranging from 1600 to 2200 euros is the largest, accounting for 22.6%, followed by 2200-2800 euros, accounting for 19.7%.

Travel habits and preferences of respondents

The frequency statistics were carried out on whether there were tourism plans before the outbreak, whether the epidemic promoted the cancellation of tourism plans, how the number of cases in tourist destinations increased, and the expected tourism product problems in the later stage of the epidemic. The results are shown in Table 2.

Table 2. Respondent's Travel References

Questions Items	Option	n	%
Did you have a travel plan before the outbreak?	Yes	283	88.7
	No	36	11.3
Did corona virus push you to cancel your trip?	Yes	267	83.7
	No	52	16.3
How would you feel if you discover corona virus cases in the destination increase?	Scared	149	46.7
	Anxious	92	28.8
	Uncomfortable	30	9.4
	Normal	16	5.0
	Other	32	10.0

After the epidemic, which types of tourism products would you prefer	Nature sightseeing	160	50.2
	Leisure and entertainment	82	25.7
	Health and wellness	214	67.1
	Ecological vacation	57	17.9
	Culture and art	72	22.6
	Sports	124	38.9
	Other	80	25.1
Questions items	option	n	%
motivation of the trip	Leisure and entertainment	151	47.3
	visiting relatives and friends	119	37.3
	family travel	86	27.0
	wellness	70	21.9
	sports	35	11.0
	ecological vacation	55	17.2
	culture and art	59	18.5
	i have some residence here	99	31.0
	other	40	12.5
travel frequency (Before the pandemic)	Many times in a year	48	15.0
	2 to 3 times in a year	87	27.2
	1 time in a year	106	33.23
	1 time in a few years	78	24.5
Travel frequency abroad (before the pandemic)	Many times in a year	17	5.33
	2 to 3 times in a year	35	11.0
	1 time in a year	71	22.3
	1 time in a few years	196	61.44
Travel budget	Below 200 euros	34	10.7
	200-400 euros	58	18.2
	400-800 euros	127	39.8
	800-1200 euros	65	20.4
	1200-2000 euros	23	7.21
	above 2000 euros	12	3.8

Individual or group trip	Individual travel	137	43.0
	group travel	182	57.0
Travel duration after the pandemic	1 to 3 days	54	16.9
	4 to 7 days	129	40.4
	7 to 14 days	88	27.6
	over 2 weeks	32	10.0
	I don't know	16	5.0
preference on types of tourism products	Nature sightseeing	160	50.2
	Leisure and entertainment	82	25.7
	health and wellness	214	67.0
	ecological vacation	57	17.9
	culture and art	72	22.6
	sports	124	38.9
	Others	80	25.0

Source: own elaboration from survey

According to table 2, 88.7% of the respondents had travel plans before the outbreak of the epidemic, and 83.7% of the respondents cancelled their travel plans due to the epidemic. It can be seen that the epidemic had a great impact on people's tourism activities. When the number of infected cases in tourist destinations increased, 46.7% of the respondents felt scary, 28.8% felt anxiety, and 9.4% felt uncomfortable. Therefore, if the number of infected cases in tourist destinations increases, people will generally feel bad. Health and wellness were the most popular tourism products expected at the end of the epidemic, accounting for 67.1%, followed by nature sightseeing, accounting for 50.2%. In addition, the table show the travel behavior of tourists before and after pandemic.

Reliability Analysis

Cronbach's alpha is used to analyze the reliability of the questionnaire. Cronbach's alpha is the correlation coefficient between the scale and all the scales with other possible items, which is used to test the internal reliability of the questionnaire. The Cronbach's alpha coefficient is between 0 and 1, and if the Cronbach's alpha coefficient is greater than 0.9, it indicates that the questionnaire is very reliable. If it is between 0.6 and 0.9, it means that the questionnaire is relatively reliable. If it is between 0.3 and 0.6, it means that the questionnaire is generally credible (Victor & Ronald, 2010)

SPSS 26.0 software was used to analyze the reliability of information acquisition, personal outcomes design, making, self-confidence, travel anxiety, and perceived risk. The results of reliability analysis are shown in Table 3.

Table 3. Reliability analysis results and descriptive statistics of each variable

Variable	Number of items	Cronbach's alpha	N	Minimum	Maximum	Mean	Std. Deviation
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Information Acquisition	4	0.877	319	1.00	5.00	2.93	1.16
Personal outcomes design making	7	0.775	319	1.71	5.00	2.94	0.86
Self-confidence	11	0.894	319	1.55	5.00	2.94	0.93
Travel Anxiety	5	0.816	319	0.80	4.80	3.01	1.03
Perceived Risk	7	0.889	319	1.43	4.71	3.01	1.01

Source: own elaboration from survey

It can be seen from table 3 that all the coefficients assessing reliability are higher than 0.6, which can be used to analyze the data quality. The scoring method is that very dissatisfied = 1 point, dissatisfied = 2 points, generally = 3 points, satisfied = 4 points, very satisfied = 5 points.

From Table 3, we can see that the average scores of Information Acquisition, Personal outcomes design making, and Self-confidence are 2.93, 2.94, and 2.94 respectively, which are all close to 3, indicating that the investigator's Information Acquisition, Personal outcomes design making, and Self-confidence level are not very high. The mean values of Travel Anxiety and Perceived Risk are 3.01 and 3.01, respectively, indicating that the investigator has a certain degree of travel anxiety and perceived risk.

The correlation between Information Acquisition, Personal outcomes design making, Self-confidence, Travel Anxiety, and Perceived Risk was analyzed using Pearson correlation analysis method. The results are shown in Table 4.

Table 4. Pearson correlation analysis results

Variable	Information Acquisition	Personal outcomes design making	Self-confidence	Travel Anxiety	Perceived Risk
Information Acquisition	1.000				
Personal outcomes design making	0.832**	1.000			
Self-confidence	0.945**	0.968**	1.000		
Travel Anxiety	-0.746**	-0.670**	-0.734**	1.000	
Perceived Risk	-0.416**	-0.367**	-0.405**	0.687**	1.000

Source: own elaboration from survey

Note: ** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).

It can be seen from Table 4 that there is a significant negative correlation between Self-confidence and Travel Anxiety. That is, the higher the degree of tourist Travel Anxiety, the lower the Self-confidence.

The Pearson correlation coefficient between Self-confidence and Perceived Risk is $R=-0.416<0$, and the significance is $p<0.05$, indicating that there is a significant negative correlation between Self-confidence and Perceived Risk. That is, the higher the degree of tourists' Perceived Risk, the lower the Self-confidence. By comparing the size of the coefficients, the degree of correlation with Self-confidence can be obtained. The descending order is Travel Anxiety, Perceived Risk.

Difference analysis

Table 5. Analysis results of differences in tourism confidence in different countries

Nationalities	N	M	SD	F	p
China	103	2.95 ab	0.99		
UK	40	3.22 bc	0.79		
German	31	2.87 ab	0.70		
Poland	15	2.00 a	0.00		
France	14	2.58 ab	0.87		
Netherlands	12	2.81 ab	0.93		
Luxembourg	12	2.77 ab	0.85	4.613	<0.001
Italy	13	3.99 c	0.76		
Belgium	9	2.58 ab	0.88		
Greece	9	2.63 ab	0.97		
Portugal	7	3.27 bc	0.83		
Spain	7	3.86 c	0.37		
Other	47	2.86 ab	0.95		

Source: own elaboration from survey

Note: a, b, c represent a subset of the same kind.

Explanation of Significant difference abc annotation:for example, if the male group is marked with ab, which means that there is no difference in travel confidence between the male and female with the female group, Also with group of don't want to answer and other group. If the female group labeled b and the group of don't want to answer and other group labeled a, indicating that the two groups have the significant differences in travel confidence. This will also be applied in the following table.

Since the question about tourist confidence in this questionnaire is designed as a scale question, the respondent has been subjectivity in answering the question. As a result of it, there is no need to judge whether the conditions of the analysis of variance are met, and the one-way analysis of variance is directly used. It can be seen from Table 5 that the significance of the one-way analysis of variance in

tourism confidence of different countries is $p < 0.05$, indicating that there are significant differences in tourism confidence of different countries. It can be seen from the post-hoc that Poland scored the lowest on tourism confidence, while Spain and UK scored the highest on tourism confidence.

Table 6. Analysis results of differences in tourism confidence with different living conditions

Situation of life	N	M	SD	F	p
Not allowed to go out even for shopping	3	3.36	0.55		
Not going out except for shopping or other special needs	22	3.02	1.00		
Allow to go out, but social distancing must be maintained				0.617	0.604
for example, in restaurant or public transportation	240	2.90	0.92		
Allow to go out, no need for social distancing	54	3.04	0.96		

Source: own elaboration from survey

It can be seen from Table 6 that the one-way analysis of variance in tourism confidence of tourists with different living conditions is not statistically significant ($p > 0.05$), indicating that there is no significant difference in tourism confidence of tourists with different living conditions.

Table 7. Analysis of differences in tourism confidence by gender

Gender	N	M	SD	F	p
Male	168	2.79 ab	0.95		
Female	135	3.16 b	0.87	6.924	0.001
Don't want to answer and other	16	2.62 a	0.90		

Source: own elaboration from survey

It can be seen from Table 7 that the significance of one-way analysis of variance on tourism confidence of tourists of different genders is $p < 0.05$, indicating that tourists of different genders have significant differences in tourism confidence. Women have the highest scores on tourism confidence.

Table 8. Analysis of differences in tourism confidence by age

Age	N	M	SD	F	p
Less than 26	31	3.13	1.05		
26-35	114	2.93	0.95		
36-45	138	2.99	0.90	1.926	0.106
46-55	19	2.64	0.79		
Over 55	17	2.50	0.86		

Source: own elaboration from survey

It can be seen from Table 8 that the significance of one-way analysis of variance on tourism confidence of tourists of different ages is $p > 0.05$, indicating that there is no significant difference in tourism confidence of tourists of different ages.

Table 9. analysis of differences in tourism confidence by educational background

Education	N	M	SD	F	p
Below junior high school	13	3.13	1.02		
High school or technical secondary school	16	3.30	0.70	1.698	0.150
College	60	3.11	0.96		
Undergraduate	158	2.85	0.91		
Master degree and above	72	2.88	0.96		

Source: own elaboration from survey

It can be seen from Table 9 that the significance of the one-way analysis of variance in tourism confidence of tourists with different educational backgrounds is $p > 0.05$, indicating that there is no significant difference in tourism confidence among tourists with different educational backgrounds.

Table 10. Analysis of differences in tourism confidence among tourists in different marital status

Marital status	N	M	SD	F	p
Single	52	3.09	0.92		
Not married but has boyfriend or girlfriend	40	3.11	0.99	1.284	0.280
Married	206	2.87	0.92		
Divorced	21	2.87	0.96		

Source: own elaboration from survey

It can be seen from Table 10 that the one-way analysis of variance in tourism confidence of tourists with different marital status significant $p > 0.05$, indicating that there is no significant difference in tourism confidence of tourists with different marital status.

Table 11. Analysis of differences in travel confidence among having or not having children

Having children	N	M	SD	t	p
Yes	197	2.87	0.93	-1.759	0.080
No	122	3.05	0.93		

Source: own elaboration from survey

From Table 11, it can be seen that tourists show the same confidence, regardless of having children.

Table 12. analysis of differences in tourism confidence among tourists by occupations

Occupation	N	M	SD	F	p
Student	20	3.27 ab	1.08		
Civil servants, employees of government	51	2.58 a	0.82		
Employees of state-owned enterprises	40	3.19 ab	0.95		
Small or big private company employees	67	2.70 a	0.87	3.939	<0.001
Self-employed persons	25	3.00 a	0.88		
Freelancers	32	3.23 ab	0.88		
Retired people	40	2.95 a	0.96		
Part-time worker in small or big company	13	3.66 b	0.43		
I do not have a job	31	2.83 a	0.96		

Source: own elaboration from survey

It can be seen from Table 12 that the significance of the one-way analysis of variance on tourism confidence of tourists of different occupations is $p < 0.05$, indicating that there are significant differences in tourism confidence of tourists of different occupations. It seems that tourists whose occupation is Part-time worker in small or big company score the highest in tourism confidence.

Table 13. analysis of differences in tourism confidence among tourists with different monthly income

Monthly income	N	M	SD	F	p
Below 500 euros	15	3.32	0.90		
500-800 euros	23	2.83	1.03		
800-1200 euros	44	3.17	0.85		
1200 -1600 euros	51	2.92	0.91	0.950	0.476
1600 -2200 euros	72	2.91	0.95		
2200 -2800 euros	63	2.79	0.93		
2800 -3600 euros	37	2.92	0.93		
3600 -4600 euros	9	2.98	1.02		
Above 4600 euros	5	2.75	1.13		

Source: own elaboration from survey

It can be seen from Table 13 that the significance of the one-way analysis of variance on the tourism confidence of tourists with different monthly incomes is $p > 0.05$, indicating that there is no significant difference in the tourism confidence of tourists with different monthly incomes.

Table 14. analysis of differences in tourism confidence of full-time/part-time workers

Part-time / full-time	N	M	SD	t	p
part-time	39	3.35	0.81	3.353	0.001
full-time	280	2.88	0.93		

Source: own elaboration from survey

It can be seen from Table 14 that the independent sample T test significance of full-time/part-time workers on tourism confidence is $p < 0.05$, indicating that there is a statistically significant difference in tourism confidence of full-time/part-time workers. By comparing the mean values, it can be seen that part-time workers have significantly higher tourism confidence than full-time workers.

Characteristics of tourists to Balearic Islands

There were 92 respondents whose destination was Balearic Islands. The characteristics of the sample are shown in Table 15.

Table 15. Descriptive Statistics of Demographic Variables to the Balearic Islands (N=92)

Variable	Category	Frequency	Percent(%)
Nationalities	Italy	2	2.2
	German	30	32.6
	UK	15	16.3
	France	12	13.0
	Poland	13	14.1
	Portugal	1	1.1
	Spain	3	3.3
	Other	16	17.4
Situation of life	Not going out except for shopping or other special needs	4	4.3
	Allow to go out, but social distancing must be maintained for example in restaurant or public transportation	84	91.3
	Allow to go out, no need for social distancing	4	4.3
Gender	Male	66	71.7
	Female	23	25.0
	Don't want to answer	3	3.3
Age	Less than 26	4	4.3
	26-35	37	40.2
	36-45	23	25.0

	46-55	11	12.0
	Over 55	17	18.5
Education	Below junior high school	3	3.3
	High school or technical secondary school	5	5.4
	College	6	6.5
	Undergraduate	46	50.0
	Master degree and above	32	34.8
Marital status	Single	15	16.3
	Not married but has boyfriend or girlfriend	13	14.1
	Married	58	63.0
	Divorced	6	6.5
Having children	Yes	55	59.8
	No	37	40.2
Occupation	Student	3	3.3
	Small or big private company employees	30	32.6
	Employees of state-owned enterprises	9	9.8
	Civil servants, employees of government	14	15.2
	Self-employed persons	5	5.4
	Freelancers	8	8.7
	Retired people	17	18.5
	Part-time worker in small or big company	3	3.3
	I do not have a job	3	3.3
Part-time / full-time	part-time	15	16.3
	full-time	77	83.7
Monthly income	Below 500 euros	6	6.5
	500-800 euros	7	7.6
	800-1200 euros	11	12.0
	1200 -1600 euros	18	19.6
	1600 -2200 euros	17	18.5
	2200 -2800 euros	23	25.0
	2800 -3600 euros	8	8.7
	3600 -4600 euros	1	1.1
	Above 4600 euros	1	1.1

Source: own elaboration from survey

It can be seen in Table 15 that German tourists have the largest number which accounting for 32.6%, followed by UK tourists, accounting for 16.3%. For the situation of life of tourists, the number of people who choose "Allow to go out, but social distancing must be maintained" is the largest, accounting for 91.3%. From the perspective of tourist gender, the proportion of males is 71.7%, and the proportion of females is 25.0%. From the perspective of tourists' age, 36-45 year-old tourists accounted for 40.2%, followed by 26-35 year-old tourists, accounting for 25.0%. From the perspective of education level, the number of people with undergraduate degree is the largest, accounting for 50.0%, followed by Master degree and above, accounting for 34.8%. From the perspective of tourist Marital status, married tourists has the largest number of tourists, accounting for 63.0%, followed by single tourists, accounting for 16.3%. Tourists with children accounted for 59.8%. From the perspective of tourist occupation, small or big private company employees accounted for 32.6%, followed by retired people, accounting for 18.5%. From the perspective of part-time or full-time job, visitors with full-time jobs accounted for 83.7%. From the perspective of monthly income of tourists, the number of people with monthly income of 2200-2800 euros is the largest, accounting for 25.0%, followed by the number of people with 1200-1600 euros, accounting for 19.6%.

The frequency statistics of tourists on whether there were tourism plans before the outbreak of the epidemic, whether the epidemic has prompted the cancellation of the tourism plan, how do the tourists feel about the increase of cases in the tourism destination, and the tourism product problems expected in the later stage of the epidemic are analyzed. The results are shown in Table 16.

Table 16. The respondent's travel references

Questions Items	Option	Frequency	Percent (%)
Did you have a travel plan before the outbreak?	Yes	91	98.9
	No	2	2.2
Did corona virus push you to cancel your trip?	Yes	90	97.8
	No	1	1.1
How would you feel if you discover corona virus cases in the destination increase?	Anxiety	59	64.1
	Scary	15	16.3
	Uncomfortable	15	16.3
	Normal	3	3.3
After the epidemic, which types of tourism products would you prefer	Nature sightseeing	71	77.2
	Leisure and entertainment	28	30.4
	Health and wellness	69	75.0
	Ecological vacation	21	22.8
	Culture and art	14	15.2

	Sports	18	19.6
	Other	2	2.2
What will stimulate your willingness to travel most?	Reduced ticket prices or reduced price hotel	26	28.30
	Coupon/voucher	18	19.60
	Free masks and gloves in destination	71	77.20
	Disinfection measures in destination	64	69.60
	Improved service and product quality	67	72.80
	Environment with fewer tourists	12	13.00
	Longer vacation	7	7.60
	Excellent medical system in destination	8	8.70
	Friendly local people	10	10.90
	Less cases than residency location	13	14.10

Source: own elaboration from survey

According to table 17, 98.9% of the respondents had travel plans before the outbreak of the epidemic, and 97.8% of the respondents cancelled the travel plan due to the epidemic. If the number of infected cases in tourist destinations increased, 64.1% of the respondents felt anxiety, 16.3% of the respondents felt scary, and 16.3% felt uncomfortable. In the survey of tourism products expected at the end of the epidemic, nature sightseeing was the most popular, accounting for 77.2%, followed by health and wellness, accounting for 75.0%. Therefore, nature sightseeing and health and wellness tourism products are the two major tourism products expected at the end of the epidemic. The main incentives are free masks and globes in destination, improved service and product quality, and rejection measures in destination, accounting for 77.20%, 72.80% and 69.60% respectively.

Descriptive statistics of self-confidence, travel anxiety, and perceived risk results are shown in Table 17.

Table 17. Descriptive statistics of each variable

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Information Acquisition	92	1.50	5.00	2.96	1.05
Personal outcomes design making	92	2.00	5.00	2.77	0.88

Self-confidence	92	2.00	5.00	2.84	0.90
Travel Anxiety	92	1.20	4.20	2.73	0.53
Perceived Risk	92	1.86	4.57	2.66	0.76

Source: own elaboration from survey

According to table 17, the average scores of tourists' information acquisition, personal outcomes design making and self-confidence are 2.96, 2.77 and 2.84 respectively, which are close to 3, indicating that the respondent's self-confidence level is not so good. The average values of travel anxiety and perceived risk were 2.73 and 2.66 respectively, which indicated that tourists had a slightly higher level of travel anxiety and perceived risk perception.

5. CONCLUSION

Under the impact of Covid-19, many tourists from different countries cancelled or changed their original travel plans. Their level of risk perception and travel confidence will determine how quickly the tourism industry recovers from the pandemic.

This paper uses the Likert Scale to measure the subjective feelings and attitudes of tourists. The results show that the correlation between different dimensions are as followings: the lower the tourist anxiety, the higher the tourist confidence level and the higher the level of risk perception, the lower the level of tourism confidence. Under Covid-19, tourists have travel anxiety and are sensitive to risk perception. Through individual interview with 5 people, it can be understood that due to the continuous outbreak of pandemic, tourists are worried about the potential greater risk of being in a confined space during the journey, which will be more likely to be infected, so they are anxious about travel plans. They also worried about not being able to get the correct Covid-19 information from their destinations, and respondents believe that the transparency and timeliness of information may not be good, the number of cases announced by the government may not be consistent with the real situation in the local area, which makes them suspicious of travel decisions. Some respondents think the chance of them facing health threats on vacation during the epidemic continue increasing in this summer. In addition, the quality of tourism products will also be influenced by Covid-19. Tourists may have to frequently use alcohol handwashing fluid for disinfection. They often need to take their body temperature when entering indoor places such as museums. Even in hot days, they must often wear masks, which will certainly reduce the quality of vacation. Based on it, this research suggests that the government of tourist destinations should improve detection capabilities, increase information transparency, and actively control the new cases like promulgating a policy that masks must be worn in confined vehicles to improve tourists' travel confidence.

Based on the analysis, there are significant differences in tourism confidence among tourists from different countries, genders, occupations, and having full-time or part-time. Tourists with different living conditions, ages, education, marital status, having children or not, and monthly income have no significant difference in confidence. The analysis results show that female tourists, British tourists, part-

time workers, small or big company employees have the highest travel confidence. Bearden et al. (2001) point out that the confidence scale shows good reliability and has a good correlation with the tourism behavior it study. Therefore, this research suggest that marketing promotion measures should focus on this group because it will be more effective to push tourists travel to the destination.

For those tourists whose original destination is the Balearic Islands, after the pandemic, their favourite type of tourism product is natural scenery, therefore, this paper suggests that travel agencies in the Balearic Islands can launch more products and activities in nature. If the policy allows tourists to enter the area to travel, they want to get free masks and disinfectant. This research suggests that the government provide it in the airport for tourists. And for disinfectant, Zeng, Chen, & Lew (2020) suggest that tourism, as a high-human touch industry, is influenced seriously by Covid-19, and if robot technology is actively applied, it can increase tourists' trust to destination's health and safety. Robot technology has been developed in the industrial field firstly before, and people are not interested in the application of robots in the tourism industry which is highly dependent on human interaction. However, with the continuous advancement of artificial intelligence (AI), robots can be used to receive tourists at hotels, such as replacing check-in and check-out for tourists at the front desk, transporting food, automatically disinfecting, and cleaning rooms. And at airports and scenic spots that require ticket sales, similar robots can be applied.

This research fills in the blanks to travel confidence which was rarely studied and based on the analysis results, some practical suggestions are put forward on how to improve tourists' confidence under Covid-19.

The limitation of this research is that due to the difficulty of sampling, this paper adopts snowball sampling. In snowball sampling, samples come from non-probability sampling. And the European samples are collected with the help of a travel agency staff, there is a possibility that people tend to transmit the questionnaire to a group of similar people, it may cause selectivity bias, the samples of the questionnaire may limited to people with similar idea attributes, and the sample size is small, therefore, which will lead to a lack of representativeness.

In addition, due to the dynamic nature of this pandemic, the particular data this research collected in August may had an impact on the results. The method used to assess confidence only have two dimensions, many other dimensions of confidence not being included in the study.

Therefore, in future research, expanding the sample size and using probability sampling will make the research better. Collecting data continuously and developing multiple dimensions in future research will be of great development of research.

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