BRDR

Original Article

Access This Article Online
Quick Response Code

DOI
10.62019/BRDR.03.02.02

Volume: 3 | Issue: 2
Pages: 11-22

Edited By
Dr. Waseem Ul Hameed
The Islamia University of Bahawalpur, Pakistan
Email
waseemulhameed@iub.edu.pk

Reviewed By
Dr. Riaz Ahmed
Bahria University Karachi Campus, Pakistan
Email
riazahmed.bukc@bahria.edu.pk
Dr. Muhammad Nazim
Khwaja Freed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan
Email
muhammad.nazim@kfueit.edu.pk

Correspondence
Aisha Aziz, Lecturer, Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan
Email
aisha.aziz@kfueit.edu.pk

How to Cite This Article
Aziz, A., Umer, K. & Zaidi, S. N. B. (2023). Maladaptive Perception, Protection Motivation and Health Protective Behavior: the Application of Protection Motivation Theory in Tourism Industry Amidst the Digital Revolution. *Business Review of Digital Revolution.* 3(2), 11-22.

Received:	08-Jul-2023
Revised:	28-Nov-2023
Accepted:	10-Dec-2023
Published:	31-Dec-2023

Maladaptive Perception, Protection Motivation and Health Protective Behavior: the Application of Protection Motivation Theory in Tourism Industry Amidst the Digital Revolution

Aisha Aziz[1*], Khushbakhat Umer[2], Syeda Nazish Batool Zaidi[3]

Abstract

In the backdrop of the ongoing digital revolution, this study delves into the intricate connections among maladaptive perception, protection motivation (intention), and health protective behavior in the context of COVID-19. The data of 309 tourists residing in different cities of Pakistan through an online survey were collected by employing purposive sampling. These tourists were of various categories such as business and professional, holiday and leisure, tourists travelling to relatives and friends, and tourists travelling for study or shopping. Due to the predictive nature of the model, PLS-SEM was employed for data analysis and hypothesis testing. The results reveal that both a threat and coping appraisal influence the travellers' protection motivation intentions, ultimately influencing their actual behaviour. This study also empirically confirms that behavioural intentions retain robust predictive power of travellers' actions regarding their health and risk of COVID-19, and this health-related behaviour leads them to make travel or destination-related decisions. Additionally, this study also confirms that maladaptive perception has a negative association with travellers' coping appraisal. Thus, tourists' perception regarding health risk towards their destination does not play a significant part in traveller's destination-related decisions, which further influence travellers' health-defensive behaviour as well as trip quality during and after COVID-19. Hence, suggested that travelers fail to engross in preventive actions due to maladaptive perception in high-risk situations. This study signifies that the relation between appraisals and action strongly depends upon the protective intentions, while the moderating role of preventive behaviour can also influence the travellers' motivation intention. This study also cannot gather data only from tourists of Pakistan. Future research may have responses from other countries and make comparisons. Implications elaborated on how travellers can be encouraged to shield themselves from health-related risks of COVID-19. This study provides a comprehensive understanding of travellers' health-related behaviour. Thus, it is predicted from this study's findings that it may comprehend the knowledge of health-protective behaviour adopted by travellers due to COVID-19. The PMT model combined with behavioural choice strategy has not been tested before to study the relationship between travellers' maladaptive perception, protective behaviour, and COVID-19.

Keywords: COVID-19, Health, Travel, Protection Motivation, Perception, Behaviour, Appraisal, Digital Revolution.

1. Introduction

In the current landscape marked by the digital revolution, tourism, typically associated with leisure and pleasure activities, necessitates vigilant risk management. Undeniably, risk in tourism is fundamentally viewed as antipathy for pleasure, which causes dissatisfaction among tourists (Karl, 2018). Indeed, tourism signifies an important segment in the economic and social life of countries around the world. Tourism boosts any country's development by fetching economic benefits and building a positive image, value, or identity of a particular country (Jha-Thakur et al., 2021). According to the World Tourism Organization, till 2019, approximately 1.5 billion tourist arrivals at the international level were recorded. An increase of 4% until 2020, which was also forecasted for 2021, indicates tourism is a robust and leading economic sector, especially in the era of high uncertainties such as social, natural, political, or global economic disasters (Costa, 2019). According to the World Tourism Organization (WTO) , the tourism sector is falling drastically; the estimated fall in international tourist arrivals is by 20-30% in the years 2020 and 2021 compared to figures of 2019 due to travel restrictions across the world (WTO, 2021).

Authors Affiliation
[1] Lecturer, Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan. Email: aisha.aziz@kfueit.edu.pk
[2] Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan. Email: kb.umer66@gmail.com
[3] Khawaja Fareed University of Engineering and Information Technology, Rahim Yar khan, Pakistan. Email: ta.nazish@kfueit.edu.pk

The digital revolution has played a pivotal role in shaping the narrative around the impact of the coronavirus, a primary catalyst for the decline in international tourist arrivals and the subsequent downturn in the tourism sector's shares. World Health Organization affirmed the public health emergency as a global concern at the start of Jan 30th, 2020. As of October 2021, Coronavirus disease (COVID-19) had spread to 218 countries in six continents, 231 million confirmed cases, and 4.9 million deaths were globally reported (WHO, 2021). The risk of this infectious disease is serious and high in areas with confirmed cases of coronavirus disease. The World Health Organization (WHO) has officially labelled this pandemic (Roser, Ritchie, Ortiz-Ospina, & Hasell, 2020). Due to this epidemic, people cannot continue their daily life as normal. This disease prohibited people from travelling worldwide or even within the country and from close contact with people. If someone recently travelled to any affected area or has close contact with someone suffering from the virus, they must seek medical advice as well as try to stay away from people and public places (WHO, 2020).

Pakistan's tourism sector was growing faster than interminably before, till 2018, determined to become the number one travel destination worldwide. But started to decline in 2019 due to the COVID-19 pandemic. The tourism sector plays a significant role in the economy of a country. Likewise, as the number of travellers visits increases in Pakistan, the better becomes its economy. Figure 1 reflects the tourism sector's contribution to the GDP of Pakistan from the year 2015-2020.

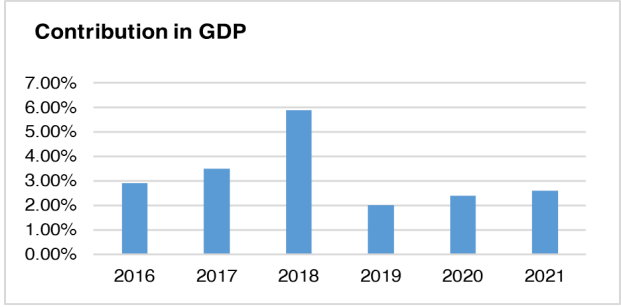

Figure1: Tourism Sector Contribution to GDP of Pakistan.

The spread of Coronavirus globally has confounded the tourism industry of Pakistan; due to the complete lockdown, numerous airlines seem engaged in restraining their operations in the country. In Pakistan, by October 14, 2021, confirmed corona cases were reported 1,262,771and 28,228 people died due to this epidemic. Thus, many events, conferences, and trade shows have been cancelled in Pakistan due to security measures taken by the government, limiting business and tourism, which seems to be having drastic impacts on the hospitality industry. With outbound travelling, inward travel has also considerably decreased within Pakistan. Due to fear of a pandemic, travel trends in Pakistan have dropped by 60-70% in Pakistan. And this effect is witnessed to continue throughout the year (Hussain, 2020).

Suffering a tourist from disease or facing any dangers throughout the trip can prevent harm to tourists, managers, and suppliers in the tourism and travel-related industry (Peattie, Clarke, & Peattie, 2005). Hence, a suitable health risk management system must support lessening travellers' concerns and lead to healthier travel experiences. Moreover, it has been conducive for destinations with the highest risks to create a positive image regarding risk and safety controls (CBI, 2020).

In the context of tourism, information (maladaptive perception) regarding the occurrence of tragic events like outbreaks helps to examine the tourists' (perceived severity level, vulnerability level, and efficacies), which further leads to threat as well as coping appraisal results in protection motivation intentions to understand the health behaviour. Moreover, in behavioural choice strategy, this perceived motivation helps in choice behaviour based on which travellers make travel and destination choice decisions. According to (Chien, Sharifpour, Ritchie, & Watson, 2017; Jones et al., 2015), Diverse forms of health-related beliefs such as the severity of risk, susceptibility of risk, associated benefits or barriers, and cues are validated signs to predict the people health allied behaviour. The risk-preventive behaviour mediates the relationship between travellers' health beliefs and health-protecting behaviour. One of the major determinants of travellers' decision to visit a place is travellers' perception of security and safety (Beirman, 2020). According to Irvine and Anderson (2006), risk perception influences travellers' behaviour rather than actual risk circumstances or factors. They decide either to cancel or avoid the travel to a specific destination. Shortly, travel-related decisions of tourists are entirely centred on their perceptions instead of certainty (Roehl & Fesenmaier, 1992); thus, it can be argued that actual risks may be different from perceived risks. Therefore, researchers must differentiate these two concepts.

Specifically, the self-protection behaviour of the travellers contrary to health risk is among the precarious research inquiries. This study utilises the protection motivation theory to reconnoitre psychological contrivances regarding health preventive behaviours for travellers and tourists (Wang, Liu-Lastres, Ritchie, & Mills, 2019). Protection motivation theory highlights the effect of threat, copping appraisals and efficiencies on the protecting behaviour of tourists (Verkoeyen & Nepal, 2019). Moreover, the Protection motivation theory (PMT) intends that health-allied beliefs, such as perceived severity and vulnerability, concerning health risks, are a particularly multi-dimensional variable. This study seeks to examine the association between maladaptive perception, protection motivation (intention), health-protective behaviour, and travel and destination decisions during and after COVID-19 by extending the application of the combined model of health motivation theory and behavioural choice strategy in the tourism sector.

The major contribution of this study is that it helps travel agents understand the intentions of tourists and travellers regarding the visit to certain places or destination choices after an outbreak. (Cahyanto, Wiblishauser, Pennington-Gray, & Schroeder, 2016). This study provides a comprehensive understanding of travellers' health-related behaviour. Thus, it is predicted from this study's findings that it may comprehend the knowledge of health-protective behaviour adopted by travellers due to COVID-19. PMT model combined with behavioural choice strategy has not been tested before to study the relationship between travellers' maladaptive perception, protection motivation intention, and health-protective behaviour in the context of COVID-19. Moreover, this study is unique as it shows how protection motivation intention induces health and choice-related behaviour, leading to the destination or travel decisions during and after COVID-19.

2. Literature Review

2.1. Diseases, Travel, and Tourists

At the end of 2019, a causative virus termed a novel coronavirus (or COVID-19) started scattering from China's city of Wuhan to further countries very rapidly and hurriedly; the World Health Organization affirmed the COVID-19 epidemic as a pandemic in March 2020. As

a reaction to alleviate the spread of Coronavirus and secure human lives, governments of pretentious countries enforced desperate measures involving social distancing, extensive lockdown, travelling restrictions, gatherings, and public movements (Craven, Liu, Mysore, & Wilson, 2020; Liguori & Winkler, 2020; Segal & Gerstel, 2020).

The challenges posed by Emerging Infectious Disease (EID) outbreaks, predominantly viral in origin, have been exacerbated by the digital revolution (Gesser-Edelsburg & Shir-Raz, 2016). As a result of these viruses, impacted countries prohibited travellers which welcomed international travellers. The avoidance response and potential fear factor of the customers caused cancellations of flights and travel. The cancellation of travel was primarily inclined by the severity of symptoms and specific viruses' transmission mode. The news coverage also greatly affects the public perception of potential hazards (Grand, 2016; Morawska & Cao, 2020). Travel is a strong force that contributes to the emergence of diseases. It was found that the migration of humans is a threatening source of the emergence and spreading of infections and diseases in the population and geographic areas. The penalties of the travel encompass beyond the travellers to the population they visited as well as the ecosystem. International travel and tourism pretense various health risks, which depend on the characteristics of the traveler and the traveling destination (Raude et al., 2020).

2.2. Source of Knowledge and Tourism

Reports, news, and word of mouth regarding any outbreak enhance the consumers' perceptions of risks at the destination (Partoip, 2016; Smith & Smith, 2016). Media have high ability and credibility to grasp a huge number of the public in a petite period; therefore, media mostly, have great potential to change individuals' perceptions regarding any destination. When tourists do not know about their destination, the media plays a vital part in spreading negative risk perceptions among people regarding precious destinations besides non-precious destinations (via ripple effects). Subsequently, making an erroneous decision regarding travel and tour turns into a perceived risk and threat (Cavlek, 2002; Fuchs & Reichel, 2006; Tasci & Gartner, 2007). Moreover, information regarding epidemics and their severe impacts prevents travellers from travelling. As a result, travellers change their behaviour regarding travel, such as cancelling their bookings when customers get enough information. As a result, they sense high risk; then they alter their behaviours as well as plans, for instance, cancellation, evacuation, or non-booking from the destinations regarding their perceived risk (Allgaier & Svalastog, 2015). Thus, the impending impacts of biased and misleading media coverage on residents' mental health are unimaginable. News about the coronavirus as a public health crisis has a greater impact on the behaviour of the public. Moreover, the coronavirus outbreak has had adverse effects on the image of the country and destination image concerning tourist behaviour during the times of this crisis (Park, Ju, Ohs, & Hinsley, 2021; Wen, Aston, Liu, & Ying, 2020).

Additionally, studies based on previous outbreaks revealed that individuals' psychology is a strong influencing factor for engaging individuals in health-related preventive behaviours. Moreover, extensive media exposure and knowledge causes an increase in adopting preventive health behaviours (Faasse & Newby, 2020; Wise, Zbozinek, Michelini, Hagan, & Mobbs, 2020; Zickfeld, Schubert, Herting, Grahe, & Faasse, 2020).

2.3. Perceived Severity and Vulnerability

Diverse health-allied beliefs, such as susceptibility to risks, the severity of risk, associated benefits, barriers, and cues, are validated signs to predict and explain people's health-allied behaviour in the Health belief model. Moreover, risk-preventive behaviour mediates the relationship between travellers' health beliefs and health-protecting behaviour (Chien et al., 2017; Jones et al., 2015).

Considerable evidence regarding the COVID-19 pandemic advocates that embracing extensive changes in behaviour sturdy impacts the spreading of the virus and destructive impacts occurrence due to the pandemic (Bakioğlu, Korkmaz, & Ercan, 2020). There is a strong correlation between the constructs of the Health Belief Model (i.e. severity and susceptibility perceptions and perceived- efficacy). Self-efficacy plays a significant role in changing the perceptions regarding severity and susceptibility to adopt particular health-protective behaviour (Nasir & Almahdi, 2020; Seale et al., 2020).

Perceived susceptibility and perceived benefit are significant precursors towards defensive behaviours, as health beliefs and self-efficacy have a positive influence on preventative behaviours, and health beliefs are indirectly related to preventive behaviour. Furthermore, it is found that risk-preventive behaviour is a strong factor in satisfaction during any trip. Thus, tourists' perception of health risk towards their destination plays a significant part in traveller's destination-related decisions, which further influence travellers' health-defensive behaviour and trip quality (Huang, Dai, & Xu, 2020).

Moreover, concerns related to satisfaction and perceived health risks of tourists would significantly impact the tourists' preventive behaviour, travel preparation, and holidays. Nevertheless, most prevailing studies had anticipated the influences of individuals' perceptions on such behavioural intentions about travellers' information searching as well as making travel-related decisions (Chien et al., 2017; Page, 2009; Walker et al., 2020). Moreover, tourists encounter more risks than locals because of their non-familiarity with the climate and geography destination. However, these health-associated fears and risks can be prohibited. The impacts of such risks can be reduced by means of health-protecting behaviours (such as captivating medicine) (Chien et al., 2017; Lunt, Smith, & Exworthy, 2011). In the same regard, affirmative alliances are a source of active preparedness for future epidemics throughout the tourism and health-related sectors.

2.4. Protection Motivation Theory (PMT) and Research Hypotheses

Rogers (1975) is the founder of PMT. Protection motivation theory proposes that health belief obtained from health-related knowledge, such as the perceived severity and perceived vulnerability toward health risk, is a multidimensional variable (Verkoeyen & Nepal, 2019).

Perceived Severity: It refers to the assessment of the subject related to the severity of any health problem. Individuals with high perceived severity have a high intensity of engrossment in health-related behaviour.

Perceived Vulnerability: It refers to the assessment of subjects related to risk in engaging in health-related behaviour. Individuals with less vulnerability are less likely to engage in health-related behaviour. Therefore, we hypothesise that;

H1a: Corona pandemic knowledge significantly predicts the perceived severity.
H1b: Corona pandemic knowledge significantly predicts the perceived vulnerability.

Moreover, Protection motivation theory highlights the effect

of threat, copping appraisals and efficiencies on the protecting behavior of the tourists (Verkoeyen & Nepal, 2019).

Response Efficacy: stated as the effectiveness of any indorsed behavior to remove or prevent possible harm (Van der Velde & Van der Pligt, 1991).

Self-efficacy: It refers to the individual's perception regarding their competence to perform a particular behaviour successfully. It effectively predicts individuals' differences in engaging in health-related behaviour (Ruiter, Abraham, & Kok, 2001). Thus, we propose the following hypothesis;

H1c: Corona pandemic knowledge significantly predict the response efficacy.
H1d: Corona pandemic knowledge significantly predicts the perceived self-efficacy

Threat Appraisal Process: It consists of both the perceived severity as well as the vulnerability of any circumstance. It emphasises sources of threats and increases or decreases the likelihood of health-preventive behaviours (Plotnikoff & Trinh, 2010). Therefore, it was hypothesised that;

H2a: Perceived severity significantly predicts the tourists' threat appraisal.
H2b: Perceived vulnerability significantly predicts the tourists' threat appraisal.

Coping Appraisal Process: It is a combination of response efficacy as well as perceived self-efficacy. Its emphasis is on sources of coping with any situation as well as increasing or decreasing the likelihood of health-preventive behaviours (Prentice-Dunn, Mcmath, & Cramer, 2009). So, the hypotheses are formulated as follows;

H3a: Response efficacy significantly predicts the tourists' coping appraisal.
H3b: Perceived self-efficacy significantly predicts the tourists' coping appraisal.

Furthermore, protection motivation is stated as an individual's motivation to protect themselves from harmful events. Thus, we hypothesised that;

H4: Threat appraisal predicts the protection motivation (intention).
H5: Coping appraisal predicts the protection motivation (intention).

In social sciences, empirical choice behaviour is usually studied using a deceptively intuitive choice set containing few alternatives (Beach, 1990; KAI-INEMAN & Tversky, 1979). Additionally, According to Block (1995), behaviour choice strategy refers to the individuals' choice process based on perceptions and concurrent needs. The function of this choice behaviour is to select among the possible course of action from the available set of alternatives that, in that specific context, meet the certain concurrent needs of the individuals. Thus, in the case of travel and tourism, this health choice behaviour will help make travel or destination choice decisions. Therefore, we propose the following hypothesis;

H6: Protection motivation significantly predicts health and choice behaviour.
H7: Health and choice behaviour significantly predict the travel/destination choice decision.

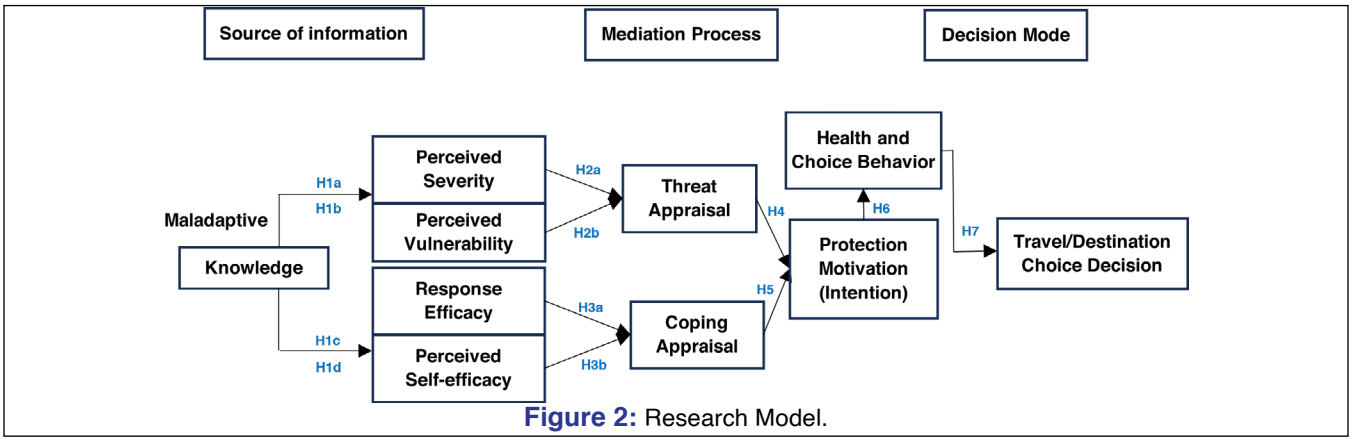

Figure 2: Research Model.

3. Methodology

3.1. Sampling and Procedure

This study was conducted in Pakistan in May 2021 by employing a survey method. The purposive sampling method was used in this study. Data was collected by using an online survey method. This method was used as the result of preventive measures such as lockdowns in the country. Moreover, avoiding social contact due to the pandemic emphasises the use of online survey methods. Structured questionnaires were used as data collection instruments. The target population of this study was tourists from different cities in Pakistan. Tourists are selected from other cities in Pakistan to enhance the generalizability of the study. These tourists were of various categories such as Business and professional, holiday and leisure, tourists travel to relatives and friends, tourists travelling for research or shopping etc. Questionnaires were distributed among these different types of tourists to assess their travel and destination choices under fear of the coronavirus pandemic with a brief description. A total of 520 questionnaires were distributed through the Internet, but 309 respondents gave back responses. So, the response rate of this study was 59.6%. Thus, the final sample size for this study was 309 tourists. The questionnaire was divided into three parts. The first part constituted information regarding basic demographics (i.e., age, education, marital status, gender, etc.) and travelling behaviour (i.e., source of information, trip partner, tourism type), the second part was related to fear of Coronavirus disease (COVID-19), travelling, threat and coping

appraisal in the context of Coronavirus disease (COVID-19), the third part was related to health behaviour and travelling choice decisions after Coronavirus disease (COVID-19).

To analyse the data, the PLS-SEM technique was employed by Smart PLS software to ensure validity, reliability, and hypothesis testing (Hair, Risher, Sarstedt, & Ringle, 2019). The fundamental purpose of the current study is to predict the travel destination choice by employing health motivation theory during COVID-19 duration. Therefore, PLS-SEM is considered a more suitable technique when the focus of research is prediction (Joe F Hair Jr, Howard, & Nitzl, 2020). Furthermore, Shmueli, Ray, Estrada, and Chatla (2016) argued that "PLS-SEM primarily focuses on the interplay between prediction and theory testing and results should be validated accordingly (Shmueli, Ray, Velasquez Estrada, & Chatla, 2016)." Therefore, researchers in the field of PLE-SEM have developed a new data analysis procedure designed specifically for PLS-SEM's prediction-oriented nature (Umrani et al., 2020). By following the recommendations of Hair et al. (2019), the current study adopts the two-stage model. Firstly, a measurement model consisting of inter-item loading, internal consistency, and convergent validity will be ensured. Secondly, the structural model assessment will be determined by examining the hypothesis testing.

3.2. Measurements

The perceived vulnerability was measured by respondents' degree of likelihood regarding travelling experience in different countries based on Sharifpour et al., (2014). To measure the perceived severity, respondents were asked to tell the severity of the COVID-19 pandemic they think when travelling to other countries derived from Martin et al. (2007). The actual preventive behavior of participants was determined by asking the respondents to specify do they commenced any behavior to reduce the associated risks. Self-efficacy was measured by asking the respondents to appraise their sureness to protect them counter to COVID-19 through their trip after this epidemic reform embraced by Rimal et al.,(2003). Moreover, the Response efficacy of respondents was measured by asking the participants to appraise their efficacy level to prevent themselves counter to risk derived from Martin et al., (2007). Intents to execute the preventive behavior were measured by asking the respondents to show the degree by which they were granted to protect themselves when they took any trip after decreasing the intensity of the COVID-19 epidemic. Threat appraisal was measured by asking participants to specify how they show a willingness to follow the tilt of threats against COVID-19 embraced (Floyd, Prentice-Dunn, & Rogers, 2000). The coping appraisal was measured by asking the participants to specify the degree by which they show a willingness to follow the tilt of coping behaviour against COVID-19 derived from (Floyd et al., 2000). To Maladaptive perception developed by knowledge regarding the COVID-19 epidemic, five statements were derived from literature such as (Tanner Jr, Hunt, & Eppright, 1991). The participants were requested to show the degree by which they agree about five statements regarding the source of knowledge and perception regarding COVID-19: media, news, reports, travel agencies, and word of mouth. Additionally, travel or destination choice behaviour was measured by explicitly including items related to travel or destination choice decisions adopted by Hess et al, (2008). All variables were measured on 5 5-point Likert scale where (1 = extremely disagree, 5 = extremely agree).

4. Results

As shown in Table 1, descriptive statistics show that most of the respondents were business and professional tourists (24.4% of the total sample), followed by leisure and holiday tourists (21.5%). 84.7% of respondents were male, while the ratio of female respondents was 15.3%. The dominant respondents lie in the age group 29 to 39-year-old group (29.6%), and more than half of respondents (62.4%) were single, (30.9) % of respondents were married, and 6.7 % were divorced. In terms of educational qualifications, most respondents had a graduate degree (32.6%). In the case of occupation, 52.1% reported that they are professionals, while 40.3% of respondents reported that they earned between 80,000 and 99,999 rupees per month. Table 1 also reflects data regarding travel behaviour. The results also revealed that for more than half of the respondents (61.6%) source of knowledge and maladaptive perception about the coronavirus is media/news. Thus, the media is a strong force in spreading knowledge regarding the epidemic.

Table 1: Descriptive Statistics.

Characteristics	Percentage	Travelling Behaviour	Percentage
Gender		**Trip partner**	
Male	84.7%	Alone	7.2%
Female	15.3%	Families	14.1%
Age		Classmate	13.4%
20 and under	26.0%	Friend	31.6%
20–29 years	27.3%	Co-worker	16.3%
29–39 years	29.6%	Tour Group	17.4%
40–55 years	14.5%		
Over 55 years	2.6%	**Tourism type(s)** Shopping	18.1%
Educations		Holiday and leisure	21.5%
Post-graduate	24.8%	VFR tourism	5.4%
Graduate	32.6%	Business and Professional	24.4%
College	16.9%	Study and education	18.0%
High School	10.9%	Others	12.4%
Others	14.8%		
Marital status		**Source of information for Corona**	
Single	62.4%	Internet	18.2%
		Media/News/report	61.6%
Married/living as a couple	30.9%	Travel agencies	10.5%
Separated/divorced/ widow	6.7%	Word of mouth	8.6 %
Occupations		Others	1.1%
Professional	52.1%		
Self-employed	24.4%	**Number of visits previously**	
Housewife	1.2%	None	1.2
Unemployment	0%	One time	4.2%
Retired	6.3%	Two times	12.1%
Others	16.0%	Three times	23.8%
		Four times	22.1%
		Five times	19.6%
Monthly income		More than five times	17.0%
19,999 or less	3.1%		
20,000–39,999	5.5%	**Last time visited**	
40,000–59,999	12.8%	Never	0.0
60,000–79,999	23.5%	one month ago	15.5%
80,000–99,999	40.3%	two to five months ago	38.9%
100,000 or more	14.8%	five months to one year ago	32.7%
		Over 1 year ago	12.9%
Household size		**Length of stay**	
Single-member	6.2%	One night	16.6%
2 members	27.6%	Two nights	22.3%
3 members	20.2%	Three nights	26.6%
4 members	29.9%	Four nights	23.6%
5 members and more	16.1%	Five nights	6.2%
		More than five nights	4.7%

4.1. Measurement Model

The measurement model for the current research is presented in Table 2, where items, items loadings composite reliability (CR), and average variance extracted (AVE) are shown. The item loadings were ensured by determining a threshold level of 0.60 (Hair et a., 2010). The item loadings range between 0.646 and 0.897. Internal consistency was ascertained through CR as all values of the latent construct meet the threshold of 0.70 (Hair et al., 2019). The value of AVE is also above the threshold level of 0.50 recommended by (Hair et al., 2019), which established the convergent validity of all constructs.

Table 2: Factor loadings, Composite Reliability, and Average Variance Extracted.

Latent Construct	Items	Item Loadings	CR	AVE
Coping Appraisal	CA1	0.809	0.903	0.699
	CA2	0.878		
	CA3	0.823		
	CA4	0.834		
Health and Choice Behaviour	HCB2	0.973	0.872	0.775
	HCB3	0.776		
Knowledge	KN1	0.726		
	KN2	0.776	0.808	0.583
	KN3	0.788		
Protection Motivation	PM1	0.829	0.858	0.752
	PM3	0.903		
Perceived Severity	PS1	0.755	0.859	0.551
	PS2	0.773		
	PS3	0.728		
	PS4	0.800		
	PS5	0.646		
Perceived Self Efficacy	PSE1	0.754		
	PSE2	0.793		
	PSE3	0.738	0.872	0.578
	PSE4	0.703		
	PSE5	0.807		
Perceived Vulnerability	PV1	0.739		
	PV2	0.779		
	PV3	0.702	0.882	0.601
	PV4	0.811		
	PV5	0.838		
Response Efficacy	RE1	0.653		
	RE2	0.781	0.837	0.563
	RE3	0.784		
	RE4	0.776		
Threat Appraisal	TA1	0.807		
	TA2	0.897	0.910	0.718
	TA3	0.873		
	TA4	0.810		
Travel and Destination Decision	TD1	0.865	0.813	0.685
	TD5	0.789		

4.1.1. Discriminant Validity

To ensure the discriminant validity, the "Heterotrait-Monotrait ratio" was employed as it is considered to be the most accurate tool for ascertaining discriminant validity (Hair et al., 2019; Joseph F Hair Jr, Hult, Ringle, & Sarstedt, 2016) compared to traditional Fornell and Larcker (1981). PLS-SEM literature suggests that if HTMT values are higher than 0.85 (Kline, 2005) or 0.90 (Gold, Malhotra, & Segars, 2001), it shows the problem of discriminant validity. In the present study, table 3 presents the result where all values are less than 0.90 and thus, met the criteria of Gold et al. (2001).

Table 3 Discriminant Validity (HTMT Ratio).

	CA	HCB	Knowledge	PM	PS	PSE	PV	RE	TA	TD
CA										
HCB	0.090									
Knowledge	0.704	0.112								
PM	0.831	0.085	0.776							
PS	0.660	0.095	0.822	0.604						
PSE	0.750	0.056	0.773	0.822	0.785					
PV	0.653	0.100	0.768	0.650	0.774	0.735				
RE	0.731	0.122	0.807	0.733	0.763	0.842	0.721			
TA	0.838	0.059	0.749	0.802	0.645	0.820	0.621	0.735		
TD	0.102	0.233	0.135	0.124	0.125	0.126	0.133	0.099	0.089	

Note: N=309, PSE=Perceived Susceptibility, PV=Perceived-vulnerability, RE=Response-efficacy, PE=Perceived-efficacy, TA=Threat-Appraisal, CA=Coping Appraisal, PM=Protection Motivation, HCB=Health and Choice behaviuor, TD= Travel and Destination Choice

4.2. Structural Model

After examining the structural model, the second step is to test the hypothesis by checking the significance of path coefficients. By considering and following the recommendations of (Hair et al., 2019), the bootstrap procedure with 5000 subsample technique was employed through the Smart PLS version (3.2.2). Figure 2 and Table 3 reveal the results of hypothesis testing.

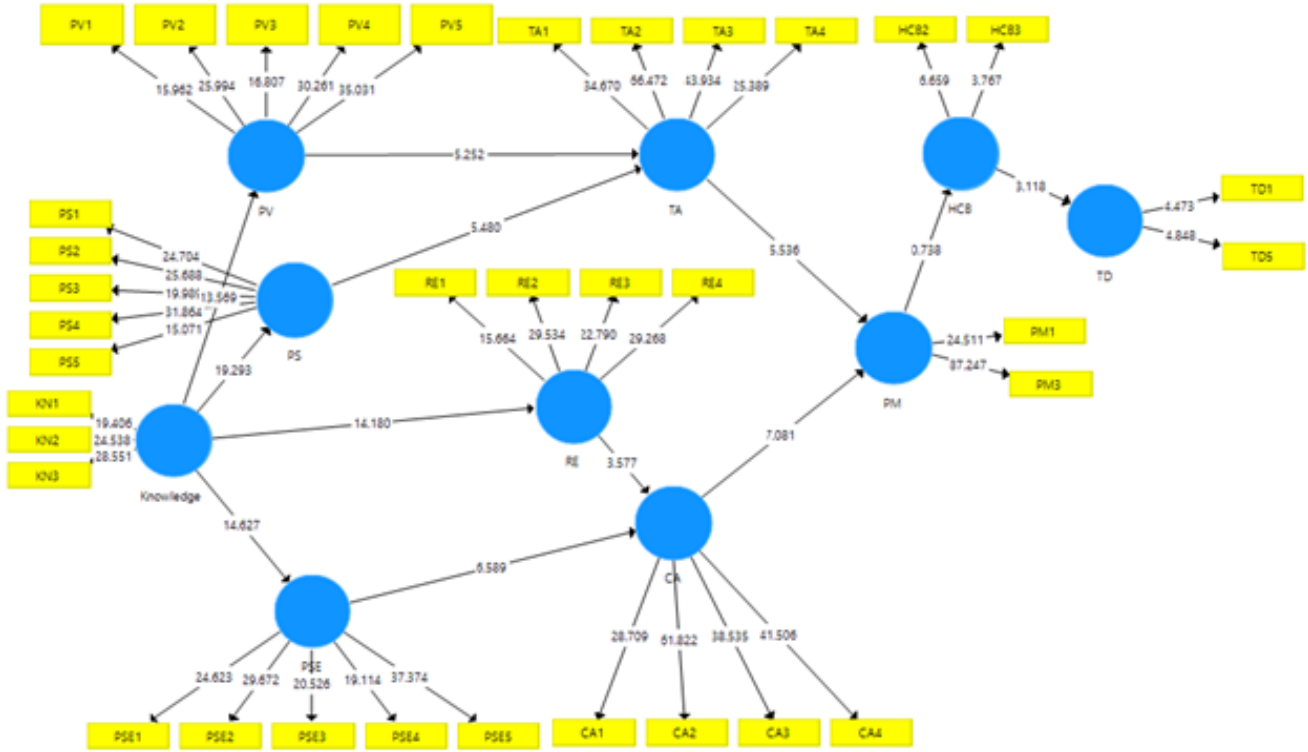

Figure 3: Structural Model.

Table 4: Structural Equation Modeling Results.

Hypothesis	SE Paths	β	T-Value	P-Value	HT Results
H1a	KN→PS	0.663	19.293	0.000	**Supported**
H1b	KN→PV	0.572	13.569	0.000	**Supported**
H1c	KN→RE	0.560	14.180	0.000	**Supported**
H1d	KN→PSE	0.569	14.627	0.000	**Supported**
H2a	PS→TA	0.340	5.480	0.000	**Supported**
H2b	PV→TA	0.315	5.252	0.000	**Supported**
H3a	RE →CA	0.260	3.577	0.000	**Supported**
H3b	PSE→CA	0.446	6.589	0.000	**Supported**
H4	TA→PM	0.321	5.536	0.000	**Supported**
H5	CA→PM	0.414	7.081	0.000	**Supported**
H6	PM→HCB	0.053	0.053	0.738	**Not Supported**
H7	HCB→TDC	0.170	3.118	0.002	**Supported**

Note: KN= Knowledge, PSE=Perceived-susceptibility, PV=Perceived-vulnerability, RE=Response-efficacy, PE=Perceived efficacy, TA=Threat-Appraisal, CA=Coping Appraisal, PM=Protection Motivation, HCB=Health and Choice Behaviuor, TD= Travel and Destination Choice

It shows that perceived severity, as well as vulnerability, is significantly predicted by Knowledge (maladaptive perception) regarding coronavirus disease (COVID-19) such as through media, news, reports, internet, tour agencies, public and word of mouth (βcoefficient= 0.663; p value=0.000) and (βcoefficient= 0.572; p value=0.000) respectively, supporting H1a and H1b. Here, the impact of knowledge regarding coronavirus (maladaptive perception) is high on perceived vulnerability compared to perceived severity. While perceived severity and vulnerability will induce threat appraisal as (β- coefficient= 0.560; p-value=0.000) and (β-coefficient= 0.569; p-value=0.000) correspondingly, showing support to H2a and H2b. On the other hand, knowledge regarding corona disease (maladaptive perception) such as through media, news, reports, internet, tour agencies, public and word of mouth predicts response efficacy and perceived efficacy as (β-coefficient= 0.340; p-value=0.000) and (β-coefficient= 0.315; p-value=0.000) respectively, supporting H1c and H1d. Moreover, response efficacy and perceived self-efficacy induced coping appraisal (β= 0.260; p=0.000), supporting H3a and H3b. Furthermore, results revealed that both threat appraisal and coping appraisal mediated the effect of protection motivation on health and choice behaviour, supporting H4 (β coefficient=0.321, p value=0.000)

and H5 (β coefficient= 0.414, p value=0.000) as reflected in table 4. Additionally, protection motivation does not influence health and choice behaviour (β-coefficient= 0.053; p-vale=0.738), hence rejecting the H6. However, HCB significantly predicts the destination and travel choice decision (β-coefficient= 0.170; p-value=0.022), thus rejecting H7.

5. Discussion

The findings of this study revealed that perceived severity and vulnerability are significantly predicted by maladaptive perception regarding coronavirus disease (COVID-19) through media, news, reports, internet, tour agencies, public, and word of mouth supporting H1a and H1b. Which was stated as H1a: Corona pandemic knowledge significantly predicts the perceived severity, and H1b: Corona pandemic knowledge significantly indicates the perceived vulnerability. Here, the impact of knowledge regarding coronavirus (maladaptive perception) is high on perceived vulnerability compared to perceived severity. While perceived severity and vulnerability will induce threat appraisal, showing support to H2a and H2b, which was described as H2a: Perceived severity significantly predicts the tourists' threat appraisal, H2b: Perceived vulnerability significantly predicts the tourists' threat appraisal. Thus, supported by studies of (Cavlek, 2002; Fuchs & Reichel, 2006; Tasci & Gartner, 2007), reports, news, and word of mouth regarding any outbreak enhance consumers' perceptions of risks at the destination. Media have high ability and credibility to grasp a huge number of the public in a short time; therefore, media mostly, have great potential to change individuals' perceptions regarding any destination. When tourists do not know about their destination, the media plays a vital part in spreading negative risk perceptions among people regarding precious destinations besides non-precious destinations. Subsequently, making an erroneous decision regarding travel and tour turns into a perceived risk and threat.

On the other hand, knowledge regarding COVID-19 (maladaptive perception) such as through media, news, reports, the internet, tour agencies, the public and word of mouth predicts response efficacy and perceived efficacy supporting H1c and H1d. In this study, these two hypotheses were stated: H1c: Corona pandemic knowledge significantly predicts the response efficacy, and H1d: Corona pandemic knowledge significantly predicts perceived self-efficacy. Moreover, response efficacy and perceived self-efficacy induced coping appraisal supporting H3a and H3b. Constructed as H3a: Response efficacy significantly predicts the tourists' coping appraisal, H3b: Perceived self-efficacy significantly predicts the tourists' coping appraisal. According to Nasir and Almahdi (2020), self-efficacy plays a significant role in changing the perceptions regarding severity and susceptibility to adopt particular health-protective behaviour. Thus, these findings also got support from the literature. Such information regarding epidemics and their severe impacts prevents travellers from being able to travel. As a result, travellers change their behaviour regarding travel, such as cancelling their bookings when customers get enough information. As a result, they sense high risk; then they alter their behaviours as well as plans, for instance, cancellation, evacuation or non-booking from the destinations regarding their perceived risk (Allgaier & Svalastog, 2015; Mansfeld, 2006).

Furthermore, results revealed that both threat appraisal and coping appraisal mediated the effect of protection motivation on health and choice behaviour supporting H4 and H5. Studies based on previous outbreaks revealed that an individual's psychology is a strong influencing factor for engaging individuals in health-related preventive behaviours. Moreover, extensive media exposure and knowledge causes an increase in adopting preventive health behaviours (Wise et al., 2020; Zickfeld et al., 2020). Additionally, protection motivation does not influence the health and choice behaviour, which does not further influence the destination and travel choice decision rejecting H6 and H7. According to this study, H6: Protection motivation does not predict health and choice behaviour. Whereas H7: Health and choice behaviour significantly predict the travel/destination choice decision not supported by existing literature. Thus, it is rationalised from the findings of this study that in the case of COVID-19, perceived severity and perceived vulnerability are significant precursors towards defensive behaviours, as health beliefs and self-efficacy have a positive influence on preventative behaviours, and health beliefs are indirectly related to preventative behaviour. Furthermore, it is found that risk-preventative behaviour is not a strong factor in satisfaction during any trip. Thus, tourists' perception regarding health risk towards their destination does not play a significant part in traveller's destination-related decisions, which further influence travellers' health-defensive behaviour as well as trip quality during and after COVID-19.

6. Theoretical Implications

This study combined the PMT model with behavioural choice strategy, thus, helpful to comprehend the knowledge of health-protective behaviour adopted by travellers due to COVID-19. Moreover, this study is unique because it shows the effects of protection motivation intention in inducing health and choice-related behaviour, leading to the destination or travel decisions during and after COVID-19.

Thus, this study can play a crucial role in investigating the reasons for the poor compliance with recommendations and rules for travellers' issued by destination officials and which appropriate measures should be taken to reduce the threat of corona from the minds of travellers.

This study has an important contribution in making countries realise that they should focus on increasing the awareness for travellers visiting friends and relatives for holiday, leisure, study and professional activities regarding this epidemic and how they can cope with this crisis and put restrictions on unnecessary travel. Moreover, this study may cause travel medicine practitioners to not discourage travellers from visiting these countries by realising they are following the basic hygienic measures. This study may also help improve awareness about differences and similarities, which can influence the tourists' visit intentions.

7. Practical Implications

This study helps travellers to apprehend that even though they are unable to eradicate COVID-19 disease illness, they can prevent the serious consequences and reduce damage due to this disease, as supported by (Doran et al., 2017). Although COVID-19 caused physical discomfort, this study is helpful for travellers to realise that coronavirus is life-threatening if they do not take precautions. Thus, tourists must take threat appraisals and choose effective health and choice behaviour to travel. Based on this study, health officials dealing with public affairs, travelling agencies, and tourism marketers should provide extensive education and health-related information to visitors on how they can take preventive measures to improve their travelling further. Moreover, this study is important to elaborate on local health authorities of the affected countries on which measures they should take to reduce the occurrence of the coronavirus epidemic among travellers. In general, this study

will provide more knowledge needed to deliver to the tourists to enhance their awareness regarding the importance and necessity of taking preventive actions.

8. Conclusion

The results reveal that both a threat and coping appraisal influence the travellers' protection motivation intentions, ultimately influencing their actual behaviour. This study also empirically confirms that behavioural intentions retain robust predictive power of travellers' actions regarding their health and risk of COVID-19, and this health-related behaviour leads them to make travel or destination-related decisions. Additionally, this study also confirms that maladaptive perception have a negative association with travelers' coping appraisal. Thus, tourists' perception regarding health risk towards their destination does not play a significant part in traveller's destination-related decisions, which further influence travellers' health-defensive behaviour as well as trip quality during and after COVID-19. Consequently, the study implies that travellers, influenced by maladaptive perceptions in high-risk situations, tend to neglect preventive actions, highlighting a critical area for intervention amidst the ongoing challenges spurred by the digital revolution.

9. Limitations and Further Research Directions

A few limitations of this study are also identified, such as in this study purposive sampling technique is used. However, the use of this technique is essential for this study. Still, some disquiet has been raised related to the generalizability of findings, and it also poses challenges to the external validity of the study's outcomes. However, this research can also be done by using other sampling techniques or experiments after reducing the coronavirus epidemic. In future research, the explanatory power of this study can also be enhanced by applying several research techniques; for instance, combining both quantitative and qualitative methodologies would enhance the validity as well as the generalizability of the findings. Moreover, in this study, data was collected by self-reported online survey technique, although this technique is used as the result of preventive measures such as lockdown and avoiding social contact, it is limited to the people having internet access. This study also cannot gather data only from tourists of Pakistan. Future research may have a response from other countries and do a comparison. This study merely focused on travel and destination choice decisions while ignoring the revisit intentions of tourists. Thus, further study can be conducted to study the revisit intentions of tourists. Furthermore, further research can also focus on other moderating variables to enhance the model structure. Although the sample in this study was demonstrative and centred on the tourists going on a journey and tourists who underwent from bad consequences of COVID-19 may have ignored, this study did not focus on revisiting the intention of visitors who were travelling when this epidemic outbreak, so further study can done in this regard as well. Additionally, the moderating role of preventive behaviour can also influence the travellers' revisit intention. Thus, future studies can take preventive behaviour as a moderator as well. Moreover, travellers' disease-protective behaviour can also be studied in Pakistan or other countries to increase the applicability of the study.

References

Allgaier, J., & Svalastog, A. L. (2015). The communication aspects of the Ebola virus disease outbreak in Western Africa–do we need to counter one, two, or many epidemics? *Croatian medical journal, 56*(5), 496.

Bakioğlu, F., Korkmaz, O., & Ercan, H. (2020). Fear of COVID-19 and positivity: mediating role of intolerance of uncertainty, depression, anxiety, and stress. *International journal of mental health and addiction*, 1-14.

Beach, L. R. (1990). *Image theory: Decision making in personal and organizational contexts*: John Wiley & Sons Incorporated.

Beirman, D. (2020). United States: September 11, 2001 Terrorist Attacks: The impact on American and global tourism *Restoring Tourism Destinations in Crisis* (pp. 43-68): Routledge.

Block, N. (1995). The mind as the software of the brain: An invitation to cognitive science: MIT Press.

Cahyanto, I., Wiblishauser, M., Pennington-Gray, L., & Schroeder, A. (2016). The dynamics of travel avoidance: The case of Ebola in the US. *Tourism Management Perspectives, 20*, 195-203.

Cavlek, N. (2002). Tour operators and destination safety. *Annals of tourism research, 29*(2), 478-496.

Chien, P. M., Sharifpour, M., Ritchie, B. W., & Watson, B. (2017). Travelers' health risk perceptions and protective behavior: A psychological approach. *Journal of Travel Research, 56*(6), 744-759.

Cooper, M. (2006). Japanese tourism and the SARS epidemic of 2003. *Journal of Travel & Tourism Marketing, 19*(2-3), 117-131.

Costa, C. (2019). Tourism planning: a perspective paper. *Tourism review*.

Craven, M., Liu, L., Mysore, M., & Wilson, M. (2020). COVID-19: Implications for business. Executive Briefing, COVID-19: Briefing note, McKinsey & Company. *Retrieved fromwww. google. com. Assessed on 10/7*.

Faasse, K., & Newby, J. (2020). Public perceptions of COVID-19 in Australia: perceived risk, knowledge, health-protective behaviors, and vaccine intentions. *Frontiers in psychology, 11*.

Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A meta-analysis of research on protection motivation theory. *Journal of applied social psychology, 30*(2), 407-429.

Fuchs, G., & Reichel, A. (2006). Tourist destination risk perception: The case of Israel. *Journal of Hospitality & Leisure Marketing, 14*(2), 83-108.

Gershon, R. R., Zhi, Q., Chin, A. F., Nwankwo, E. M., & Gargano, L. M. (2018). Adherence to emergency public health measures for bioevents: review of US studies. *Disaster medicine and public health preparedness, 12*(4), 528-535.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems, 18*(1), 185-214.

Grand, M. (2016). Forecasting the potential impact viral outbreaks will have on the United States tourism industry. *Journal of Tourism and Hospitality Management, 4*(1), 1-13.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research, 109*, 101-110.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage publications.

Hall, C. M. (2006). Tourism, disease and global environmental change: the fourth transition? *Tourism and global environmental change* (pp. 173-193): Routledge.

Huang, X., Dai, S., & Xu, H. (2020). Predicting tourists' health risk preventative behaviour and travelling satisfaction in Tibet: Combining the theory of planned behaviour and health belief model. *Tourism Management Perspectives, 33*, 100589.

Irvine, W., & Anderson, A. R. (2006). The effect of disaster on peripheral tourism places and the disaffection of prospective visitors *Tourism, security and safety* (pp. 177-194): Routledge.

Jha-Thakur, U., Khosravi, F., Quattrone, G., Bandyopadhyay, S., Magedera, I., & Garikipati, S. (2021). Exploring the role of strategic environmental assessment in cultural heritage tourism planning: a case study of the Srirangapatna-Mysore region in India. *Impact Assessment and Project Appraisal, 39*(2), 138-150.

Jones, C. L., Jensen, J. D., Scherr, C. L., Brown, N. R., Christy, K., & Weaver, J. (2015). The health belief model as an explanatory framework in communication research: exploring parallel, serial, and moderated mediation. *Health communication, 30*(6), 566-576.

KAI-INEMAN, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 363-391.

Karl, M. (2018). Risk and uncertainty in travel decision-making: Tourist and destination perspective. *Journal of Travel Research, 57*(1), 129-146.

Kline, T. (2005). *Psychological testing: A practical approach to design and evaluation*: Sage.

Liguori, E., & Winkler, C. (2020). From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19 pandemic: SAGE Publications Sage CA: Los Angeles, CA.

Lunn, P. D., Timmons, S., Julienne, H., Belton, C. A., Barjaková, M., Lavin, C., & McGowan, F. P. (2021). Using decision aids to support self-isolation during the COVID-19 pandemic. *Psychology & Health, 36*(2), 195-213.

Lunt, N., Smith, R., & Exworthy, M. (2011). Medical Tourism: Treatments, Markets and Health System Implications: A Scoping Review, Paris: Organisation for Economic Co-operation and Development.

Mansfeld, Y. (2006). The role of security information in tourism crisis management: The missing link *Tourism, security and safety* (pp. 276-295): Routledge.

Mason, P. (2020). *Tourism impacts, planning and management*: Routledge.

Morawska, L., & Cao, J. (2020). Airborne transmission of SARS-CoV-2: The world should face the reality. *Environment international, 139*, 105730.

Nasir, E. F., & Almahdi, H. A. (2020). Study of the Sudanese perceptions of COVID-19: Applying the Health Belief Model. *medRxiv*.

Nishiura, H., Jung, S.-m., Linton, N. M., Kinoshita, R., Yang, Y., Hayashi, K., Akhmetzhanov, A. R. (2020). The extent of transmission of novel Coronavirus in Wuhan, China, 2020: Multidisciplinary Digital Publishing Institute.

Oosterhoff, B., & Palmer, C. A. (2020). Psychological correlates of news monitoring, social distancing, disinfecting, and hoarding behaviors among US adolescents during the COVID-19 pandemic.

Page, S. J. (2009). Current issue in tourism: The evolution of travel medicine research: A new research agenda for tourism? *Tourism management, 30*(2), 149-157.

Park, T., Ju, I., Ohs, J. E., & Hinsley, A. (2021). Optimistic bias and preventive behavioral engagement in the context of COVID-19. *Research in Social and Administrative Pharmacy, 17*(1), 1859-1866.

Partoip, E. (2016). *Impact of The Outbreak of Ebola Virus in West Africa on Performance of Tourism Industry in Kenya (2014-2016).* University of Nairobi.

Pavli, A., Tsiodras, S., & Maltezou, H. C. (2014). Middle East respiratory syndrome coronavirus (MERS-CoV): prevention in travelers. *Travel medicine and infectious disease, 12*(6), 602-608.

Peattie, S., Clarke, P., & Peattie, K. (2005). Risk and responsibility in tourism: promoting sun-safety. *Tourism management, 26*(3), 399-408.

Plotnikoff, R. C., & Trinh, L. (2010). Protection motivation theory: is this a worthwhile theory for physical activity promotion? *Exercise and sport sciences reviews, 38*(2), 91-98.

Prentice-Dunn, S., Mcmath, B. F., & Cramer, R. J. (2009). Protection motivation theory and stages of change in sun protective behavior. *Journal of Health Psychology, 14*(2), 297-305.

Raude, J., Lecrique, J.-M., Lasbeur, L., Leon, C., Guignard, R., Roscoät, E. D., & Arwidson, P. (2020). Determinants of preventive behaviors in response to the COVID-19 pandemic in France: comparing the sociocultural, psychosocial and social cognitive explanations. *Frontiers in psychology, 11*, 3345.

Rittichainuwat, B. N., & Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism management, 30*(3), 410-418.

Roehl, W. S., & Fesenmaier, D. R. (1992). Risk perceptions and pleasure travel: An exploratory analysis. *Journal of Travel Research, 30*(4), 17-26.

Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change1. *The journal of psychology, 91*(1), 93-114.

Roser, M., Ritchie, H., Ortiz-Ospina, E., & Hasell, J. (2020). Coronavirus (COVID-19) deaths. *Our World in Data*.

Ruiter, R. A., Abraham, C., & Kok, G. (2001). Scary warnings and rational precautions: A review of the psychology of fear appeals. *Psychology and health, 16*(6), 613-630.

Samarathunga, W., & Warnasekara, J. (2018). Health awareness and health issues among international tourists visiting Sri Lanka. *Samarathunga, WHMS & Warnasekara, J.(2018). Health Awareness and Health Issues among International Tourists Visiting Sri Lanka. Journal of Management Matters, 5*(1), 21-34.

Schmierer, C., & Jackson, M. (2006). Local health impacts of tourism *Tourism in Turbulent Times* (pp. 87-100): Routledge.

Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., Kaur, R. (2020). COVID-19 is rapidly changing: Examining public perceptions and behaviors in response to this evolving pandemic. *PloS one, 15*(6), e0235112.

Segal, S., & Gerstel, D. (2020). The global economic impacts of COVID-19, critical questions. *Center for Strategic and International Studies (CSIS). Retrieved from: https://www.csis.org/analysis*.

Shmueli, G., Ray, S., Estrada, J. M. V., & Chatla, S. B. (2016). The elephant in the room: Predictive performance of PLS models. *Journal of Business Research, 69*(10), 4552-4564.

Smith, S., & Smith, S. (2016). Media coverage of the Ebola virus disease in four widely circulated Nigerian newspapers: lessons from Nigeria. *Health promotion perspectives, 6*(2), 92.

Tanner Jr, J. F., Hunt, J. B., & Eppright, D. R. (1991). The protection motivation model: A normative model of fear appeals. *Journal of marketing, 55*(3), 36-45.

Tasci, A. D., & Gartner, W. C. (2007). Destination image and its functional relationships. *Journal of Travel Research, 45*(4), 413-425.

Tooher, R., Collins, J. E., Street, J. M., Braunack-Mayer, A., & Marshall, H. (2013). Community knowledge, behaviours and attitudes about the 2009 H1N1 Influenza pandemic: a systematic review. *Influenza and other respiratory viruses, 7*(6), 1316-1327.

Umrani, W. A., Channa, N. A., Yousaf, A., Ahmed, U., Pahi, M. H., & Ramayah, T. (2020). Greening the workforce to achieve environmental performance in hotel industry: A serial mediation model. *Journal of Hospitality and Tourism Management, 44*, 50-60.

Van der Velde, F. W., & Van der Pligt, J. (1991). AIDS-related health behavior: Coping, protection motivation, and previous behavior. *Journal of behavioral medicine, 14*(5), 429-451.

Van Schaik, P., Jeske, D., Onibokun, J., Coventry, L., Jansen, J., & Kusev, P. (2017). Risk perceptions of cyber-security and precautionary behaviour. *Computers in Human Behavior, 75*, 547-559.

Verkoeyen, S., & Nepal, S. K. (2019). Understanding scuba divers' response to coral bleaching: An application of Protection Motivation Theory. *Journal of environmental management, 231*, 869-877.

Walker, P. G., Whittaker, C., Watson, O. J., Baguelin, M., Winskill, P., Hamlet, A., Green, W. (2020). The impact of COVID-19 and strategies for mitigation and suppression in low-and middle-income countries. *Science, 369*(6502), 413-422.

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.

Webster, R., Brooks, S., Smith, L., Woodland, L., Wessely, S., & Rubin, J. (2020). How to improve adherence with quarantine: rapid review of the evidence. medRxiv. *Preprint, 10*(2020.03), 17.20037408.

Wen, J., Aston, J., Liu, X., & Ying, T. (2020). Effects of misleading media coverage on public health crisis: a case of the 2019 novel coronavirus outbreak in China. *Anatolia, 31*(2), 331-336.

Wise, T., Zbozinek, T. D., Michelini, G., Hagan, C. C., & Mobbs, D. (2020). Changes in risk perception and self-reported protective behaviour during the first week of the COVID-19 pandemic in the United States. *Royal Society open science, 7*(9), 200742.

Yates, M. (2006). Project Phoenix: a benchmark for reputation management in travel and tourism *Tourism in turbulent times* (pp. 287-300): Routledge.

Yeoman, I., Lennon, J. J., & Black, L. (2005). Foot-and-mouth disease: A scenario of reoccurrence for Scotland's tourism industry. *Journal of Vacation Marketing, 11*(2), 179-190.

Zhang, B. (2016). *The Impacts of Perceived Risk and Destination Image on Chinese Visitor's Decision and Destination Loyalty for Visiting Thailand*. Bangkok University.

Zickfeld, J. H., Schubert, T. W., Herting, A. K., Grahe, J., & Faasse, K. (2020). Correlates of health-protective behavior during the initial days of the COVID-19 outbreak in Norway. *Frontiers in psychology, 11*.

About Authors

Aisha Aziz

Lecturer, Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan.
Email: aisha.aziz@kfueit.edu.pk .

Khushbakhat Umer

Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan.

Syeda Nazish Batool Zaidi

Khawaja Fareed University of Engineering and Information Technology, Rahim Yar Khan, Pakistan.
Email: ta.nazish@kfueit.edu.pk

