

# Customers' Perception of the Risks Associated with the COVID-19 Pandemic in the Romanian Hospitality Industry

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## Abstract

The purpose of this study is to analyse consumers' perceptions of the risks associated with the COVID-19 pandemic in the Romanian hospitality industry. To this end, a quantitative research was conducted using an online survey, based on a questionnaire with a number of 12 questions, administered to customers of units in the hospitality industry (hotels, restaurants, cafes). A total of 292 respondents (103 men and 189 women) answered all questions. Four working hypotheses were formulated. It was concluded that the extent of the safety measures taken by the units in the Romanian hospitality industry had a positive impact on customers. The perception of the measures is a positive one and the customers do not feel any fear or significant threat regarding the possibility of infection with the SARS-CoV-2 virus in these units. The risk perceived by customers, in various forms, is not an obstacle in blocking the demand and development of the hospitality industry. The study helps to broaden the understanding of the behavioural effects of clients during a pandemic and it is good to know this behaviour of customers in another unpredictable scenario of the evolution of the spread of COVID-19 disease. The study conducted in Romania can be used as a benchmark for other countries and researchers.

## Keywords

risk, COVID-19 pandemic, customer perception, hospitality industry

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## Introduction

In December 2019, a pneumonia outbreak with an unknown source broke out in Wuhan city in China. The World Health Organization then classified the virus as the new coronavirus disease COVID-19 in February 2020. The pandemic spread globally as a result of international tourists returning to their home countries after visiting infected areas. Cases of COVID-19 have been increasing very rapidly globally on a daily basis. This has resulted in increasing global economic anxiety (Fetzer et al., 2021), which has had a significant impact on the hospitality industry (Faroudi et al., 2021), created uncertainty and negative perception on the hospitality industry, tourism and travel destinations due to the need for global quarantine and severe restrictions on movement.

The restaurant industry has been heavily impacted financially by the effects of the COVID-19 pandemic and the restrictions caused by it (Byrd et al., 2021). In the wake of the global health pandemic and its devastating impact on every industry, particularly in the hospitality industry, there have been calls for systematic, theoretically driven research into customers' perceived health risk so that hospitality managers can develop and implement health-related risks (Faroudi et al., 2021). The COVID-19 pandemic is widely regarded as a significant negative issue in a particularly difficult time for global tourism. However, studies are quite few on how previous and potential new customers behave when considering the use of hospitality services. Moreover, it is essential to investigate how the pandemic is reshaping the consumption landscape

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and consumer desire in the long term. Understanding customer beliefs and behaviour would help hospitality managers respond more effectively to a crisis.

The purpose of this study is to analyse consumers' perceptions of the risks associated with the COVID-19 pandemic in the Romanian hospitality industry. It includes four main sections. First, the Review of the scientific literature, where the main researches related to the approached topic are reviewed. The second section, Research methodology, describes the methodology, the research hypotheses and analysis process of the empirical study. It is followed by the Results and discussion section and the paper ends with conclusions, the practical implications, and the limitations and research prospects.

## 1. Review of the scientific literature

Risk theory is considered a powerful theory for explaining tourism behaviour during a global pandemic (Cahyanto et al., 2016; Faroudi et al., 2021). Previous research has found that travelers' perceived risk has a direct influence on travel intention (Al-Ansi, Olya and Han, 2019; Olya and Al-Ansi, 2018). Tourists, according to risk theory, always seek to maximize their satisfaction while avoiding any negative experience. In other words, customers will reduce their purchasing habits if they perceive a high level of health risk (Lim, 2003; Faroudi et al., 2021). The future of the hospitality sector in this unprecedented period depends on consumer perceptions of disaster shock, beliefs, anticipated emotions and future desires. In terms of perceived risk theory, it has been observed that low levels of perceived health risk in hotels have been associated with low levels of expected human interaction, which is enabled by the mobile check-in system (Shin and Kang, 2020). They also found that perceived health risk was directly affected by the level of cleanliness.

Pandemic-generated anxiety has also been investigated from different angles (Cheng et al., 2021; Tavitiyaman, Ren and Fung, 2021). Wong and Yang (2020) reported on anxiety from the perspective of guests in enforced isolation. Their research indicates that a high level of service quality can contribute to relieving loneliness anxiety. Other papers address the link between consumer behaviour and forced positive or negative emotions (Radic et al., 2021; Sung, Hu and King, 2021; Rastegar, Seyfi and Rasoolimanesh, 2021). In the case of restaurants, positive emotions can influence consumers' desire to return. In contrast, negative emotions influence how risk is perceived by consumers, generating a preventive behaviour towards restaurants.

During the pandemic, the hospitality industry also made much use of the increased interest in online food delivery (Leung and Cai, 2021; Šerić et al., 2021) aiming for a certain level of performance, trust and social influence. In this case, the visual appeal, informative nature of the menu, consumer desire for food and convenience provided by online ordering indirectly influenced consumers' purchase intentions, despite their perceived risk. At the same time, the negative impact of online ordering on consumer intentions has also been highlighted. In areas heavily affected by the pandemic, higher self-efficacy of individuals was observed and in less affected regions, the negative impact was generated by risk perception. Studies, generated in the aftermath of the pandemic, indicate certain changes in consumer behaviour. In the restaurant industry, the pandemic has encouraged a preference for dining, restaurant and private rooms (Šerić et al., 2021). The pandemic has caused an increase in the amount of food ordered and a higher consumer tolerance for food waste (Šerić et al., 2021; Sharma et al., 2021). Consumers are no longer concerned about food waste resulting from increased use of food delivery apps.

Some papers have addressed technological innovations (Ene and Bojescu, 2020) in hotels (Kim and Lee, 2020; Šerić et al., 2021). The results indicate that in the wake of the pandemic, consumer preference tends towards robot-staffed service at the expense of human-staffed service. Factors such as safety concerns and social distancing strongly influence this new preference for robotically staffed hotels. Shin and Kang also associate reduced human interaction with technological innovation (e.g., mobile or kiosk check-in systems and robot cleaning systems) with increased booking intentions (Shin and Kang, 2020). At the same time, the importance of self-service technology as a factor in customers' perception of hotel safety has also been highlighted (Atadil and Lu, 2021; Šerić et al., 2021). Other factors mentioned are medical training, hygiene control and health communication.

## 2. Research methodology

The research was conducted in Romania in the field of hospitality industry and includes an analysis of data based on a survey.

The survey questionnaire was built using online survey tools, "typeform.com", a reliable online survey tool widely used by large corporations. The statistical community was represented by the clients of the hospitality units. A 12-question questionnaire was developed for the clients of these units (Table no.1).

**Table no. 1. Questions from the customer questionnaire**

Question number	Questionnaire statements
1	I am satisfied with the safety and hygiene measures implemented by the unit (hotel/restaurant).
2	I understand the role and purpose of the SARS-CoV-2 virus safety and protection measures taken by the unit (hotel/restaurant).
3	I did not feel threatened by my infection with the SARS-CoV-2 virus during my stay at the hotel/restaurant.
4	I did not feel afraid of being infected with the SARS-Cov-2 virus from the unit's customers.
5	I consider that the services provided by the hotel are in line with my expectations regarding the safety and protection against the SARS-CoV-2 virus.
6	I am satisfied with the safety and hygiene measures in my hotel room.
7	I did not feel afraid of being infected with the SARS-Cov-2 virus from the unit's employees.
8	If I had another variant of the unit, I certainly would not have chosen this restaurant/hotel.
9	I am convinced that the unit has used the most effective methods of maintaining safety and protection against and combating the SARS-CoV-2 virus.
10	I am concerned and concerned about public health issues.
11	I am worried and worried about my health and the health of my family.
12	I have taken extreme measures for my health and that of my family.

Data collection was performed by several methods. Through the face-to-face method, the authors personally visit the units in the hospitality industry (hotels, restaurants, cafes), but also through cold calls, e-mails, etc. Before starting the questionnaire, its purpose was explained and the respondents participated voluntarily. A total of 292 respondents (103 men and 189 women) answered all questions. There were also questionnaires that were not completed in full and those were omitted from the study. The complete answer rate to all questions in the questionnaire was 64.47%. The authors ensured the anonymity of the answers and the confidentiality of all data collected.

The study period overlapped with that of holidays and vacations, when the hospitality industry was much more in demand. The analysis of the primary data collected was performed quantitatively and qualitatively. The data were coded for easier econometric processing and for the development of descriptive statistics.

The evaluation was performed using the Likert scale, according to the model shown in Table no. 2. The scale is between 1 and 5, with the following meanings: total disagreement (1), disagreement (2), neither agree nor disagree (neutral) (3), agreement (4) and total agreement (5).

**Table no. 2. Evaluation scale**

Evaluation Criterion	Total Disagreement	Discomfort	Neutral	Agreement	Total Agreement
1. I am satisfied with the safety and hygiene measures implemented by the unit (hotel/restaurant).	1	2	3	4	5

The following working hypotheses were formulated:

Hypothesis1. *There is a positive perception from customers about the safety of hospitality units.*

Hypothesis2. *Respondents do not feel fear or threat of being infected with the SARS-CoV-2 virus.*

Hypothesis3. *Respondents who do not perceive any threats during their vacation are concerned below level 4 about their own and their family's health.*

Hypothesis4. *The gender of the respondents influences their fear of being infected with the SARS-CoV-2 virus by employees.*

The calculation technique used in this study targeted the R program. With its help, the authors calculated the V Cramer correlation coefficients. In case of hypotheses, the t test was also used. Program R proved to be extremely useful for this research in data analysis (linear and nonlinear modelling, classical statistical tests, classification, grouping and so on) (Upton and Cook, 2002; Longhow, 2010). The Cramer V method

was used to test the data and determine the degree of association when a significant Chi-square was obtained (Upton and Cook, 2002; McHugh, 2013). These coefficients were used to test the hypotheses and a descriptive statistic was based on them (Schober, Boer and Schwarte, 2018).

### 3. Results and discussion

Based on the collected data and the methods used, the hypotheses were tested.

**Hypothesis1. *There is a positive perception from customers about the safety of hospitality units.***

The first hypothesis is validated.

A "t test" is calculated on the answers to question number 1 (Q1). In this test, the default media 3 represents a neutral perception of the safety measures implemented by the hospitality unit. The null hypothesis is obtained if the population average is equal to 3 (neutral), and the alternative hypothesis if the average is not equal to 3. The  $p$ -value is of  $2.2 \times 10^{-16}$ , therefore the null hypothesis is rejected. The authors conclude that the customers' perception of the safety measures implemented by the unit is positive, as the lower limit of the range of 4.05 is higher than 3 (the value of the neutral perception).

Based on the Chi-square test, it was tested whether there was any association between the gender of the respondents and the perception of the measures taken against the spread of the SARS-CoV-2 virus. It was found that there is no association between customer satisfaction and gender, as the  $p$ -value obtained, equal to 0.26, is well above the significance level of 0.05.

It was then tested whether there was an association between education level and customer satisfaction. The method used was the whole chi-square test, and the result obtained indicated a significant degree of association. Using the V Cramer method, a value of 0.22 was obtained, which shows a rather low association. It is still checked if there are major changes in customer satisfaction depending on the level of education (high school or university), but the differences are unnoticed.

**Hypothesis2. *Respondents do not feel fear or threat of being infected with the SARS-CoV-2 virus.***

The second hypothesis is validated.

The t test was performed on questions no. 3 (Q3) and Q4 of the questionnaire. The range limits for the mean value, with a 95% confidence interval, are 4.05 and 3.61. The values obtained after performing the test are above the neutral value. This indicates that clients do not feel threatened or afraid of becoming infected with the SARS-CoV-2 virus from other clients in the hospital unit.

**Hypothesis 3. *Respondents who do not perceive any threats during their vacation are concerned below level 4 about their own and their family's health.***

In the third hypothesis, the authors tested whether the threat of infection with the SARS-CoV-2 virus is associated with other variables. Using the Chi-square test, it was tested whether there was any relationship between customer satisfaction with the SARS-CoV-2 virus prevention measures taken by the unit and their concern for their own health and that of their family. The null hypothesis reflects that there is no association (correlation) between the two variables. The alternative hypothesis reflects an association between the two variables.

After performing the test, a  $p$ -value of 0.01 was obtained. This is below the significance level of 0.05, and thus rejects the null hypothesis. The conclusion is that there is an association between the two variables.

The authors then calculated Cramer's V to determine the degree of association between the two variables. The result indicates a coefficient of 0.21, which reflects a low association in terms of customer satisfaction with anti-COVID measures and concern for one's own health.

The method applied to questions no. 1 and no. 8 indicates that there is no relationship between the two variables, ie if customers were more satisfied, the decision to choose the restaurant / hotel would not have been affected.

**Hypothesis4. *The gender of respondents influences their fear of being infected with the SARS-CoV-2 virus by employees.***

The authors test whether there is any association between the gender of respondents and their fear of being infected by employees with the SARS-CoV-2 virus while consuming hotel/restaurant services. The Chi-square test indicates a  $p$ -value of 0.82, so the null hypothesis is rejected. There is no association between

the two variables. Whether or not customers have experienced a threat of SARS-CoV-2 virus during their stay, it does not depend on their gender.

Performing the Chi-square test on questions no. 10 and no.11 indicates that clients are concerned about their health and that of their family and have taken extreme steps to protect their health. The authors check the degree of association between these two variables and the level of threat and fear of infection with the SARS-CoV-2 virus in the hospital unit. The Chi-square tests between questions Q3 – Q10, Q4 – Q10, Q3 – Q11 and Q4 – Q11 indicate the following p-values: 0.08, 0.39, 0.06 and 0.29. All p-values are above the significance level of 0.05. The null hypothesis, which refutes the existence of a connection, is not rejected. Consequently, we can say that there is no obvious association between the variables mentioned above.

## Conclusions

The SARS-CoV-2 virus induced fear (Magano et al., 2021) and significant uncertainty among people (Faroudi et al., 2021) and chaotic conditions in many industries. The tourism and hospitality industry is one of the worst affected by the pandemic. Although almost all global restrictions have now been lifted (March 2022), the World Health Organization is drawing attention to the growing number of cases of SARS-CoV-2 infection in many regions (WHO, 2022), including 18 European countries, such as the United Kingdom, Ireland, Cyprus, France, Italy, Germany. Under these conditions, managing the behaviour of customers in the hospitality industry poses new challenges.

Such periods of uncertainty require the maintenance of a high level of customer satisfaction and more behavioural and causal research is needed to determine the (differential) effects of these operational strategies on customer attitudes and behaviour (Gursoy and Chi, 2020). The present research has shown that the decrease in the number of tourists and customers in the hospitality industry is not primarily due to the possibility of COVID-19 infection in hospitality units, but rather to the restrictions and limitations imposed by the authorities to combat the spread of the virus. According to Hypothesis 1, which is validated, there is a positive perception from customers about the safety measures of the hospitality units. At the same time, customers do not feel fear or threat about being infected with the SARS-CoV-2 virus, according to Hypothesis 2 validated.

A particularly important conclusion of the study is that the risk perceived by customers, in various forms, is not an obstacle in blocking the demand and development of the hospitality industry. If customers are satisfied with the measures taken by the unit, they will show their appetite for consumption. Therefore, it is good to know this behaviour of customers in a further unpredictable scenario of the evolution of the spread of COVID-19 disease. This study, including conclusions on customer perceptions of the risks associated with the COVID-19 pandemic in the Romanian hospitality industry, can be used as a benchmark for other countries and researchers.

Regarding the limits of the study, we must remember that the data were collected during the pandemic (summer 2020), in a rather unclear situation on the evolution and effects of the pandemic. In the current context of lifting the need for security measures, however, we are witnessing a different behaviour of customers, many of whom are still wearing masks and having requirements to comply with measures to prevent infection / reinfection. Therefore, future studies may be conducted in a less standardized context. Future research directions can be focused on the study of tourist behaviour in the next period. They can be checked for new behaviours and patterns of consumption in the hospitality industry compared to those before the pandemic broke out.

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