Effects of Coronavirus (Covid-19) on Tourist Industry

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ABSTRACT
The purpose of this research is to examine the impact of the coronavirus pandemic (COVID-19) on the tourism industry and to find the tourism sector that will result from this pandemic. In the absence of a similar earlier research, this research is designed to be conducted in a courteous manner. The pilot research involved 103 travelers selected on a non-probability basis. The findings suggest that the current COVID-19 pandemic is likely to affect travelers' behavior in terms of human safety, economic costs, beliefs and attitudes. Finally, the main findings and practical implications of this research are described in terms of crisis management, and the direction of further study is presented based on the findings and limitations of this research.

KEYWORD: *Tourism Industry; Pandemic; COVID-19; Rick*

1. INTRODUCTION
Tourism is regarded as a substantial industry, accounting for 10 per cent of world GDP, 7 per cent of international trade and 30 per cent of service operations. According to UNWTO, one in 10 jobs is linked to tourism. It is well known that tourism is an activity that contributes to the development of many countries, but despite its economic strength, tourism remains one of the most sensitive and vulnerable sectors to internal and external crises [1]. Nevertheless, in the aftermath of these crises, the tourism industry has been able to recover. Tourism has an incomparable capacity for resilience [2] however, unlike previous crises, the world is now facing an unprecedented crisis. The risk is not localized, but it is general and international in scope, with no tourist destination being spared. The UNWTO estimates a 20 to 30% drop in international arrivals in 2020, which translates into a loss of $300 to 450 billion in international tourism revenues Figure-1.
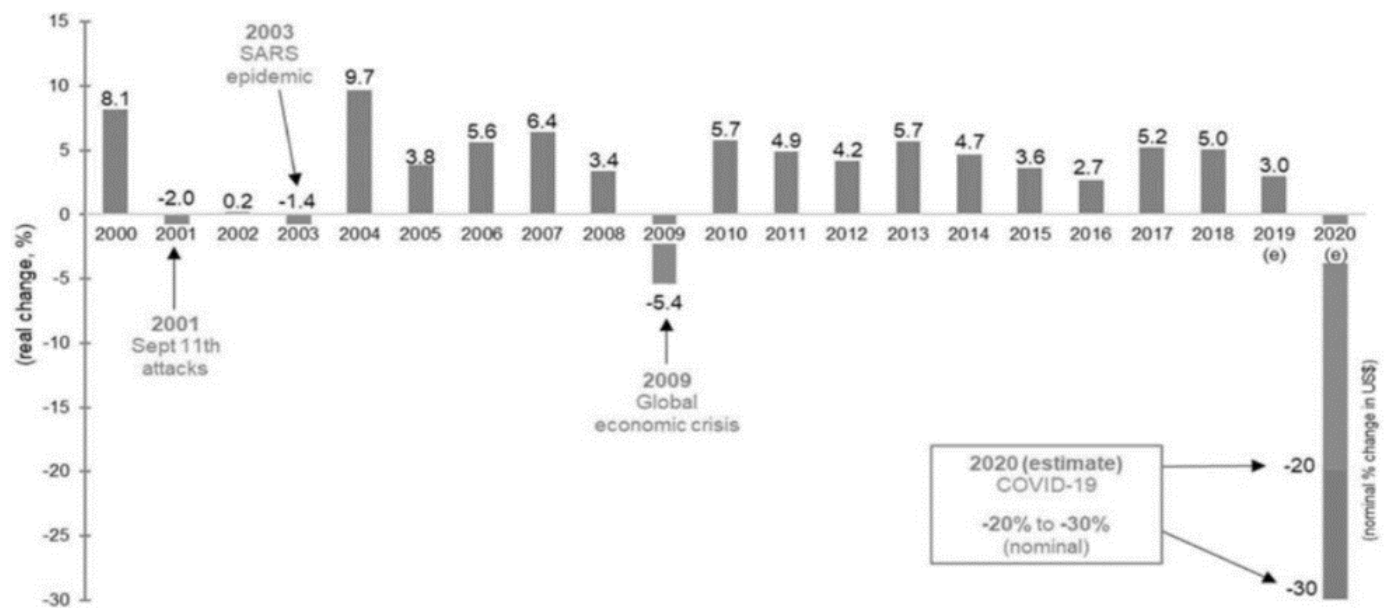

Figure-1. 2020 forecast-international tourism receipts, world (real change, %).

Faced with the perception of an external danger, the tourist adopts new consumer practices, which has been illustrated in several cases: more trip cancellations [3] more car trips [4] preventing intense contact with people and favouring outdoor activities [5], more last-minute reservations [6] and more concern for hygiene, more attention to ecotourism [7]. Thus, a question arises: once travel resumes, what will be the new trends in travel? In other words, what are the potential new tourism industries that could emerge? As experienced in other cases, after a crisis, new tourist concerns, apprehensions and demands emerge. Therefore, it is considered imperative to predict the trajectory of change in tourist industry to help tourism managers identify the basis of a resilience strategy to ideally respond to the situation.

This pilot research aims to provide a means of reflection by identifying intentions for change in tourist industry in the aftermath of Covid-19. It is extremely difficult to predict the industry of tourism consumers after a crisis [8]. Therefore, an empirical study was conducted to understand the sensitivity of tourists faced with a health crisis such as that of Covid-19, with the aim of obtaining information from travelers to identify any potential changes in their consumption as a consequence of Covid-19. The evolution of these industries was also studied from a temporal perspective. The hypotheses of this research were established on the basis of preconceptions formulated by researchers in their published work [7-10] and concerns expressed by tourists on social networks, about the general perception of the impacts of Covid-19 on tourists. Thus, after the Covid-19 crisis, for their next trip:

Ha. Tourists will prefer destinations close to home.
Hb. Tourists will avoid known, expensive destinations.
Hc. Tourists will avoid group trips.

2. Methodology
2.1. Survey Instrument
A self-administered questionnaire was used as the survey tool. This choice made it possible to interview a large number of people while covering a wide geographical area. The method of distribution was via the Internet (social networks). The questionnaire was divided into three sections. In the first section, factual questions were asked, which made it possible to identify the socio-economic dimensions of the population studied. The second section aimed to identify possible changes in tourist industry. A 5-point Likert rating scale was used, where 1=not at all important, 2=not important, 3=no opinion, 4=important, 5=very important. Respondents were asked to rate the level of importance based on their judgment, but in the face of the unknown, it is difficult to predict all the changes that will occur. For this reason, for the third section, respondents were asked to answer an open-ended question on the changes in industry that could occur, with the intention of identifying new leads.

2.2. Selection of Study Variables
The selection was made in two stages, first a review of the documentation produced on the subject. Second, a content analysis of publications and commentaries, related to general concerns about the effects of Covid-19 on industry change, published by travelers in groups on social networks, was conducted. .The use of the web as a source of information in the academic discipline of tourism has proven to be a reliable alternative because it is more convenient and less costly than primary field data [11]. Finally, a total of six study variables were identified, which represent possible changes in tourist industry induced by Covid-19.

2.3. Sampling and Study Population
A survey of respondents selected using a non-probability method was conducted from 1st to 20th April 2020. A total of 308 travelers took part in the survey; these travelers were invited via social networks. The aim of the survey was to trace and contribute to a better understanding of the effects of Covid-19 on tourism. In addition, given the pilot nature of this research, the objective was to collect initial data and to better understand the likely impacts of Covid-19 on tourist industry. At this early stage of exploration and prior to conducting further research, non-probability sampling was considered a proper sampling technique for this type of study [12].

3. Data Analysis
3.1. Non-Parametric Statistical Test of M-Square
First, the ordinal variable coded according to the Likert scale is translated into a binary variable which takes the value 1 if the consumer attaches importance to the variable studied and zero otherwise. The "no opinion" response is considered as a response that takes the value zero in our Bernoulli variable. The non-parametric M-square test of goodness-of-fit was used to analyses changes in tourist industry by testing differences in proportions between groups in the dichotomous categorical variable. For each main hypothesis, a hypothesis test was performed.

Hypothesis testing:
The resulting M-square value is compared to a significance level of 1%. If the value obtained is higher, the null hypothesis is rejected. The results of the non-parametric M-square test of goodness of fit revealed the variables that tourists value most Table 1. For the Ha hypothesis, it can be seen in Table-1 that the value of H0 (M-square=82.844, p=0.000) is below the significance level of 1%. Therefore, the null hypothesis (Ho) is accepted for the main Ha hypothesis.

Table-1. Behavioural change, percentage and significance.

		Test hypotheses	Category	Observed Prop.	Chi-Square	P-value
Ha	Choose a destination close to your region of origin (proximity)	H0	Not important	76.62%	82,844	0,000*
		H1	Important	23.38%		
Hb	Choose a less well-known destination, where there will be fewer tourists	H0	Not important	48.37%		
		H1	Important	51,62%	59,695ᵃ	0,000*
Hc	Avoid group travel by bus, cruise, etc.	H0	Not important	38,96%		
		H1	Important	61,04%	58,299	0,000*

Contrary to the Ha hypothesis, the pandemic has no impact on travelers' preferences when it comes to choosing a destination close to home for their next trip. This is also reflected in the average proportions, with more than 76.62% stating that for their next vacation, choosing a destination close to home is not an important factor. However, the value calculated for the alternative hypothesis H1 for each of the main hypotheses Hb (M-square = 59.695, p=0.000), Hc (M-square = 58.299, p=0.000), is below a significance level of 1%. Therefore, the alternative hypothesis (H1) is accepted for these hypotheses.

3.2. Content Analysis and Open-End

Question Of the 130 tourists who answered the questionnaire, 68 answered the open-ended question: "In addition to the changes mentioned above, do you think you will change anything else in your tourism industry? ". This stands for a response rate of 37.6%. A statistical representation of the content was established using the Alyse software, based on the verbatim reports of the respondents. Table-2 is a frequency table of terms, which allowed to find the most recurrent expressions, indicated by the respondents.

Table-2. Content analysis.

N.	Expressions	Weighted (%)	Gross density (%)	Occ.
1	Pay more attention	0.89	1.42	8
2	Much as possible	0.89	1.42	8
3	Avoid people as much as possible	0.84	1.89	7
4	Less money spent	0.82	0.95	7
5	Limit air travel	0.82	0.95	7
6	Avoid food outdoors	0.82	0.95	7
7	Reduce my travel budget	0.74	1.26	7
8	Wear a mask	0.6	0.95	7
9	Travel more ecologically	0.6	0.95	7
10	Do not eat out	0.57	1.26	7

This content analysis allowed to analyses the content of the answers and to identify the key words. The frequent use of these terms may also represent the possible tourist industries that could arise as a result of this health crisis. The gross density and weighted indices in Table-1 indicate that, expressions such as "reduce my travel budget" (0.74) refer to the financial aspect; where, "travel more ecologically" (0.6) refer to travel practices. In addition, expressions such as "avoid eating out" (0.82) or "do not eat out" (0.57) refer to eating habits, while "avoid the high season" (0.47) refer to the high tourist season.

4. Conclusion

Due to the global panic caused by Covid-19, the pandemic is having an effect on travel intentions. Therefore, stakeholders in the tourism industry need to be resilient and consider how to overcome all the apocalyptic predictions. This study aimed to provide an exploratory overview of the changing industry of tourists in a society at risk.

Thus, it can be concluded that Covid-19 will influence travel habits, and people will avoid travelling in groups, and being surrounded by a group of people. They will also avoid the risk of travelling without travel insurance.

As forecasts become more accurate, better defined and understood, recovery strategies could be better controlled and targeted to ensure maximum effectiveness.

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