

ARTICLE

## Consumer Behavior in Tourism in Health Crises: A Model Using the Theory of Protection Motivation in Farm Hotels

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### ABSTRACT

The impacts of a health crisis on the tourism sector may be severe, as occurred in the current Covid-19 pandemic. The behavior of tourists, due to perceived risk, may suffer alterations and needs to be understood so that efficient strategic actions can be created to allow for the fast recovery of the economy in such a sector. Therefore, this study has the purpose for investigating the existing relations between perceived risk and its precedents and the intention of visiting and the willingness to pay more for farm hotels during a health crisis. Quantitative research was conducted through a survey, which had 441 valid respondents. Data was analyzed through the characterization of the sample, confirmatory factorial analysis, a structural model, and an importance-performance matrix. Therefore, there was a validation of the Theory of Motivation of Protection, in addition to establishing the positive association between Travel Motivation and Willingness to Pay More, with Travel Motivation being a predictor for future intentions.

### **KEYWORDS**

Pandemic; Perceived Risk; Intention to travel; Willingness to pay more; Theory of motivation of protection

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# BBRComportamento do Consumidor em Turismo em Crises de Saúde: Um<br/>Modelo Usando a Teoria da Motivação de Proteção em Hotéis-Fazenda

### **RESUMO**

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Os impactos de uma crise de saúde no setor de turismo podem ser severos, como têm ocorrido na atual pandemia de Covid-19. O comportamento dos turistas, em função do risco percebido, pode sofrer alteração e precisa ser compreendido, para que possam ser criadas ações estratégicas eficazes, para uma retomada mais rápida da economia do setor. Assim, esta pesquisa tem como objetivo investigar as relações existentes entre o risco percebido e seus antecedentes com a intenção de visitar e a disposição para pagar mais por hotéis fazenda, durante uma crise de saúde. A pesquisa quantitativa foi conduzida por um *survey*, que obteve 441 respondentes válidos. Os dados foram analisados por meio da caracterização da amostra, análise fatorial confirmatória, modelo estrutural e matriz importância-desempenho. Assim, houve validação da Teoria da Motivação de Proteção, além de ser constatada a associação positiva entre a Motivação de Viagem e Disposição para Pagar

#### PALAVRAS-CHAVE

Pandemia; Risco percebido; Intenção de visitar; Disposição para pagar mais; Teoria da motivação de proteção

### **1. INTRODUCTION**

The tourism industry was one of the most affected sectors by the Covid-19 pandemic, since it remained paralyzed for a long period (Baum & Hai, 2020). The Ministry of Tourism in Brazil (MTUR) released a study of national and ecotourism parks, with the purpose of stimulating tourism of proximity, and trips that have contact with the nature, presenting a panorama which is identified as the preferred segment in the post-pandemic period (MTUR, 2020). Zhu and Deng (2020) confirm such perspective by stating that "farm tourism is considered a better choice of traveling in a period of epidemic control" (Zhu & Deng, 2020, p. 18).

The impacts suffered by the tourism industry have been due to both restrictive measures adopted as a way to control the spread of the Coronavirus, in addition to a lack of willingness of customers to travel due to perceived risks. It is perceived that opportunities for recovery of the sector come from domestic tourism, specially tourism of nature.

However, it is possible to find studies on the relation of perceived risk with the behavioral intention of the travelers in the context of health crises. Neuburger and Egger (2021) point out the need of specific studies on the Covid-19 pandemic crisis, understanding that it is a unprecedented event. Jiang and Wen (2020) add the importance of hotel personnel understanding and attending to changes in the demands and behavior of tourists trips after the pandemic, suggesting that, "researchers should work on strengthening the theory and knowledge in such crucial sector of hospitality to help hotels to become more resilient and to reach an effective post-disaster recovery" (Jiang & Wen, 2020, p. 2565).

With this said, this paper has the goal of analyzing and measuring what the existing relations are between perceived risk and their precedents, with the intention of visiting and the willingness to pay more for farm hotels, during a health crisis. Farm hotels are inserted in an environment of farm tourism, and are frequently associated to ecotourism and sustainable tourism. Its importance is notorious, mainly in the context that individuals search for an option of leisure, even when exposed to a possible risk, preferably in contact with nature.

In addition to this introduction, the present paper presents the following structure: section 2 is composed of the theoretical reference; as follows, section 3 presents the model of study and the developed hypothesis; sector 4 is constructed by the adopted methodological procedures; regarding section 5, the results are presented and discussed; and at last, section 6 presents the conclusions, highlighting the theoretical and management contributions of the article, in addition to its limitations and suggestions for future research.

### 2. THEORETICAL REFERENCE

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### **2.1.** THEORY OF THE MOTIVATION OF PROTECTION

The Theory of Motivation of Protection (TMP), developed by Rogers (1975), reveals that the motivation of protecting oneself from threats is the basis of the decision of individuals in performing risk-prevention behaviors (Janmaimool, 2017). The TMP is a model to understand how the attitudes and the behaviors may be altered, when individuals see themselves facing threats. It evaluates the confrontation of fear by an individual, influenced by environmental and inter-personal factors, based on two cognitive processes: the evaluation of threat and the evaluation of facing such a threat (Lee et al., 2019).

The evaluation of the threat represents the process of risk analysis by the individual and how much one feels threatened, composed by the variables (1) perceived vulnerability, which means, the probability of the exposition to the threat, and the (2) perceived gravity, which evaluates the consequences of the exposition to the threat (Bubeck et al., 2012). On the other hand, the confrontation of the threat is based on (1) the efficiency of the response, which is, the trust on the efficiency of the recommended protective behaviors, (2) on the self-efficiency, in which the individual evaluates his or her own capacity of performing such behaviors and (3) the cost of the response, as an estimate of how much the implementation of such measure of risk reduction would cost (Chen et al., 2020).

Cho et al. (2020) add that the relation which is established between the process of the threat evaluation and the evaluation of confronting such threat activates the motivation of protection, considered by Rogers (1975) as a synonymous and the measure of the behavior intentions, which results in one of the two ways of confronting the threat: adaptive or poorly adaptive.

Although the TMP has coverage and it shows to be a proper model for the understanding of how attitudes and behaviors from individuals may change in facing threats, in tourism and hospitality, it is still seldom explored (Floyd et al., 2000). Due to its capacity to explain the motivation of protection as an answer to a specific threat, as pointed by Bubeck et al. (2012), as in the case of the recent Covid-19 pandemic, it is chosen as theoretical basis for this study.

#### **2.2.** MOTIVATION OF THE TRIP

Hosany et al. (2020) highlight the attention given to the motivation of the trip theme in the last decades, due to its importance in understanding the elements that compose the motivation of the trip to the tourist and how such motivations affect the behavioral intention (Prebensen

et al., 2013). Fodness (1994) makes clear that this is necessary, so that it becomes possible to perform efficient tourism marketing, and adds that the interest of researchers in evaluating the motivation of the trip comes from the need of evaluating tourists types, in a way to segment the market, obtaining information that will serve as a base to new products and services, evaluation of quality, development of image, and positioning.

From the 1970's decade, several theories and models appeared, which aimed at explaining what leads the individuals to travel (Caber et al., 2020). As the motivation of the trip has been widely studied, the most common identified factors in the tourism research are: escapism, relaxation, enthusiasm, and learning (Hosany et al., 2020).

### **2.3. P**REVENTION PROTOCOLS

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The importance and world interest in the implementation of strategies of control and prevention of Covid-19 is highlighted by Harapan et al. (2020) as a way to interrupt the chain of transmission of the disease. For the economy recovery of the tourism sector, it is necessary to have planning of measures to create trust, involving the different actors (companies, clients and tourism destinations) (Sanabria-Díaz et al., 2021). In Brazil, the MTUR has created the seal "Responsible Tourism" for companies who are adherent to the program of good hygiene practices, which comply with the protocols demanded for the prevention of Covid-19, with the purpose of transmitting more safety to consumers. Complementing the guidance for a safer tourism, it established protocols for tourists, which rely on 23 recommended attitudes.

### 2.4. PERCEIVED RISK

The interest on risk has emerged since the studies by Frank Knight (Knight, 1921) in the economic sphere, and posteriorly explored by several areas, including marketing (Quintal et al., 2010). By being a multidimensional construct, Küpeli and Özer (2020) and Jacoby and Kaplan (1972), in a full review of the literature, identified five types of perceived risks, functionally independent: financial risk, functional risk, physical risk, psychological risk, and social risk. To those, they add the general perceived risk, posteriorly named by Mitchell (1992), as performance risk, and time risk, identified in the studies of Roselius (1971).

Mitchell (1992) presents a brief description of the perceived risk types, shown in Chart 1.

Social Riskis the risk in which the selection of the service provider affects in a nega form the perception of other people about the buyer.		
<b>Financial Risk</b> is the risk in which the acquired service does not reach the better profit possible for the consumer.		
Physical Riskis the risk that the execution of a service will result in danger for the consumer's health.		
Performance Risk	is the risk that the consumer will waste time, lost of convenience or waste of effort to re-do a service.	
Time Riskis the risk that the consumer will waste time, loss of convenience effort to re-do a service.		
Phychological Risk	is the risk that the selection or performance of a producer will have a negative effect on the piece of mind or self-perception of the consumer.	

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Descrit	btion (	of the	Types	of Perc	eived	Risks
		.,	- /			

Chart 1

Source: Adapted by Mitchell (1992)

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In this context of this research, it is worth highlighting the physical risk which encompasses the perception of risk of health to the consumer. The risk of contracting an infectious disease increases with the incidence of the disease in the visited place, therefore, a careful evaluation should be performed regarding the known risk factors for acquiring the disease, such as the health condition of the traveler, and the details of the planned trip such as the duration of the stay and in which conditions the activities will be performed (Memish et al., 2010). Chien et al. (2017) highlight that there is need for better comprehension of the traveler's risk perception regarding health, and the degree in which the traveler believes that one is at risk affects the decision of adopting protection behaviors. The authors highlight that the agencies should communicate the easiness in adopting the protection measures and highlight the fact that, although travelers may not prevent risks, they may take actions to reduce their chances of the occurrence of such negative events, or reducing the damages that such events may cause (Chien et al., 2017). Having this in sight, gaps in the knowledge regarding health in trips and in prevention behaviors are a challenge in health education in trips, since the technical knowledge supports more responsive approaches to the changes in risk circumstances (Hartjes et al., 2009).

#### **2.5.** Behavior intention – intention of visiting and willingness to pay more

Fishbein and Ajzen (1975) define intention as a representation of the expectation in a private form of behavior, in a certain environment, may be operationalized as a probability to act, is, still, immediately determinant and better predictor of behavior. In tourism, the behavioral intention develops itself from evaluation beliefs, social factors which lead to normative beliefs and situational factors that appear in the moment of planning a trip or an appointment (Khan et al., 2019). Afshardoost and Eshaghi (2020) amplify such positioning by revealing that the behavioral intention is a multidimensional construct, and the most favorable pre and post visit indicators are the intention of re-visit (Loi et al., 2017), intention of recommending (Prayag & Ryan, 2012), intention of visiting (Fu et al., 2016)" (Afshardoost & Eshaghi, 2020, p. 3). Varah et al. (2021) include the willingness to pay more as a variable of behavioral intention.

Therefore, to understand the process of choice of the destination by the traveler is of essential importance for the development of more efficient strategies of marketing and tourism (Baloglu, 2000).

### **2.6.** FARM HOTELS

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The data presented to the traveling industry and tourism, with all the competitiveness existing in the sector, had already shown themselves to be important when the Covid-19 pandemic was announced. The *World Travel & Tourist Council* (WTTC, 2020) presents the sector of traveling and tourism as one of the most representative in the world, with great economic impact both directly in the social-economy development and the creating of jobs, and indirectly, in the links of the supply chains from other sectors. With both the health crisis and the economic crisis generated by the Covid-19 pandemic, a change in the travel behavior of tourists is expected, searching for national destinations in a collective feeling of support to the domestic economy, and the need of places with less agglomeration (Zenker & Kock, 2020).

In this way, there is an opportunity of fomenting the internal tourism "reducing the leak of the national economy and strengthening the regional centers and farm economies" (Hall et al., 2020, p. 13). Zhu and Deng (2020) confirm such a perspective, by relating that "rural tourism is considered a better choice of traveling in a phase of epidemic control" (Zhu & Deng, 2020, p. 18). Following such a trend, the MTUR (2020) published a study of national parks and ecotourism,

with the purpose of stimulating the proximity tourism and trips that have contact with the nature, presenting a panorama which is identified as the preferred segment in the post-pandemic.

In this study, the associations will be evaluated between risk perception and the intention to travel and willingness to pay more for farm hotels, defined by MTUR (2010, p. 7) as a type of housing "located in the country environment, gifted with agriculture and cattle raising, which offers entertainment and living in the country". Farm hotels appeared to overcome the need for living in the country side which was fit mainly between 1970 and 1980, with the outward migration of the population to the urban centers (SEBRAE, 2012). Therefore, farm hotels are inserted into an environment of rural tourism and are frequently related to ecotourism and sustainable tourism.

The choice for farm hotels is due to them either being one of the options of rural tourism, or by the growing interest by Brazilian travelers in this sort of housing, which may be proven by the increase in the searches by this type of housing in the Google search area. Figure 1 presents the result obtained in the *Google Trends* platform, which provides results of analysis of search trends, between March 2020 and May 2021, for the consultation of the keyword "Farm Hotel" in Brazil. The graph represents the relative interest in the search, and the highest point in the graph (100), shows the popularity peak throughout the time. It is possible to notice that, after the declaration of the Covid-19 pandemic by the WHO on March 11, 2020, there is strong fall in the search for farm hotels, initiating a recovery and growth from August 2020, reaching the popularity peak. Although there is a new downfall in March 2021, due to the explosion of cases in Brazil, followed by a shutdown in the health system in many cities, the following months reveal an evolution.



*Figure 1.* Search in Google for the keyword "farm hotel" *Source:* Google Trends (2021)

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Therefore, although there are no official statistics in MTUR and in IBGE about the representativeness of the farm hotels segment for tourism in Brazil, it is notorious in its importance, mainly during the current context in which individuals search for an option of leisure with minimum exposure to risk as possible and preferably in contact with nature.

### **3. CONCEPTUAL MODEL AND DEVELOPMENT OF HYPOTHESIS**

#### **3.1.** PERCEIVED RISK AND BEHAVIORAL INTENTION

During a health crisis, as in the current Covid-19 pandemic, the decision-making process by the consumer is still more influenced by the perceived risk (Zhu & Deng, 2020), which is pointed out by Bae and Chang (2021) as a fundamental element in the adoption of preventive

behaviors by the consumers, aiming at minimizing the health risks. This happens, mainly, because the amount of information available, which provide the traveler, each day more, with more autonomy in the risk management (Wang et al., 2020).

The relation of the perceived risk on the behavioral intention has been studied by many researchers, such as Küpeli and Özer (2020), Tavitiyaman and Qu (2013), Neuburger and Egger (2021). Therefore, the following hypothesis are proposed:

- H1: The perceived risk is formed by the dimensions physical risk, financial risk, psychological risk, time risk, and performance risk.
- H2: The perceived risk negatively affects the intention of farm hotels.

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• H3: The perceived risk positively affects the willingness to pay more.

### 3.2. PREVENTION PROTOCOLS, BEHAVIORAL INTENTION AND PERCEIVED RISK

Jiang and Wen (2020) highlight the increase of the preoccupation of tourists with security risks, and health in trips, during a pandemic, and state that such preoccupation directly reflects the travel behavior. Even with scarcity of papers on such themes in tourism literature during the health crisis, the sanitary protocols, mainly linked to cleaning and hygiene, have become even more evident with the presence of the Coronavirus, leading the travelers to believe that they will search for hotels that offer services and products in housing "reassuring hygiene and cleaning" (Jiang & Wen, 2020, p. 2567).

According to the up-mentioned, the following hypothesis are proposed to be tested:

- H4: The prevention protocols positively affect the intention to travel.
- H5: The prevention protocols positively affect the willingness to pay more.
- H6: The prevention protocols negatively affect the perceived risk.

### **3.3.** MOTIVATION OF PROTECTION AND PERCEIVED RISK

Bubeck et al. (2012) highlight the ability of TMP to explain the fact that not an immediate reaction toward mitigation does not necessarily occur when a high risk is perceived. This happens since the individuals evaluate the threats to decide whether and how to adjust their behavior, which means that the motivation leads to a preventive behavior. Such characteristics makes TMP to be used as a theoretical basis of research that aim at explaining and predicting health behaviors, eating behaviors, protection behaviors in context of natural, technical and environmental risks (Lee et al., 2019).

Therefore, the following hypothesis are proposed:

- H7: Motivation of protection is formed by the dimensions vulnerability, gravity, efficiency of the answer and self-efficiency.
- H8: Motivation of protection positively affects the perceived risk.

### 3.4. MOTIVATION TO TRAVEL AND PERCEIVED RISK

Zheng (2018) reveals that motivations to travel execute an important role in understanding the perceived risk by the tourist and their choice of destinations, which means that those directly affect the evaluation of several risks and the choice of the place to travel to. In such perspective,

Khan et al. (2019) investigated the moderator effect of the motivation to travel, in the relation between perceived risks, travel restrictions, and intention to visit of young female travelers. In addition, Tang (2014) and Caber et al.(2020), also studied the impact of the risk perception in the motivation to travel. Based on the studies presented, the following hypothesis will be developed:

- **H9:** Motivation to travel is formed by the dimensions learning, enthusiasm, escapism, and relaxation.
- H10: Motivation to travel negatively affects perceived risk.

### 3.5. MOTIVATION TO TRAVEL AND BEHAVIORAL INTENTION

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Fodness (1994) already noticed a broad literature referring to the motivation to travel with different approaches, although a limitation in empirical studies was observed, in search of understanding for the reasons why people travel. Corroborating such a perspective, Hosany et al. (2020) point out a scarcity in the empiric studies on the relation between motivation to travel and behavioral intention, highlighting the importance of such relation, once the motivation is built as a predictor of future intentions.

Some researchers, however, work with the association of both of two constructs, such as Li and Cai (2012), Huang and Hsu (2009). Based on what was revealed, the following hypothesis will be developed for this study:

- H11: Motivation to travel positively affects the intention of visiting farm hotels.
- H12: Motivation to travel positively affects the willingness to pay more.

In the face of the theoretical reference presented, in which, the constructs used to answer the purpose of this study were defined, in addition to the 12 raised hypothesis, the model of research was developed, presented in Figure 2.



*Figure 2.* Model of Research *Source:* elaborated by the authors (2021)

### 4. METHODOLOGICAL PROCEDURES

Considering that the purpose of the present study was to investigate the existing relations between perceived risk and their precedents in the intention to visit and in the willingness to pay more for farm hotels during a health crisis using the unique conclusive-descriptive-transversal drawing of the research, proposed by Malhotra et al. (2017). Clow and James (2013) indicate the quantitative methods as a proper approach to descriptive and casual researches. In the present study, the research of unique transversal raise research was applied. Data gathering, for the increase of information in the constructs described in the hypothesis model, was performed through a survey, constructed based on models proposed by authors with known relevance on the theme, with proper adjustments to a better conduction of the study.

Therefore, the choice of scales that served as basis for the creation of the instrument was through a review of literature of each construct, prioritizing those tested in the context of tourism. To make sense, the information was adjusted, as fit, for the Covid-19 situation. This way, such adjustments were validated by a judging panel of 3 PhD's in the area, in addition of being performed a pre-test of 11 respondents, randomly chosen, with the purpose of validating the proposed instrument and identifying possible problems in the interpretation or adverse situations, which could generate problems in filling in the survey by the target-public of the study (Chart 2).

The considered population to answer the form was formed by Brazilian citizens aved over 18. Therefore, the selection of the sample was performed by the non-probabilistic technique. The surveys were available in *Whatsapp* and social media (*Instagram and Facebook*). The form and distribution of the survey was performed through the management research app Google Forms. The questions of interval scale Likert type were of 7 points, with variation from 1 to 7, between "totally disagree" to "fully agree". The gathering occurred between the days of February 16 to 21 of 2021, being important to highlight that up to the end of the period, only 0.55% of the Brazilian population was completed immune and 2.76% of the population had received at least one dose of the vaccine against Covid-19. The survey had 506 respondents, among which 441 were considered valid.

In addition to those items, some questions were performed to analyze the characterization of the sample and the result is shown in topic 5.2.

The analysis of the data obtained through the survey was performed by the multi-varied technique of Modeling of Structural Equations (MEE), specifically PLS-SEM. PLS-SEM is defined as an "alternate approach of estimation for tradition SEM. The constructs are represented by compounds, based on results of factorial analysis, without the attempt of recreating covariance between the measured items" (Hair et al., 2009, p. 644). In addition of the PLS-SEM being more appropriate for this type of exploratory research with structural equations, which means, when a model is being developed, it still minimizes the problems from the either normality or not of data, common in researches of social sciences. The *software SmartPLS* was used for the application of such method.

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### Chart 2

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Questionnaire Items

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CONSTRUCT	DIMENSION	ABBREVIATION	INDICATOR		
	Physical Risk		When visiting a farm hotel, I am afraid of		
		RFIS1	contracting Covid-19 during meals.		
		RFIS2	contracting epidemic diseases, such as Coviid-19.		
		RFIS3	being exposed to Covid-19 due to agglomerations.		
			When thinking about traveling to a farm hotel during a pandemic, I am afraid that		
	E:	RFIN1	it is not worth it economically.		
	Financial Kisk	RFIN2	I will have unexpected expenses.		
		RFIN3	it will be more expensive than other types of housing.		
			To travel to a farm hotel during a pandemic		
		RPSI1	is not compatible with my self-image.		
Perceived Risk	Psychological and Social Risk	RPSI2	impacts the way that I am seen by my friends.	Khan et	
		RPSI3	does not bring personal satisfaction.	al. (2017)	
		RPSI4	does not correspond to my status (social class).		
	Performance Risk		I consider that	-	
		RDES1	farm hotels during a pandemic may be very crowded.		
		RDES2	the services of the farm hotels may be unsatisfactory.		
		RDES3	some services of the farm hotel may not be working due to the pandemic.		
		RDES4	the employees may not be kind during a pandemic due to the risk of contracting Covid-19.		
		RTEM1	To travel to a farm hotel during a pandemic would be a waste of time.		
	Time Risk	RTEM2	To travel to a farm hotel during a pandemic would prevent me of using my precious time of rest.		
		RTEM3	To plan and to prepare to a trip to a farm hotel during a pandemic would take a lot of time.		
		GRAV1	I worry that me and my family will be infected by Covid-19.		
		GRAV2	During a pandemic, I think about which places the Covid-19 virus is present.		
Motivation	Carritar	GRAV3	I believe that the pandemic will still be present for a very long time.	Deng et	
of Protection	Gravity	GRAV4	The things around me always remind me that the pandemic is nearby.	al. (2020)	
		GRAV5	I use to suspect that the people around me may be infected by Covid-19		
			GRAV6	I avoid contact with other people, believing that this diminishes the risk of infection.	

CONSTRUCT	DIMENSION	ABBREVIATION	INDICATOR	SOURCE	
			VULN1	In general, I am very susceptible to colds, flu and other infectious diseases.	
		VULN2 If a disease is "circulating" I will contract it.		-	
	Vulnershility	VULN3	My immune system protects me from most of the diseases that other people contract.	Duncan et al	
	vumerability	VULN4	I have higher probability than other people around me of contracting Covid-19	(2009)	
		VULN5	My previous experiences make me believe that is unlikely that I contract Covid-19, even if my friends do.		
			I may prevent myself from Covid-19		
	S -16 - 6 -:	AEFI1	by washing my hands and using alcohol in gel.		
Motivation	Self-emclency	AEFI2	by using a mask	Chua et al. (2021)	
of Protection		AEFI3	keeping social distance.		
	Efficiency of the Response	EFI1	In case I decide to travel, I consider that a farm hotel is an effective housing in the reduction of the risk of contracting Covid-19.		
		EFI2	By being in contact with the nature is an effective way of reducing the chance of contracting Covid-19 n a trip.	Lee et al. (2019)	
		EFI3	To keep social distance in a farm hotel is an effective way to reduce the chance of contracting Covid-19 in a trip.		
		EFI4	To use a mask in a hotel is an effective way of reducing the chance of contracting Covid-19 in a trip.		
			In case I decide to travel to a farm hotel is to		
		MVESC1	stay way from all of this.		
	Escapism	MVESC2	escape from the routine.		
Travel Motivation		MVESC3	forget everything.		
		MREL1	relax.	Hosany	
	Dolovino	MREL2	be near the nature.	et al.	
	Relaxing	MREL3	enjoy the view.	(2020)	
		MREL4	reduce the accumulated tension.		
		MENT1	do exciting things.		
	Enthusiasm	MENT2	enjoy the news.		
		MENT3	feel joy.		

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Chart 2

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CONSTRUCT	DIMENSION	ABBREVIATION	INDICATOR	SOURCE	
		MAPR1	know more about the local history of the area.	Hosanv	
Travel Motivation	Learning	MAPR2	learn about the culture of the region.	et al.	
Wouvation	MAPR3discover new places.		discover new places.	(2020)	
		PREV1	To implement body temperature verification for clients at the entry.		
		PREV2	To provide enough protection materials (such as masks) for the employees.		
D D		PREV3	To educate the employees about the prevention knowledge of epidemics.	Lai and	
Prevention Proto	ocols	PREV4	To remind guests of the importance of prevention of epidemics.	(2020)	
		PREV5	To implement enough cleaning and disinfection in the public areas of hotels.	(_0_0)	
		PREV6	To implement enough cleaning and disinfection in hotel rooms.		
Intention to Travel		INT1	I would like to travel to a farm hotel in a near future, even during a pandemic.		
		INT2	I am planning on going to a farm hotel in a near future, even during a pandemic.		
		INT3 I will make an effort to travel to a farm hotel in a near future, even during a pandemic.		Chang (2021)	
		INT4	I will certainly invest time and money to travel to a farm hotel in a near future, even during a pandemic.	(2021)	
			What is your willingness to pay more in a farm hotel		
Willingness to Pay More		DISP1	which its practices favor the environmental preservation?		
		DISP2 in comparison to an "ordinary' hotel?		Hultman et al. (2015)	
		DISP3that offers a safer environment regarding sanitary protocols?			
		DISP4	that genuinely shows concern in protecting the guests' health?		
		DISP5	that embodied edge technology to avoid contamination?		

Chart 2

Cont.

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*Source:* elaborated by the authors (2021)

### **5. ANALYSIS AND DISCUSSION OF THE RESULTS**

### **5.1. P**REPARATION OF THE DATA BANK

To certify that only valid questionnaires became part of the final data bank previous procedures and posterior treatments were adopted. The questionnaire was constructed making available the option "mandatory" in all questions, in addition, ending the period of gathering, the occurrence of double forms and atypical data (outliers) was evaluated. In the total data bank (506), the existence of 58 cases was pointed out, which were immediately excluded. As follows, the analysis of the existence of atypical data was carried out, with two methods in the detection of possible atypical observations: uni-varied detection and multi-varied detection. The exclusion of the 6 cases that presented 3 or more superior indicators at the extremes -4 and +4, in the uni-varied outliers analysis and of 3 case for the multi-varied analysis, totaling 7 excluded cases, considering both analysis. The final base for the research regarding the analysis continued with 441 observations.

### **5.2. P**ROFILE OF THE SAMPLE

Table 1 presents a total representation of the data, for a better understanding of the sample's profile.

#### Table 1

Profile of the sample

Item	Amount	Percentage
Gender		
Female	350	79,37%
Male	88	19,95%
Rather not inform	3	0,68%
Others	0	0,00%
Total	441	100,00%
Schooling		
Incomplete elementary	1	0,23%
Complete high school	17	3,85%
Complete college	106	24,04%
Incomplete college	15	3,40%
Post-graduation or more	302	68,48%
Total	441	100,00%
Age range		
Between 18 and 25 years old	14	3,17%
Between 26 and 35 years old	61	13,83%
Between 36 and 45 years old	195	44,22%
Between 46 and 55 years old	135	30,61%
Between 56 and 65 years old	29	6,58%
Over 66 years old	7	1,59%
Total	441	100,00%

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BBR	Table 1   Cont.						
	Item	Amount	Percentage				
	Estado Civil						
14	Single	57	12,93%				
	Married or in a stable relationship with no kids	39	8,84%				
	Married or in a stable relationship with kids at school age	268	60,77%				
	Married or in a stable relationship with grown kids	35	7,94%				
	Separated or divorced without children	10	2,27%				
	Separated or divorced with children at school age	21	4,76%				
	Separated or divorced with grown children	11	2,49%				
	Total	441	100,00%				
	Family income						
	0 to 2 minimum wages (up to R\$ 2.200)	9	2,04%				
	2 to 5 minimum wages (from R\$2.200,01 to R\$ 5.500,00)	43	9,75%				
	5 to 10 minimum wages (from R\$ 5.500,01 to R\$ 11.000,00)	105	23,81%				
	10 to 20 minimum wages (from R\$ 11.000,01 to R\$ 22.000,00)	166	37,64%				
	Above 20 minimum wages (above R\$ 22.000,00)	118	26,76%				
	Total	441	100,00%				
	Have you ever had Covid-19?						
	No	387	87,76%				
	Yes	54	12,24%				
	Total	441	100,00%				
	Do you have any comorbities?						
	No	367	83,22%				
	Yes	74	16,78%				
	Total	441	100,00%				
	Do you live with people from the risk group?						
	No	285	64,63%				
	Yes	156	35,37%				
	Total	441	100,00%				

*Source:* elaborated by the authors (2021)

### **5.3.** CONFIRMATORY FACTORIAL ANALYSIS

The confirmatory factorial analysis (AFC) as exposed by Hair et al. (2009), is a technique that enables either the confirmation or rejection of a pre-conceived theory. From the construction of a model, the application of the *PLS Algorithm* functionality was performed, with the purpose of evaluating the convergent and discriminating validation, in addition to the reliability of the constructs and of the indicators that represent them.

### 5.3.1. Convergent validation

The convergent validation evaluates "how many indicators of a specific construct convert or share an elevated proportion of variance in common" (Hair et al., 2009, p. 589), it is the initial point of the analysis of the model. It may be estimated by simple reliability (Alfa by *Cronbach*),

composed reliability (CC), and by extracted average variance (AVE). The ABC presents estimations of paths for the constructs and indicators, and may reveal problems with the measures. According to Hair et al. (2009), in addition to being meaningful, the values ideally desired of the loads are above 0.7. Acceptable values are slightly below, when it comes to studies that are exploratory, such as this one. The reliability of a construct, either simple or composed, points out an internal consistence of the scale, with suggestion of values of 0.7 or above, values between 0.6 and 0.7 may be acceptable when other values of the construct were good. For AVE, values above 0.5 suggest a proper convergence.

By evaluating the index presented for the indicators, by the previously related parameters, it was verified the need of exclusion of those that presented values below the recommended, aiming at a better adjustment of the model. Therefore, the following were removed: GRAV3 (0.58), EFI3 (0.36), EFI4 (0.10), PREV1 (0.42), RDES3 (0.59), RPSI4 (0.61), DISP1 (0.64) e DISP2 (0.55). Therefore, the adjustment of the model initiated by the removal of the indicators and promoting a new round of PLS *Algorithm* with the purpose of improving both reliability as well as the validation of the model. The estimation of the path of the model, adjusted to the indicators was presented, according to Table 2, presenting, practically, all indicators with values above 0.70, with exception of MVESC1, highlighted in bold, with 0.67. However, its continuity was chosen in the final adjusted model, due to the exploratory nature of the research, as pointed out by Hair et al. (2009). It is important to highlight, also, that due to the same reason, the presence of Efficiency of the Response, was chosen, even constituted by 2 indicators.

#### Table 2

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Estimation of the path of the adjusted model - final

Construct	Dimension	Indicator	Estimation of Path
		RFIS	0,89
	Physical Risk	RFIS2	0,90
		RFIS3	0,84
		RFIN1	0,89
	Financial Risk	RFIN2	0,87
		RFIN3	0,74
		RPSI1	0,91
Perceived Risk	Psychological Risk	RPSI2	0,75
		RPSI3	0,82
		RDES1	0,75
	Psychological Risk RPS12 00 RPSI3 00 Performance Risk RDES2 00 RDES4 00 RTEM1 00	0,80	
		pological Risk     RPSI2     0,75       RPSI3     0,82       RDES1     0,75       rmance Risk     RDES2     0,80       RDES4     0,73       RTEM1     0,88       me Risk     RTEM2     0,89	0,73
		RTEM1	0,88
	Time Risk	RTEM2	0,89
		RTEM3	0,83
		GRAV1	0,81
		GRAV2	0,81
Motivation of Protection	Gravity	GRAV4	0,75
		GRAV5	0,78
		GRAV6	0,75

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	Construct	Dimension	Indicator	Estimation of Path			
			VULN1	0,72			
16			VULN2	0,75			
		Vulnerability	VULN3	0,83			
			VULN4	0,80			
	Mativation of Duotostian		VULN5	0,78			
			AEFI1	0,78			
		Self-efficiency	AEFI2	0,89			
			AEFI3	0,85			
			EFI1	0,94			
		Emclency of the Response	EFI2	0,75			
			MVESC1	0,67			
	Motivation to Travel	Escapism	MVESC2	0,79			
			MVESC3	0,80			
		Relaxation	MREL1	0,86			
			MREL2	0,89			
			MREL3	0,88			
			MREL4	0,80			
		Enthusiasm	MENT1	0,87			
			MENT2	0,90			
			MENT3	0,76			
			MAPR1	0,90			
		Learning	MAPR2	0,92			
			MAPR3	0,83			
			PREV2	0,86			
			PREV3	0,91			
	Prevention Protocols		PREV4	0,72			
			PREV5	0,80			
			PREV6	0,82			
			INT1	0,87			
	Intention		INT2	0,90			
	Intention		INT3	0,95			
			INT4	0,95			
			DISP3	0,93			
	Willingness to Pay More		DISP4	0,95			
			DISP5	0,92			

*Source:* elaborated by the authors (2021)

When the model was adjusted, the following was as proceeded: simple reliability, composed reliability and average extracted variance, as presented in Table 3. The results show the fitting of all constructs to the parameters suggested for each one of the measures.

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### Table 3

Simple reliability, composed reliability and extracted avarage variance

		Cronbach's Alpha	Composed Reliability	Extracted average variance
17	Learning	0,86	0,91	0,78
	— Self-efficiency	0,80	0,88	0,70
	Willingness to Pay More	0,93	0,95	0,87
	Efficiency of the Response	0,64	0,84	0,72
	Enthusiasm	0,80	0,88	0,72
	Escapism	0,65	0,80	0,57
	Gravity	0,84	0,89	0,61
	Intention to Visit	0,94	0,96	0,85
	Prevention Protocols	0,88	0,91	0,68
	Relaxation	0,88	0,92	0,73
	Financial Risk	0,79	0,87	0,70
	Physical Risk	0,85	0,91	0,77
	Psychological Risk	0,77	0,87	0,69
	Time Risk	0,83	0,90	0,75
	Performance Risk	0,64	0,80	0,58
	Vulnerability	0,84	0,88	0,61

*Source:* elaborated by the authors (2021)

#### 5.3.2. Discriminating Validation

Hair et al. (2009, p. 592) define discriminating validation as "the degree in which a construct is truly different from the rest", which means, the evaluation of the discriminating validation has the purpose of guaranteeing that a construct presents stronger relations with its own indicators, when compared to another construct, in a PLS track model (Hair et al., 2017). To evaluate the discriminating validation, the Fornell-Larcker criteria (Fornell & Larcker, 1981) was used.

In the Fornell-Larcker criteria, it is recommended that the correlations between the constructs should be inferior to the AVE root (Table 4).

This way, the discriminating validation between the constructs and the dimensions of the adjusted model is proven by criteria, enabling the advance to the modeling phase of the structural equations.

#### **5.4.** STRUCTURAL MODEL

In the structural model, the inter-relations of the variables between the constructs are represented, to test the proposed theoretical model, through modeling of the structural equations, which means, a series of equations of multiple regression separated estimated simultaneously (Hair et al., 2009). This phase was performed by the *software* SmartPLS, in the functionality *Bootstrapping*.

The result from the test of hypothesis, presented in Table 5, shows that 9 from the 12 hypothesis proposed were supported.

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Table 4

	MAPR	EFI	DISP	EFI	MENT	MESC	GRAV	INT	PREV	MREL	RFIN	RFIS	RPSI	RTEM	RDES	VULN
MAPR	0.88															
EFI	0.07	0.84														
DISP	0.12	0.29	0.93													
EFI	-0.23	0.02	-0.11	0.85												
MENT	0.60	0.03	0.13	-0.31	0.85											
MESC	0.29	0.08	0.15	-0.32	0.41	0.76										
GRAV	-0.05	0.39	0.20	0.24	-0.13	-0.04	0.78									
INT	0.26	-0.08	0.13	-0.50	0.34	0.28	-0.32	0.92								
PREV	0.19	0.38	0.38	-0.07	0.15	0.25	0.26	0.03	0.83							
MREL	0.47	0.09	0.19	-0.33	0.59	0.55	-0.10	0.33	0.28	0.86						
RFIN	0.04	0.08	0.06	0.06	0.00	0.01	0.12	-0.14	-0.02	-0.07	0.84					
RFIS	-0.13	0.25	0.11	0.33	-0.18	-0.07	0.65	-0.38	0.16	-0.20	0.18	0.88				
RPSI	-0.11	0.15	0.08	0.25	-0.22	-0.15	0.32	-0.44	0.04	-0.23	0.33	0.36	0.83			
RTEM	-0.20	0.07	-0.05	0.29	-0.30	-0.19	0.35	-0.48	-0.03	-0.39	0.38	0.39	0.56	0.87		
RDES	-0.17	0.20	0.03	0.27	-0.18	-0.04	0.42	-0.29	0.07	-0.20	0.27	0.49	0.38	0.44	0.76	
VULN	-0.03	0.07	-0.04	0.10	-0.02	0.08	0.26	-0.10	0.00	-0.03	0.20	0.25	0.10	0.23	0.23	0.78

*Source:* elaborated by the authors (2021)

### Table 5

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*Result from the test of hypothesis – linear* 

		Structural Relations	Path coefficient	Level of significance	Result
9		Perceived Risk → Financial Risk	0,54	0,00*	
		Perceived Risk → Physical Risk	0,71	0,00*	
	H1	Perceived Risk → Psychological Risk	0,75	0,00*	Supported
		Perceived Risk $\rightarrow$ Time Risk	0,81	0,00*	
		Perceived Risk $\rightarrow$ Performance Risk	0,71	0,00*	
	H2	Perceived Risk $\rightarrow$ Intention to visit	-0,43	0,00*	Supported
	H3	Perceived Risk $\rightarrow$ Willingness to pay more	0,08	0,09	Not supported
	H4	Prevention Protocols $\rightarrow$ Intention to visit	-0,01	0,72	Not supported
	H5	Prevention Protocols $\rightarrow$ Willingness to pay more	0,35	0,00*	Supported
	H6	Prevention Protocols $\rightarrow$ Perceived Risk	-0,01	0,89	Not supported
		Motivation of Protection $\rightarrow$ Self-efficiency	0,55	0,00*	Supported
	H7	Motivation of Protection $\rightarrow$ Efficiency of the response	0,34	0,00*	
		Motivation of Protection $\rightarrow$ Gravity	0,87	0,00*	
		Motivation of Protection $\rightarrow$ Vulnerability	0,61	0,00*	
	H8	Motivation of Protection $\rightarrow$ Perceived risk	0,54	0,00*	Supported
		Motivation to Travel → Learning	0,75	0,00*	Supported
	I IO	Motivation to Travel $\rightarrow$ Enthusiasm	0,16	0,00*	
	пу	Motivation to Travel → Escapism	0,84	0,00*	
		Motivation to Travel → Relaxation	0,87	0,00*	
	H10	Motivation to Travel $\rightarrow$ Perceived risk	-0,25	0,00*	Supported
	H11	Motivation to Travel $\rightarrow$ Intention to visit	0,26	0,00*	Supported
	H12	Motivation to Travel $\rightarrow$ Willingness to pay more	0,12	0,02**	Supported

\*p<0,01. \*\*p<0,05.

*Source:* elaborated by the authors (2021)

The first result presented by the structural model is the confirmation that the construct Perceived Risk is formed by the dimensions Time Risk (0.81), Psychological Risk (0.75), Performance Risk 0.71), Physical Risk (0.71) and Financial Risk (0.54), supporting the hypothesis H1 of this study, consistent with the discoveries of previous studies on the theme (e.g. Roselius, 1971; Jacoby & Kaplan, 1972; Mitchell, 1992; Khan et al., 2017). It is perceived that the dimension Time Risk is more prominent, reflecting the tourism concern about the time spent in a trip to a farm hotel during a pandemic. The position of the Physical Risk is highlighted, being the third more prominent dimension: this can be explained having in sight that the technical knowledge of prevention of the disease was well-disseminated at the moment of the data gathering (about a year after the declaration of the Covid-19 Pandemic). According to Chien et al. (2017), although travelers may not prevent the risks, they make take measures to reduce the chances of occurrence of such negative events or reduce the damages that those events may cause, in addition, the technical knowledge supports more responsive approaches to the changes in risk circumstances (Hartjes et al., 2009)

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Hypothesis 2 is also supported, revealing a negative relation between the Perceived Risk and the Intention to Visit (-0.43). Such discovery is compatible with previous studies, stating that the perceive risk has a predictor role in the intention of the tourist's behavior (Bauer, 1960; Roselius, 1971; Lee et al., 2019; Zhu & Deng, 2020). Bi and Gu (2019) reinforce that since risk and safety began to be a part of the people's worries, when a trip destination is chosen, such destination may be considered more or less desirable, due to the way that the individuals perceive the risk in visiting it.

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However, Perceived Risk did not present a linear relation with Willingness to Pay More, rejecting hypothesis 3. Such result is the contrary of previous findings, such as the ones by Qiu et al. (2020) and Lin et al. (2020) that reveal a direct and representative connection between Perceived Risk and Willingness to Pay More.

Evidence of a positive relation were found between the influence of Willingness to Pay More on Prevention Protocols, supporting hypothesis 5. Lai and Wong (2020), in an analysis of importance-performance, reveal that the prevention protocols in an epidemic present great importance. Such discovery indicates that the individuals who are most likely to invest in tangible aspects may result in an increase of the trip's safety such as the measurement of the temperature from guests and employees.

On the other hand, the connection between Prevention Protocols, Intention to Visit and Perceived Risk are analyzed, evidences that support such relations are not found, rejecting hypothesis 4 and 6. Both the results lead to believe that, although the tourist is willing to pay more for effective actions adopted by farm hotels in the pandemic prevention, as proven by hypothesis 5, it is not possible to affirm that such protocols will reduce the perceived risk, neither will they increase the intention to visit.

Another result of the structural model was that the construct Motivation of the Protection is formed by the dimensions Self-efficiency, Efficiency of the Response, Gravity, and Vulnerability, confirming hypothesis 7 and validating the Theory of Motivation of Protection (TMP), (TMP), as it was already done in other studies developed in the area of tourism (e.g. Bubeck et al., 2012; Janmaimool, 2017; Fisher et al., 2018; Wang et al., 2019; Lee et al., 2019). The dimension that has revealed itself more prominent in TMP is Gravity (0.87), followed by Vulnerability (0.61), Self-Efficiency (0.55) and, at last, by Efficiency of the Response, (0.34).

It is highlighted that the two variables with higher coefficients (Gravity and Vulnerability) are the ones that compose the cognitive process of the threat evaluation (Maddux & Rogers, 1983), showing a greater concern by the tourist with the risks that one will be exposed to in a farm hotel during a pandemic, and the consequences of such exposition. Self-Efficiency and Efficiency of the Response, which compose the process of evaluation of confrontation (Maddux & Rogers, 1983), although they present relevant results, they have less strength, which means the evaluation of the capacity of performing protection behaviors, as well as how effective they will be, exert less influence in the Motivation of Protection. Therefore, corroborating with the research of Wang et al. (2019), this study shows that both the threat evaluation, as well as the evaluation of confrontation show intention of the individuals in protecting themselves. On the other hand, unlike the present study, the threat evaluation generates stronger effects in the Motivation of Protection.

The relation of Motivation of Protection with Perceived Risk was also supported, confirming hypothesis 8. Such a fact corroborates the finding of Bubeck et al. (2012) who reiterate the ability of the TMP to explain the individual's behavior, when a risk is perceived. Therefore, it is verified that the tourist, when evaluating the risks in staying in a hotel farm during a pandemic, does not

act immediately. The tourist analysis the situation both by the perspective of the threats which one will be exposed (vulnerability and gravity) as well as by the evaluation of the confrontation (self-efficiency and efficiency), once all the conclusion will directly reflect on the perception of risk.

Validating previous findings (e.g. Papadimitriou & Gibson, 2008; Li & Cai, 2012; Hosany et al., 2020), hypothesis 9 was supported, proving that the examined motivational dimensions in this study (Escapism, Relaxation, Enthusiasm, and Learning form the construct Motivation of the Trip. Among the dimensions, Relaxation (0.87) and Escapism (0.84) are the most prominent, highlighting the need of people who live a pandemic of relaxing, diminishing the tension, and being near nature.

Evaluating the results presented to the dimensions Motivation of the Trip, it is understood the importance of all of them be considered in the offer of housing, once, as exposed, the motivation of the trip is knowledgeably recognized as a predictor for future intentions (Li & Cai, 2012). Such a fact is confirmed by the relation established in hypothesis 11, Motivation of the Trip  $\rightarrow$  Intention to Visit, which is supported in this study, corroborating the findings of previous studies (e.g. Li & Cai, 2012; Caber et al., 2020; Afshardoost & Eshaghi, 2020).

Another related item highlighted is the positive association between Motivation of the Trip and Willingness to Pay More, confirming hypothesis 12. Such relations show that, in a moment of crisis, with restricted circulation, limited activities of leisure, the desire to rest, and the desire to entertain oneself in another environment, makes the tourist willing to pay more for farm hotels that provide a safe environment, genuinely worrying with the guest's health. Such preoccupation with the security and health aspects is reinforced by hypothesis 10, which presents a negative relation Motivation of the Trip  $\rightarrow$  Perceived Risk, also supported in this study. This is evidence that corroborates the findings of the research by Zheng (2018) that highlights a relevant influence of the perception of the risk in the motivation of the trip. This means that, the more the tourist is aware of the several risks (physical, financial, time, or performance), the less motivated one is to travel.

#### 5.5. IMPORTANCE-PERFORMANCE MATRIX

The Importance-Performance Matrix (IPMA) is an approach of analysis in the PLS-SEM which amplifies the results of the coefficient of the track estimated from a construct (importance), by adding the dimension that considers the average values of the punctuation form latent variables (performance). The results allow the identification of the forerunners with a relatively high importance and relatively low performance, being those the main points of improvement and of high priority, in the management actions (Hair et al., 2017).

In this study, the analysis was performed for the constructs that have more than one forerunner. For this, the function *Importance-Performance Map Analysis* (IPMA) was used in the *SmartPLS*, and, from the results presented, the average was calculated, both for the importance, as well as for the performance of forerunner constructs, with the purpose of tracing the average lines on the map.

Figure 3 represents the map of the construct Perceived Risk. It is verified that the construct Motivation of Protection is the forerunner that presents greater importance. However, it has the lowest performance. The Motivation of the Trip and the Prevention Protocols, on the other hand, occupy the quadrant of low importance and high performance. Such result reveals the need of a greater attention by the hotel managers to the Motivation of Protection, which helps to understand how attitudes and behaviors of individuals may change in facing threats, referring to a predictive model of choices and protective behaviors regarding health. The dimensions Gravity and Vulnerability that were identified as stronger in the Motivation of Protection need to receive attention, since by improving such aspects, there will be a reflection in the reduction of the perceived risk.

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*Figure 3.* IPMA Map Perceived Risk *Source:* elaborated by the authors (2021)

The importance-performance map of the construct Intention to Visit, represented by Figure 4, points out that the construct Perceived Risk presents high importance, but low performance. To adopt prevention protocols does not seem to be enough for tourists to perceive less risk, as it was demonstrated in the IPMA of Perceived Risk. In this IPMA of Intention to Visit, they also presented low importance, although they were in the quadrant of high performance. This leads one to believe that the tourists may be considering that having prevention protocols is not a differential, but yet, something expected, in addition to not guaranteeing higher security. It is necessary, therefore, that actions are created so that tourists realize that such action are effective to reduce physical risks, avoiding the contamination by the coronavirus, as well as the other risks.

The construct Motivation of the Trip presents high importance and high performance. Such result seem to be very coherent with the context, once in times of health crisis, such as the current Covid-19 pandemic, to be socially isolated is one of the suggested measures of prevention. Due to this, it receives even greater influence from Motivation of the Trip, once the tourist starts having a higher necessity of relaxing, escaping the routine, making different activities in new places. On the other hand, the Motivation of Protection is found with importance and performance below the average, being possible to receive attention and winning points for improvement, in a way to generate impact on the Intention to Visit.

The map of the construct Willingness to Pay More (Figure 5) exhibits Prevention Protocols in the quadrant of high importance and high performance, meanwhile Motivation of Protection and Perceived Risk are in the quadrant of low importance and low performance. On the other hand, Motivation to Travel is put in the quadrant of low importance and high performance. The Prevention Protocols are the only forerunner with importance above average, it is possible to infer that the tourist is willing to pay more for concrete services within its housing, such as seeing the employees using security equipment, such as masks, more severe cleaning protocols in the rooms and common areas.







*Figure 4.* IPMA Map Intention to Visit *Source:* elaborated by the authors (2021)



*Figure 5.* IPMA Map Willingness to Pay More *Source:* elaborated by the authors (2021)

### 6. CONCLUSION

The main purpose of this article was to understand the existing relations between the perceived risk and its background in the intention to visit and willingness to pay more for farm hotels, during a health crisis, like the current Covid-19 pandemic. As a result, it was noticed that nine hypothesis of this study were supported.

For the theory, the present study corroborates with the studies on the influence of the perceive risk on behavioral intention, during the current Covid-19 crisis, gap pointed out by Neuburger and Egger (2021). In addition, it makes the studies in tourism richer by using as basis the Theory of the Motivation of Protection, very appropriate to prevent health behaviors, as suggested by Wang et al. (2019).

Regarding management, this study provides to hotel managers several *insights*. It is necessary the creation of communication strategies with the client, disclosing information that reinforce that traveling to farm hotels may not make individuals more susceptible to Covid-19 contamination, and in fact may diminish such a risk, since farm hotels have outdoor environment and contact with the nature. Although there is a strong plea for Protection Protocols, reinforced by organizations linked to tourism, which have created, including, certification stamps, this is not a decisive factor for the Intention to Visit. What was evident is that such construct is more sensible by the Motivation to Travel, once the tourism aims at relaxing, escaping the routine and getting to know new places. Therefore, to reinforce such aspects, mainly the reduction of the risk, will positively impact on the intention of the client to visit a farm hotel during a health crisis.

Although such study a has offered the presented collaborations, it is important to recognize that it presents limitations. It is about a new context, therefore, qualitative research would make the current research richer. In addition, the study was performed within the Brazilian context, with specific and political characteristics for the combat of Covid-19, in addition of being specific to farm hotels.

From the limitations presented and recognizing the statement by Gössling et al. (2020) that the current health crisis is without precedents, it is recommended that studies with the same structure shall be performed, in other stages, such as post-vaccination and post-pandemic. In addition, a better investigation of the influence of Prevention Protocols on the Behavioral Intention, is recommended, once although it has received much attention from the sector, it did not preset meaningful relation with the Intention to Visit.

### REFERENCES

- Afshardoost, M., & Eshaghi, M. S. (2020). Destination image and tourist behavioral intentions: A meta-analysis. *Tourism Management*, *81*, 104154. https://doi.org/10.1016/j.tourman.2020.104154
- Bae, S. Y., & Chang, P. J. (2021). The effect of coronavirus disease-19 (COVID-19) risk perception on behavioural intention towards 'untact'tourism in South Korea during the first wave of the pandemic (March 2020). *Current Issues in Tourism*, 24(7), 1017–1035. https://doi.org/10.1080 /13683500.2020.1798895
- Baloglu, S. (2000). A path analytic model of visitation intention involving information sources, sociopsychological motivations, and destination image. *Journal of Travel & Tourism Marketing*, 8(3), 81–90. https://doi.org/10.1300/J073v08n03\_05
- Bauer, R. A. (1960). Consumer behavior as risk taking. Proceedings of the 43rd National Conference of the American Marketing Assocation, June 15, 16, 17, Chicago, Illinois, 1960, American Marketing Association, 389–398.

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Baum, T., & Hai, N. T. T. (2020). Hospitality, tourism, human rights and the impact of COVID-19. International Journal of Contemporary Hospitality Management, 32(7), 2397–2407. https://doi.org/10.1108/IJCHM-03-2020-0242
 Bi, J., & Gu, C. (2019). Cultural distance and international tourists' intention to visit a destination. <i>Asia Pacific Journal of Tourism Research</i> , <i>24</i> (8), 839–849. https://doi.org/10.1080/10941665.2019.1 635503
Bubeck, P., Botzen, W. J. W., & Aerts, J. C. (2012). A review of risk perceptions and other factors that influence flood mitigation behavior. <i>Risk Analysis: An International Journal</i> , <i>32</i> (9), 1481–1495. https://doi.org/10.1111/j.1539-6924.2011.01783.x
Caber, M., González-Rodríguez, M. R., Albayrak, T., & Simonetti, B. (2020). Does perceived risk really matter in travel behaviour? <i>Journal of Vacation Marketing</i> , <i>26</i> (3), 334–353. https://doi.org/10.1177/1356766720927762
Chen, F., Dai, S., Zhu, Y., & Xu, H. (2020). Will concerns for ski tourism promote pro-environmental behaviour? An implication of protection motivation theory. <i>International Journal of Tourism Research</i> , <i>22</i> (3), 303–313. https://doi.org/10.1002/jtr.2336
Chien, P. M., Sharifpour, M., Ritchie, B. W., & Watson, B. (2017). Travelers' health risk perceptions and protective behavior: A psychological approach. <i>Journal of Travel Research</i> , <i>56</i> (6), 744–759. https://doi.org/10.1177/0047287516665479
Cho, M., Bonn, M. A., & Li, J. (2020). Examining risk-reduction behavior toward water quality among restaurant guests. <i>Cornell Hospitality Quarterly</i> , 61(3), 255–270. https://doi.org/10.1177/1938965520919106
Chua, B. L., Al-Ansi, A., Lee, M. J., & Han, H. (2021). Impact of health risk perception on avoidance of international travel in the wake of a pandemic. <i>Current Issues in Tourism</i> , 24(7), 985–1002. https://doi.org/10.1080/13683500.2020.1829570
Clow, K. E., & James, K. E. (2013). <i>Essentials of marketing research: Putting research into practice</i> . SAGE publications.
Deng, S., Wang, W., Xie, P., Chao, Y., & Zhu, J. (2020). Perceived severity of COVID-19 and post-pandemic consumption willingness: The roles of boredom and sensation-seeking. <i>Frontiers in Psychology</i> , <i>11</i> , 567784. https://doi.org/10.3389/fpsyg.2020.567784
Duncan, L. A., Schaller, M., & Park, J. H. (2009). Perceived vulnerability to disease: Development and validation of a 15-item self-report instrument. <i>Personality and Individual Differences</i> , 47(6), 541–546. https://doi.org/10.1016/j.paid.2009.05.001
Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Addison-Wesley.
Fisher, J. J., Almanza, B. A., Behnke, C., Nelson, D. C., & Neal, J. (2018). Norovirus on cruise ships: Motivation for handwashing? <i>International Journal of Hospitality Management</i> , 75, 10–17. https://doi.org/10.1016/j.ijhm.2018.02.001
Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A meta-analysis of research on protection motivation theory. <i>Journal of Applied Social Psychology</i> , <i>30</i> (2), 407–429. https://doi.org/10.1111/j.1559-1816.2000.tb02323.x
Fodness, D. (1994). Measuring tourist motivation. Annals of Tourism Research, 21(3), 555-581. https://doi.org/10.1016/0160-7383(94)90120-1

BBR

25

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. <i>Journal of Marketing Research</i> , 18(3), 382–388. https:// doi.org/10.2307/3150980
Fu, H., Ye, B. H., & Xiang, J. (2016). Reality TV, audience travel intentions, and destination image. <i>Tourism management</i> , 55(C), 37–48. https://doi.org/10.1016/j.tourman.2016.01.009
Google Trends. (2021, June 8). <i>Hotel fazenda</i> . Google Trends. https://trends.google.com.br/trends/ explore?date=2020-03-11%202021-06-08&geo=BR&q=hotel%20fazenda
Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. <i>Journal of Sustainable Tourism</i> , 29(1), 1–20. https://doi.org/10.1080/09669582.2020.1758708
Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). <i>Análise multivariada de dados</i> . Artmed.
Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage.
Hall, C. M., Scott, D., & Gössling, S. (2020). Pandemics, transformations and tourism: Be careful what you wish for. <i>Tourism Geographies</i> , 22(3), 577–598. https://doi.org/10.1080/14616688.2 020.1759131
Harapan, H., Itoh, N., Yufika, A., Winardi, W., Keam, S., Te, H., Megawati, D., Hayati, Z., Wagner, A. L., & Mudatsir, M. (2020). Coronavirus disease 2019 (COVID-19): A literature review. <i>Journal of Infection and Public Health</i> , <i>13</i> (5), 667–673. https://doi.org/10.1016/j.jiph.2020.03.019
Hartjes, L. B., Baumann, L. C., & Henriques, J. B. (2009). Travel health risk perceptions and prevention behaviors of US study abroad students. <i>Journal of Travel Medicine</i> , <i>16</i> (5), 338–343. http://doi.org/10.1111/j.1708-8305.2009.00322.x
Hosany, S., Buzova, D., & Sanz-Blas, S. (2020). The influence of place attachment, ad-evoked positive affect, and motivation on intention to visit: Imagination proclivity as a moderator. <i>Journal of Travel Research</i> , <i>59</i> (3), 477–495. https://doi.org/10.1177/0047287519830789
Huang, S., & Hsu, C. H. (2009). Effects of travel motivation, past experience, perceived constraint, and attitude on revisit intention. <i>Journal of Travel Research</i> , 48(1), 29–44. https://doi.org/10.1177/0047287508328793
Hultman, M., Kazeminia, A., & Ghasemi, V. (2015). Intention to visit and willingness to pay premium for ecotourism: The impact of attitude, materialism, and motivation. <i>Journal of Business Research</i> , 68(9), 1854–1861. https://doi.org/10.1016/j.jbusres.2015.01.013
Jacoby, J., & Kaplan, L. (1972). The components of perceived risk. <i>Advances in Consumer Research</i> , <i>3</i> , 1–19.
Janmaimool, P. (2017). Application of protection motivation theory to investigate sustainable waste management behaviors. <i>Sustainability</i> , <i>9</i> (7), 1079. https://doi.org/10.3390/su9071079
Jiang, Y., & Wen, J. (2020). Effects of COVID-19 on hotel marketing and management: A perspective article. <i>International Journal of Contemporary Hospitality Management</i> , <i>32</i> (8), 2563–2573. https://doi.org/10.1108/IJCHM-03-2020-0237
Khan, M. J., Chelliah, S., & Ahmed, S. (2017). Factors influencing destination image and visit intention among young women travellers: Role of travel motivation, perceived risks, and travel constraints. <i>Asia Pacific Journal of Tourism Research</i> , 22(11), 1139–1155. https://doi.org/10.108

26

BBR

0/10941665.2017.1374985

- Khan, M. J., Chelliah, S., Khan, F., & Amin, S. (2019). Perceived risks, travel constraints and visit intention of young women travelers: The moderating role of travel motivation. *Tourism Review*, 74(3), 721–738. https://doi.org/10.1108/TR-08-2018-0116
- Knight, F. H. (1921). *Risk, uncertainty and profit*. Houghton Mifflin.
  - Küpeli, T., & Özer, L. (2020). Assessing perceived risk and perceived value in the hotel industry: An integrated approach. *Anatolia*, *31*(1), 111–130. https://doi.org/10.1080/13032917.2020.1711785

Lai, I. K. W., & Wong, J. W. C. (2020). Comparing crisis management practices in the hotel industry between initial and pandemic stages of COVID-19. *International Journal of Contemporary Hospitality Management*, 32(10), 3135–3156. https://doi.org/10.1108/IJCHM-04-2020-0325

Lee, J. H., Mustapha, A., & Hwang, J. (2019) Enhancing ethnic restaurant visits and reducing risk perception: The effect of information and protection motivation. *Journal of Hospitality and Tourism Insights*, 2(4), 341–357. https://doi.org/10.1108/JHTI-10-2018-0068

Li, M., & Cai, L. A. (2012). The effects of personal values on travel motivation and behavioral intention. *Journal of Travel Research*, 51(4), 473–487. https://doi.org/10.1177/0047287511418366

- Lin, C. T., Huang, Y. S., Liao, L. W., & Ting, C. T. (2020). Measuring consumer willingness to pay to reduce health risks of contracting dengue fever. *International Journal of Environmental Research* and Public Health, 17(5), 1810. https://doi.org/10.3390/ijerph17051810
- Loi, L. T. I., So, A. S. I., Lo, I. S., & Fong, L. H. N. (2017). Does the quality of tourist shuttles influence revisit intention through destination image and satisfaction? The case of Macao. *Journal* of Hospitality and Tourism Management, 32, 115–123. https://doi.org/10.1016/j.jhtm.2017.06.002
- Maddux, J. E., & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19(5), 469–479. https://doi.org/10.1016/0022-1031(83)90023-9
- Malhotra, N., Nunan, D., & Birks, D. (2017). Marketing research: An applied approach. Pearson.
- Memish, Z. A., Goubeaud, A., Bröker, M., Malerczyk, C., & Shibl, A. M. (2010). Invasive meningococcal disease and travel. *Journal of Infection and Public Health*, 3(4), 143–151. https:// doi.org/10.1016/j.jiph.2010.09.008
- Mitchell, V. (1992). Understanding consumers' behaviour: Can perceived risk theory help? *Management Decision*, 30(3), 26–31. https://doi.org/10.1108/00251749210013050
- MTUR Ministério do Turismo. (2010). *Sistema de classificação dos meios de hospedagem*. Ministério do Turismo do Brasil. http://antigo.turismo.gov.br/acesso-a-informacao/63-acoes-e-programas/5021-sistema-brasileiro-de-classificacao-de-meios-de-hospedagem-sbclass.html
- MTUR Ministério do Turismo. (2020, June 7). *Ministério do Turismo divulga estudo sobre parques nacionais e ecoturismo*. Ministério do Turismo. https://www.gov.br/turismo/pt-br/assuntos/ultimas-noticias/ministerio-do-turismo-divulga-estudo-sobre-parques-nacionais-e-ecoturismo.
- Neuburger, L., & Egger, R. (2021). Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Current Issues in Tourism*, 24(7), 1003–1016. https://doi.org/10.1080/13683500.2020.1803807
- Papadimitriou, D., & Gibson, H. (2008). Benefits sought and realized by active mountain sport tourists in Epirus, Greece: Pre-and post-trip analysis. *Journal of Sport & Tourism*, 13(1), 37–60. https://doi.org/10.1080/14775080801972056

BBR, Braz. Bus. Rev. – FUCAPE, Espírito Santo, 21(3), e20221256, 2024

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27

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Prayag, G., & Ryan, C. (2012). Antecedentes da lealdade dos turistas às Ilhas Maurício: o papel e
a influência da imagem do destino, apego ao lugar, envolvimento pessoal e satisfação. Journal of
Travel Research, 51(3), 342–356.

BBR

28

- Prebensen, N. K., Woo, E., Chen, J. S., & Uysal, M. (2013). Motivation and involvement as antecedents of the perceived value of the destination experience. *Journal of Travel Research*, 52(2), 253–264. https://doi.org/10.1177/0047287512461181
  - Qiu, R. T., Park, J., Li, S., & Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, 84, 102994. https://doi.org/10.1016/j.annals.2020.102994
  - Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism Management*, 31(6), 797–805. https://doi.org/10.1016/j. tourman.2009.08.006
  - Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change1. *The Journal of Psychology*, 91(1), 93-114. https://doi.org/10.1080/00223980.1975.9915803
  - Roselius, T. (1971). Consumer rankings of risk reduction methods. *Journal of Marketing*, 35(1), 56–61. https://doi.org/10.2307/1250565
  - Sanabria-Díaz, J. M., Aguiar-Quintana, T., & Araujo-Cabrera, Y. (2021). Public strategies to rescue the hospitality industry following the impact of COVID-19: A case study of the European Union. *International Journal of Hospitality Management*, 97, 102988. https://doi.org/10.1016/j. ijhm.2021.102988
  - SEBRAE Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. (2012). Ideias Sustentáveis - Hotel Fazenda. SEBRAE. http://extranet2.pr.sebrae.com.br/portal/sustentabilidade/Hotel%20 Fazenda.pdf
  - Tang, Y. (2014). Travel motivation, destination image and visitor satisfaction of international tourists after the 2008 Wenchuan earthquake: A structural modelling approach. *Asia Pacific Journal of Tourism Research*, 19(11), 1260–1277. https://doi.org/10.1080/10941665.2013.844181
  - Tavitiyaman, P., & Qu, H. (2013). Destination image and behavior intention of travelers to Thailand: The moderating effect of perceived risk. *Journal of Travel & Tourism Marketing*, *30*(3), 169–185. https://doi.org/10.1080/10548408.2013.774911
  - Varah, F., Mahongnao, M., Pani, B., & Khamrang, S. (2021). Exploring young consumers' intention toward green products: Applying an extended theory of planned behavior. *Environment, Development* and Sustainability, 23(6), 9181–9195. https://doi.org/10.1007/s10668-020-01018-z
  - Wang, F., Xue, T., Wang, T., & Wu, B. (2020). The mechanism of tourism risk perception in severe epidemic—The antecedent effect of place image depicted in anti-epidemic music videos and the moderating effect of visiting history. *Sustainability*, *12*(13), 5454. https://doi.org/10.3390/su12135454
  - Wang, J., Liu-Lastres, B., Ritchie, B. W., & Mills, D. J. (2019). Travellers' self-protections against health risks: An application of the full Protection Motivation Theory. *Annals of Tourism Research*, 78, 102743. https://doi.org/10.1016/j.annals.2019.102743
  - WTTC World Travel & Tourism Council. (2020). Travel & tourism global economic impact & trend 2020 may 2020. WTTC.
  - Zenker, S., & Kock, F. (2020). The coronavirus pandemic–A critical discussion of a tourism research agenda. *Tourism Management*, *81*, 104164. https://doi.org/10.1016/j.tourman.2020.104164

**BBR** Zheng, S. (2018). *Evaluating the impact of travel motivations, sensation seeking, destination perceived risk on consumer choice.* Kent State University College.

Zhu, H., & Deng, F. (2020). How to influence rural tourism intention by risk knowledge during COVID-19 containment in China: Mediating role of risk perception and attitude. *International Journal of Environmental Research and Public Health*, *17*(10), 3514. https://doi.org/10.3390/ijerph17103514

#### **AUTHOR'S CONTRIBUTION**

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**DR:** conceptualization, data gathering, analysis of data, original writing; **MG:** conceptualization, tools of analysis, data analysis and supervision; **NC:** analysis of data, review and editing.

#### **CONFLICTS OF INTEREST**

No potential conflict of interest was related by the authors.

### EDITOR-IN-CHIEF Talles Vianna Brugni 💿

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