JFTH

Vol. 18, Issue 2 (2021) ISSN: 2314-7024 E-ISSN: 2682-2180



The Impact of Perceived Risk on Future Travel: The Role of Destination Trust during the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic has undoubtedly a significant influence on the tourism industry due to the perceived risk of travelers that cause them to change their travel decision. The study proposed a conceptual framework to identify the impact of the risk perceptions of the residents of Alexandria on the intention to travel to tourism destinations during the pandemic. The study examined four risk types; financial risk, psychological risk, health risk, and travel risk. The proposed framework also investigated the mediating role of destination trust in the relationship between the four types of risk and intention to travel. An online questionnaire was conducted on potential leisure travelers, and a structural equation modeling was used to test the relationships between hypotheses. The results showed a significant relationship only between psychological, health and travel risk and the intention to travel. The results also proved that only travel risk has no impact on travel intention in the presence of destination trust during the pandemic. The unique contribution of the study is investigating the effect of trust on the relationship between perceived risk and travel intention. Useful practical implications are provided by the study to help Destination Management Organizations (DMOs) to

develop strategies to decrease the risk perceptions and encourage travelers to revisit tourism destinations.

Keywords: perceived risk, intention to travel, destination trust, mediating role.

1. Introduction

The World Health Organization recently classified the new coronavirus disease (COVID-19) as a pandemic, and like many other health pandemics, develops disastrous consequences all around the world (Kaulu et al 2020). COVID-19 has had a big influence on international travel, tourism demand, and the hospitality business (Perić et al., 2021). Travel and tourism organizations from the largest airlines to the smallest hotel have been heavily affected the coronavirus. **Tourism** by destinations are now trying to recover and restore the traveler confidence and trust again. People nowadays are unwilling to travel due to the global pandemic, not only because of the uncertainty surrounding the conditions that the tourist would meet in the destination, but also because of the possibility for consequences as a result of the decision (Sánchez-Cañizares et al., 2021). Brati'c et al., (2021)stated that tourist behavior influenced by perceived risk. They added that due to the risk perceptions of coronavirus, people had to change their travel behavior and reconsider their choice of destination. Rahman et al., (2021) also noted that tourists will avoid visiting destinations if they believe it risky. Many studies examined the risk perception and its impact on willingness to travel during health outbreaks such as SARS and H1N1 bird flu which demonstrated tourists' reluctance to visit Asian countries (Cahyanto et al., 2016). Similarly, different studies analyzed the intention to travel during the spread of Covid-19 (Li et al. 2020; Sánchez-Cañizares et al., 2021). The pandemic emphasized importance of perceived risk in shaping travel decisions (Holland, 2020). Abraham et al., (2020) noted that tourists' perceived risk can affect destinations' choices and most of them prefer to travel to the destinations where they trust their health system. Tassawa and Banjongprasert (2019) examined the role of destination trust in the destination choices process and their study found that the more the destination provides the positive outcomes, the greater tourist will trust. Making visitors feel safe and secure during their trip can be crucial for the destination's competitiveness (Kozak et al., 2007). Individuals' perceptions of the risk of travelling during a pandemic are influenced not only by the probability of infection, but also by media coverage and information shared through social media (Yu et al., 2020). According to Hassan and Soliman, (2021) tourists trust tourism destination due to its good reputation and strong image. They added that the increasing of tourists' perceived trust has a positive impact on revisit intention (Hassan and Soliman, 2021). The aim of the study is to examine the risk perceptions among the residents of Alexandria that associated with future travel whether domestic or international after the isolation of COVID-19.

In specific, the purpose of this study is (1) to investigate the impact of perceived risk types on the intention of the potential tourists to travel during the pandemic. (2) to examine the impact of destination trust as a mediator on the relationship between perceived risk and the intention to travel during the pandemic. The focus of the study is on individuals' perceptions of different types of risk in pleasure travel in vacations.

To achieve this purpose, the study used an online survey to gather information from leisure travelers living in Alexandria who had visited a foreign country at least once in the previous years. The survey was completed by the end of July 2021 and the sample included 281 filled questionnaires. The study proposed a framework to develop the hypotheses. To test the proposed famework, a structural equation modelling was performed. Finally, the practical and theoretical implications were formulated based on the findings.

Although, many scholars have widely examined perceived risk that associated to travel and tourism, few studies have analyzed the role of destination trust and its relationship with intention to travel. The study is one of the first to address the mediating role of destination trust and its impact on the relationship between perceived risk and travel intentions during the COVID-19 pandemic in tourism literature. The study also gives a better understanding of the relationship between different types of perceived risk and intention to travel during the epidemic outbreaks.

2. Literature Review

Perceived risk in Tourism

Martin and Priest (1986) referred that risk is the possibility of loss of something of value. Deng and Ritchie (2018) identified two types of risk, absolute risk and perceived risk. Absolute risk is evaluated by organizations and individuals who develop security measures to minimize risk and maximize safety (Deng and Ritchie, 2018). Dowling and Staelin (1994, p.119) defined perceived risk as "the negative consequences of buying a product or service". Jeon et al (2020) referred to perceived risk as the consumer's perception of risk and uncertainty when acquiring products or services. Chien et al., (2016) referred to perceived risk related to travel as the subjective feelings towards potentially negative consequences and impacts during travel. Kaplan et al. (1974) proposed five dimensions that determine perceived risk perception. It includes performance, financial, psychological, physical and social. Then, Stone and Gronhaug (1993) added the sixth dimension which is time risk. Their research is widely applied in different fields (Wang et al., 2020). Floyd *et al.*, (2004) found that risk could be divided into five major groups: health concerns, terrorism, crime, war and political instability and natural disasters. Cui (2015) argued that there are six types of perceived risk: body, performance, property, time, society, and psychology. While, Lenggogeni (2015) proposed only four dimensions of perceived risk: time loss, hazard loss, money loss, and ego loss. Recently, the concept of perceived risk related to travel got more attention with the expansion of tourism industry and the change of travel behavior (Cui et al., 2016). Since the tourism industry is considered a service, the risk perception related to this industry is higher compared to goods (Hasan et al., 2017). Lin et al., (2009) referred that there are physiological, personal, and socio-cultural factors that affect tourists' risk perception degree during visiting tourism destinations. Lin et al., (2009) added that the high risk associated with travel services is due to the intangibility, high cost and complex process of travel decision making (Lin et al., 2009). Roehl and Fesenmaier (1992) proposed

that travelers make decisions based on their perception not reality.

Perceived risk and travel intentions

Perceived risk has been identified as a significant factor impacting destination choice and travel intentions (Fuchs & Reichel, 2011). Perceived risk affects not only the destination choice, but also whether to travel or not and whether or not to return to the destination again (Rittichainuwat and Chakraborty, 2009; Schusterschitz et al., 2010). Wachyuni and Kusumaningrum, (2020) proved that tourists' intentions to travel are influenced by their perceptions of safety and risk concerns. A single incident might alter people's risk perceptions associated with a destination and decrease the number of its visitors (Khan et al., (2019). Many studies found that when risk perception is high, females are more likely to change their travel arrangements (Kozak et al., 2007). Khasawneh and Alfandi, (2019) noted that the relationship between perceived risk and travel intention depends on the situation and they suggested that travelers act towards perceived risks differently. They also added that it is a must also to study destinationspecific risk perceptions (Khasawneh and Alfandi, (2019).

Destination trust and intention to travel

Trust is recognized as a critical component in ensuring the continuity of the relationship between the customer and the provider (Han and Hyun, 2013). Chung and Kwon (2009) explained trust as the individual's feeling of security and willingness to rely on other people or things. Trust defined "expectations held by the consumer that the service provider is dependable and can be relied on to deliver on its promises" (Pavlou et al 2007 p. 17). Different scholars believe that trust is an effective tool for reducing uncertainty (Abubakar et al., 2017; Han & Hyun, 2013). Chiu et al (2012) referred that customer trust levels might have an impact on

repurchase intention. Thomson et al., (2005) added that Tourists' emotional attachment to a destination predicts their willingness to make financial sacrifices to go there, and such attachment predicts their willingness to make financial sacrifices to get there. According to Roodurmun and Juwaheer, (2010) tourists are more likely to visit destinations that they believe to be trustworthy and dependable. Tourists are more likely to revisit the destination if they trust the healthcare system (Han Hyun, 2015). Tassawa Banjongprasert (2019) considered destination trust plays an important role in in the travel decision-making process. According to Han and Hyun, (2015) trust affects revisit intention if medical tourists trust the healthcare system in destinations. Isaac and Keijzer (2020) confirmed that to rebuild the trust in travel and tourism industry, destinations must provide tourists with local health protocols and relevant health information.

Risk types associated with tourism

Previous studies evaluated a wide range of risk types that are associated with tourism destinations and defined that the level of risk degree depend on the characteristics of every destination (Hasan et al., 2017). Cui et al. (2016) also confirmed that tourism risk perceptions are influenced by the type of destination that tourists visit. Baker, (2014) suggested seven different types of perceived risk financial, social, physical, psychological, functional, situational and travel risks. Khan et al., (2019) defined five dimensions of perceived risk associated with tourism: physical risk, financial risk, performance risk, social-psychological risk, and time risk. Particularly, physical and performance risk are more important for natural areas while financial risk is more important to cultural activities (Cui et al., 2016). Martín -Azami and Ramos -Real, (2019) identified different types of perceived risk in tourism whether a product,

a service, destination or an activity. They stated that the tourism product might have a financial risk related to its quality/price ratio or a functional risk due to high expectation in the product (Martín -Azami and Ramos -Real, 2019). They added that it might also have a physical risk if it harms the health or a psychological if it damages risk the self-esteem. Furthermore, they suggested that the tourism product might include a social risk, if it disapproves the reference groups, satisfaction risk, if it is not satisfying and a time risk, if it means a waste of time (Martín -Azami and Ramos -Real, 2019).

Financial risk: Financial risk describes the risk that the service purchased will not result in the best possible monetary gain for the consumer. Financial risk in the travel and tourist industry refers to the fear of losing money that payed in tourism products or services (Cho et al., 2018). Roehl and Fesenmaier (1992) assumed that the financial risk of travelers could be measured by the unexpected extra expenses or the possibility of being the destination expensive more than others (Zulfakar and Abdul Rahim, 2019).

Psychological risk: Lenggogeni, (2015)psychological risk is referred that the probability of the producer's performance that will be influenced by psychological factors. Zeugner-Roth, and Žabkar, (2015) study showed that tourists prefer destinations with psychological characteristics that are similar to their characteristics. Psychological risk exists when tourists believe that the destination does not fit their self-perception (Yin and Jahari, 2014). This leads to a decrease desire to return with a higher perceived psychological risk (Yin and Jahari, 2014). Liang et al. (2018) found that psychological risk has significant relationship with trust.

Health risk: Reisinger and Mavondo (2005) defined the health perceived risk as the

possibility to get sick while travelling or at a destination. Kozak et al. (2007) found differences between females and males with respect to health risk. Their study showed that females are more concerned about health risks that men who are less concerned about health risks (Kozak et al. (2007). In travel research, health risk has recognized through the perspective of becoming sick while travelling (Hunter-Jones et al., 2008), then it started to focus on the fear of pandemics and health crisis (Yang and Nair, 2014). Few studies investigated the relationship between the health perceived risk and tourists' travel intentions especially in the current COVID-19 situation (Godovykh et al., 2021; Turnšek et al., 2020). Health perceived risk is considered the one that have the greatest influencers on tourist behavior among all the perceived tourism-related risks (Neuburger and Egger, 2020).

Travel risk: Travel-related risk can be defined as the threat of an adverse event affecting a person's health whilst traveling, interferes with the trip or necessitates the use of health services (Leggat and Franklin, 2013, According to Promsivapallop and Kannaovakun, (2018), perceived travel risk is influenced by the condition of the destination. Neuburger and Egger, (2020) confirmed that perceived travel risk has a significant influence the willingness cancel to arrangements, as well as the intention to travel. Tourism marketers need to examine the relationship between perceived travel risk and travel behavior during health crisis which can lead to travel anxiety and a significant impact on travel avoidance (Lee et al., 2012). Alianto et al (2020) defined perceived travel risk as tourists' worry and discretion of a negative experience that is likely to occur as a result of health or safety concerns.

Abubakar and Ilkan (2016) stated that destination trust visitors' is the willingness to

put their faith in a med-tour destination's ability to deliver on its promises. Abubakar et al (2017) referred to destination trust as the reliability of key elements associated with a elements location. These are honesty, benevolence, and the competence of local residents. Pujiastuti et al (2020) study discovered that tourist trust had a significant and positive effect on their intention to return. Tourists were more likely to return if they had faith in the destination. Similarly, if tourists' trust in the destination was negatively perceived, they were less likely to return and would seek out alternative destinations (Pujiastuti et al (2020). Trust has been viewed one of the most important aspects influencing travelers' intention (Chen & Tsai, 2007).

3. Conceptual framework and Hypotheses development

Based on the literature, the study proposed a framework depends on two models that present the relationships between hypotheses. The first model assumed that the perceived risk types associated with the COVID-19 have a significant impact on travel intention. The second model suggested that destination trust has an impact on the relationship between perceived risk types and intention to travel shown during the pandemic.

Thus, the study basically adopted_four types of reisk and assumed the following hypotheses as shown in Figure 1:

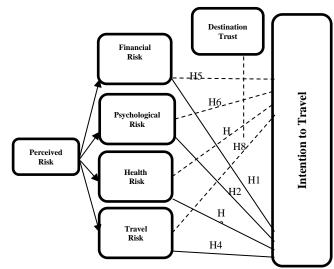


Figure 1. The Proposed Framework of the Study

H1: There is a significant relationship between perceived financial risk and the intention to travel during the COVID-19 pandemic.

H2: There is a significant relationship between perceived psychological risk and the intention to travel during the COVID-19 pandemic.

H3: There is a significa nt relationship between perceived health risk and the intention to travel during the COVID-19 pandemic.

H4: There is a significant relationship between perceived travel risk and the intention to travel during the COVID-19 pandemic.

H5: Destination trust will mediate the relationship between perceived financial risk and the travel intention during the COVID-19 pandemic.

H6: Destination trust will mediate the relationship between perceived psychological risk and the travel intention during the COVID-19 pandemic.

H7: Destination trust will mediate the relationship between perceived health risk and the travel intention during the COVID-19 pandemic.

H8: Destination trust will mediate the relationship between perceived travel risk and the travel intention during the COVID-19 pandemic.

4. Methodology

Instrument and Measures

The study adopted a quantitative method through survey questionnaire via Google form. A self-administered online questionnaire was used to gather data for this study, which was carried out during the third wave of the COVID-19 pandemic. The link of the survey was shared on social networks. The survey was distributed using WhatsApp, Facebook and Emails. An exploratory factor analysis (EFA) was used in the early stages of research to examine the interrelationships among the variables and to demonstrate the reliability of the constructs (Hair et al, 2010). The questionnaire consists of four sections. *The*

first section was designed to measure the four risk perceptions. A scale of 21 items using five-point Likert scales ranging from strongly disagree to strongly agree. Financial risk included 4 items where the items were adapted from Hong, (2015) and Liang et al., (2018). Psychological risk included 7 items where the items were adapted from Liang et al. (2018); Malazizi et al. (2018) and Perić et al. (2021). Health risk included 6 items where the items were adapted from Chen and Ma, (2015); Deng and Ritchie (2018) and Zhan et al., (2020). Travel risk included 4 items where the items were adapted from Floyd et al., (2004) and Perić et al. (2021). The second section was designed to measure the travel intention. Eight items were used and adapted from Abubakar et al., (2017); Sánchez-Cañizares et al. (2021) and Turnšek et al (2020). In the third section to measure destination trust, the study used 7 items were adapted from Abubakar et al., (2017); Su et al. (2017) and Tassawa and Banjongprasert, (2019). The fourth section consists of demographic questions (gender, age, education, monthly income and marital status).

Data collection

The population of the study consisted of the residents in Alexandria. The sample targeted only leisure travelers who visited a foreign country at least one time and from those who may be potential travelers in the short/medium term in the environment in that was affected by the disease. The data was collected from 3 May to 29 July 2021 and 281 respondents fully completed the questionnaire without the occasional missing data.

Results analysis Sample Demographic

The demographic characteristics that presented in table 1 indicated that 44.1% were men while 55.9% were women. 54.8% of the respondents

were between 20 and 30 years, 22.8 % were between 30 and 40 years,14.2 % were between 40 and 50 years and 7.5 % of the respondents are above 50 years old. In terms of education, 70.8% of the respondents had Bachelor degree and 17.8 % had Post-graduate degrees. 52% were single while 41.3% were married. 61.6 % had a monthly income less than 10000 £ while 18.1 % had a monthly income 10000-15000 £.

Table.1 Sample characteristics

Variable	Classification	Frequency	Percentage (%)
Condon	Male	124	44.1
Gender	Female	157	55.9
	Under 20	2	0.7
	From 20 – 30	154	54.8
Age	From 30 – 40	64	22.8
	From 40 – 50	40	14.2
	50 and above	21	7.5
	Secondary school	19	6.8
Education	Bachelor degree	199	70.8
	Post-graduate	50	17.8
	Diploma	9	3.2
	Professional degree	4	1.4
	Single	146	52.0
Marital status	Married	116	41.3
	Divorced	15	5.3
	Widowed	4	1.4
	Less than 10000 £	173	61.6
Monthly income	10000-15000 £	51	18.1
	15000-20000 £	31	11.0
	20000-25000 £	11	3.9
	Above 250000 €	15	5.3

Reliability and Validity

The suitability of the data for factor analysis was tested by Kaiser-Mayer-Olkin (KMO) coefficient and Barlett Sphericity Test. (KMO) value was found to be 0.849 and significant value of Bartlett's sphericity p < 0.001. PCA was performed to examine 6

constructs with 36 items, the factor loading of all items exceeded 0.6 except for two items. Table 2 shows that Cronbach's α for all constructs are greater than 0.6 which exceed the approved limit. The measure of KMO is suitable since the KMO statistics are > 0.60 for all constructs. Also, the Barlett's test of sphere city is significant for all constructs because the p-value < 0.05. The CR of all items exceeded 0.8 which is higher than the approved limit of 0.7 for all constructs. Moreover, the AVE is actually over the tolerance threshold of 0.5.

Table 2. Reliability and* validity measures

Construct	Reliability	Construct validity		Convergent validity	
	Cronb ach's α	KMO	Barlett's test	CR	AVE
Perceived financial risk	0.767	0.686	327.23***	0.851	0.589
Perceived psychological risk	0.837	0.859	748.74***	0.874	0.517
Perceived health risk	0.779	0.753	507.82***	0.897	0.593
Perceived travel risk	0.674	0.728	158.72***	0.804	0.508
Intention to travel	0.743	0.776	690.64***	0.864	0.578
Destination trust	0.930	0.913	1494.03***	0.944	0.706

*** significant at 5% level of significance (P-value < 0.001.)

The Structural Models

To examine the impact of the perceived risk types on travel intention during the COVID-19 pandemic and the role of destination trust as a mediator on the relationship between them, two structural equation models were applied. In the first model the relationship was presented directly from perceived risk to intention to travel (Perceived Risk ---> Intention to Travel). In the second model, the relationship was presented directly from perceived risk to destination trust to intention to travel (Perceived Risk ---> Destination Trust ---> Intention to Travel). The results of the structural equation models that are

illustrated in figure 2 and 3 showed a causal relationship between the variables. A structural equation model was estimated to assess the two proposed conceptual model using IBM SPSS AMOS 25. The models were evaluated by assessing the degree of fitting to the empirical data prior to hypothesis testing.

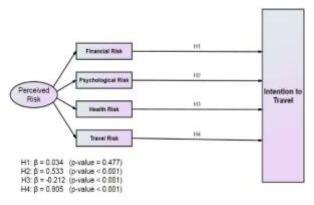


Figure 2. The estimation of the paths for the first conceptual model

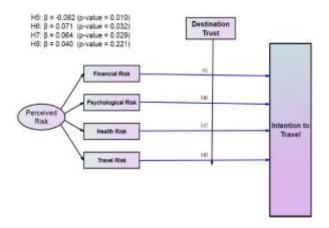


Figure 3. The estimation of the paths for the second conceptual model

The final measurement model was fit. The result that presented in table 3 are within a suitable range.

Table 3. The Fitting of the two proposed models

Fit measure	First proposed model	Second proposed model
χ2	0.089	0.091
GFI	0.921	0.942
AGFI	0.902	0.931
RMSEA	0.056	0.064
NFI	0.910	0.951
TLI	0.915	0.924
CFI	0.932	0.957

Hypotheses Testing Results

The study tested the hypotheses in two steps: in the first model, the relationship between the

perceived financial risk, the perceived psychological risk, the perceived health risk and the perceived travel risk with the intention to travel was tested. In the second model, the impact of the mediating role of destination trust on the relationship between the perceived (financial, psychological, health and travel) risk and the travel intention during the COVID-19 pandemic was explored. Table 4 illustrates the paths from the perceived financial risk to the intention to travel ($\beta = .03$, p > 0.05) which are not significant. Therefore, Hypotheses H1 is rejected. The paths from the perceived psychological risk to the intention to travel ($\beta = .5$, p < 0.05) are significant. Therefore, Hypotheses H2 is supported. The paths from the perceived health risk to the intention to travel ($\beta = .2$, p < 0.05) are significant. Therefore, Hypotheses H3 is supported. The paths from the perceived travel risk to the intention to travel ($\beta = .8$, p < 0.05) are significant. Therefore, Hypotheses H4 is supported.

Table 4. Estimation and testing hypotheses for the first proposed model

	Standardized effects		
Paths	Standar dized estimate	P-value	Result
H_1 Perceived financial risk> Intention to travel	0.034	0.477	Rejected
<i>H</i> ₂ Perceived psychological risk> Intention to travel	0.533	<0.001	Supported
H_3 Perceived health risk> Intention to travel	-0.212	<0.001	Supported
<i>H</i> ₄ Perceived travel risk> Intention to travel	0.805	< 0.000	Supported
Significant p < 0.05			

In the second model, the impact of the mediating role of destination trust on the relationship between the perceived (financial, psychological, health and travel) risk and the travel intention during the COVID-19 pandemic was tested. Table 5 illustrates that

destination trust mediates the relationship between the perceived financial risk and the travel intention with $\beta = 0.082$ and p < 0.05. Hence, Hypothesis H5 is supported and the relationship is significant. Destination trust also mediates the relationship between the perceived psychological risk and the travel intention with $\beta = 0.082$ and p < 0.05. Hence, supported H6 is Hypothesis relationship is significant. The results also indicated that destination trust mediates the relationship between the perceived health risk and the travel intention with $\beta = 0.064$ and p < 0.05. Hence, Hypothesis H7 is supported and the relationship is significant. Additionally, destination trust mediates the relationship between the perceived travel risk and the travel intention with $\beta = 0.040$ and p > 0.05. Hence, Hypothesis H8 is rejected and the relationship is not significant.

Table 5. Estimation and testing hypotheses for the second proposed model (Mediate effect of the destination trust on the relationship)

	Standardized effects		
Paths	Standardize d estimate	P- value	Result
H ₅ Perceived financial risk> Destination trust > Intention to travel	-0.082	0.010	Supported
H ₆ Perceived psychological risk> Destination trust> Intention to travel	0.071	0.032	Supported
H ₇ Perceived health risk> Destination trust > Intention to travel	0.064	0.029	Supported
H ₈ Perceived travel risk> Destination trust > Intention to travel	0.040	0.221	Rejected
Significant p < 0.05			

5. Discussion of Results

Tourism studies has been little paid consideration to the mediating role of destination trust and its impact on the relationship between perceived risk and travel intention during the COVID-19 pandemic. In contrast, different studies examined the impact of perceived risk types on the intention to travel which has turned into a real crisis in the period of the pandemic. The perceived risk associated with travelling is considered the biggest problem that is currently facing the tourism industry and a reason to examine the types of risk that control the travel intention (Khan et al., 2020). According to UNWTO World Tourism Barometer, the unexpected global health caused a decline in the International tourist arrivals 72% in January-October 2020 over the same period in 2019, and a loss of US\$ 935 billion in export revenues from international tourism.

The framework of study developed two models as presented in figure 4, the first tested four types of perceived risk that affect the intention to travel during the COVID-19 outbreak. The results showed a significant relationship between only three types of risks and the intention to travel. The results indicated that there is not a significant relationship between the perceived financial risk and the intention to travel during the pandemic. This is in line with several studies that have come to the same conclusion, although, tourists are always concerned about any potential expenses. For example, Liang et al. (2018) proved that the perceived financial risk has no significant effect on customers' intention to use technologies in the presence of trust. Khan et al., (2019) investigated the relationship between perceived different types of risks and the visit intention of young women to travel. Their findings highlighted that there is no relationship between the financial risk and the intention to travel (Khan et al., 2019). Phau et al. (2015) examined the different types of risks such as physical, social, financial, performance, time, psychology, financial and satisfaction and their relations with travel intention. The results of the study showed that some types of risks have a hierarchical significance where physical, performance, and social risks are the highest while, financial and satisfaction risks have the lowest negative influence on the travel intention (Phau et al. 2015). The results also indicated that there is a significant relationship between the perceived psychological risk and the intention to travel during the COVID-19 pandemic. These findings are consistent with previous studies that proved the influence of psychological risk on the intention to travel. et al., Xueging (2009) examined relationship between the perceived risk and the travel intentions associated with the Olympic Games in Beijing. The results showed that the psychological risk had a significant impact on the intention to travel to China. Falahuddin et al., (2020) study partially demonstrated a significant relationship between the psychological risk and the travel intention. The results identified that there is a significant relationship between the perceived health risk and the intention to travel during the pandemic. The findings of previous studies revealed that health issues have a significant influence on the travel intention especially during the pandemics (Godovykh et al., 2021). Golets et al., (2020) study also proved that the health perceived risk has a significant effect on the travel intentions of Brazilians during the COVID-19 outbreak. Other studies confirmed the same results that the health perceived risk has a significant effect on the travel intention during the COVID-19 virus pandemic (Perić et al. 2021; Su et al., 2021) The results also showed that there is a positive significant relationship between the perceived travel risk and the intention to travel during the COVID-

19 pandemic. These findings are consistent with the study of Angguni, & Lenggogeni, (2021) who found an association between the perceived travel risk and the intention to travel. In the context of risk studies related to travel, the findings of this study revealed that not all the perceived risk types show significant relationships with intention to travel. Gray et al., (2011) investigated the impact of the different types of risks on international tourists' travel intentions. Their results showed positive and negative relationships between the different types of risk perceptions and the intention to travel. Khan et al., (2019) also investigated the relationship between different types of risks and the young women travel intention. Their findings highlighted that only the physical risk has a significant relationship with the intention to travel. Hashim et al., (2019) investigated the effect of domestic tourist on the perceived risk (physical risk, financial, social, time and psychological) on their intention to visit tourism destination in Malaysia. Their study proved that only the physical and financial risks have an effect on the intention to visit Malaysia.

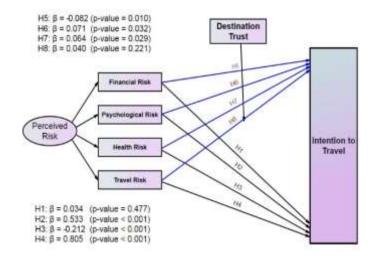


Figure 4. The estimation of the two models clarifies the significant and non-significant paths

The second model tested the mediating role of destination trust on the relationship between the four types of perceived risks and the travel intention. The results showed that the travel intention is influenced by only three types of perceived risks in the presence of destination trust. Financial, psychological and health risk have a negative significant impact on the intention to travel during the COVID-19 pandemic in the presence of destination trust. While there isn't any significant relationship between the perceived travel risk and the intention to travel during the COVID-19 pandemic in presence of destination trust. Previous studies support the same findings. ere customers' intention to use technologies in the presence of trust. Hong (2015) study also examined the impact of perceived risk and consumer's trust on the intention to buy. The findings of the study proved that perceived risk types and trust act as determinants of the intention to buy online. Rahman et al., (2021) study added that due to the growth of the Covid19 outbreak, visitors' perceptions of travel risk and destination trust in hygiene and safety have a significant impact on their travel decisions. Choe and Kim (2021) examined the impact of perceived risk and destination perceptions on the intention to visit an Olympic destination. Their study demonstrated that the tourists' perceived risk alone is rarely the only cause for hesitation to travel. Health and safety related concerns towards destination have also an impact on destination choice. According to Falahuddin et al., (2020), the relationship between the intention to travel and the perceived risks depends on the tourist perception of the health and safety of tourism destinations, which it must be concentrated on the conditions of the COVID- 19 pandemic.

6. Conclusion

The objectives of the study have been achieved. The study examined the relationship between perceived risk types and travel intention. The study focused on the residents of Alexandria. The study invistagated the leisure travelers. The findings supported

previous studies that proved a significant relationship between the psychological, health and travel risk and the intention to travel. Financial risk has no impact on travel intention during the pandemic. The study highlighted the mediating role of destination trust between perceived risk types and the travel intention. Financial, psychological and health risk are found to be the most significant types in determining the intention to travel in the presence of destination trust. While, the mediating role of destination trust revealed no impact on the relationship between the perceived travel risk and the intention to travel.

7. Theoretical implications

The study tried to explore the relationship between the perceived travel risk types and the intention to travel whether domestically or internationally during the global Covid19 pandemic. The study also is the first contribution in tourism literature that examined the impact of destination trust on the relationship between the different types of perceived risks and the intention to travel during the COVID-19.

8. Practical implications

The present study suggests that tourism destinations during the pandemic should look into adopting strategies to reduce the perceived travel risk associated with the pandemic. Tourism providers have to design the strategies that could increase tourist trust in the destination's safety and health. Marketing strategies should design promotional activities to minimize the perceived risks of those who were affected by the pandemic. Tourism have destinations to strengthen communication strategies by keeping travelers informed of how to minimize COVID-19related health hazards. After the pandemic, *tourists' characteristics will be different and their behaviors will have new features. Tourism destination management must consider the cleanliness and the health safety measures because that will influence the destination selection. Tourism providers have to realize that tourists will prefer short visits and the trust of the health environment will affect their choices. Tourism marketers should promote for risk-free tourism activities, develop sense of safety and decrease the the risk perception associated with travelling. Marketing efforts should focus on the segments that are less sensitive to perceived risk. The media must create a sense of safety, provide tourists with the accurate information and not exaggerate the epidemiological situation in every destination. Travel agencies should assure their customers during the trip to reduce their sense of uncertainty.

9. Limitations and Future studies

One of the limitations is the geographical scope of the study that limits the generalization of the findings. Another limitation was the size of the sample that could be larger. The findings also could be different if the data were collected at a time where the cases of COVID-19 have decreased and most of people are vaccinated. Besides, the study could not address different places in Egypt or other nationalities.

Future research must focus on the most reluctant type of travelers to COVID-19 as well as examine the demographic profiles of travelers. This may help tourism destinations to target this type of travelers based on their perceptions to Covid-19. A sample could also be chosen from other countries that have different cultural backgrounds to compare their attitude towards the pandemic. Future studies should differentiate between the domestic and the international tourists and whether they have visited the destination before or not.

References

- Abraham, V., Bremser, K., Carreno, M., Crowley-Cyr, L., and Moreno, M., (2020), "Exploring the consequences of COVID-19 on tourist behaviors: perceived travel risk, animosity and intentions to travel", *Tourism Review*, pp. 1-17.
- Abubakar AM, Ilkan M. (2016), (2016), Impact of online WOM on destination trust and intention to travel: A medical tourism perspective. *Journal of Destination Marketing and Management*,5(3):192-201.
- Abubakar, A. M., Ilkan, M., Al-Tal, R. M., & Eluwole, K. K. (2017), "e-WOM, revisit intention, destination trust and gender", *Journal of Hospitality and Tourism Management*, 31, 220–227.
- Alianto, C., and Hatane, S., and Wijaya, S., (2020), "Website Quality and the Role of Travel Perceived Risk in Influencing Purchase Intention: A Study on Bali Tourism Board's Official Website", In: the 2nd International Conference on Business and Management of Technology 2020, Surabaya Indonesia.
- Angguni, F., & Lenggogeni, S. (2021), The impact of travel risk perception in Covid 19 and travel anxiety toward travel intention on domestic tourist in Indonesia". *Journal Ilmiah MEA* (Manajemen, Ekonomi, & Akuntansi), 5(2), pp.241-259.
- Baker, D. (2014)." The effects of terrorism on the travel and tourism industry". *International Journal of Religious Tourism and Pilgrimage*, 2(1), pp.58-68.
- Brati´c, M.; Radivojevi´c, A.; Stojiljkovi´c, N.; Simovi´c, O.; Juvan, E.; Lesjak, M.; Podovšovnik, E. (2021), Should I Stay or Should I Go? Tourists' COVID-19 Risk Perception and Vacation Behavior Shift. Sustainability, 13, 3573.
- Cahyanto, I., Wiblishauser, M., Pennington-Gray, L. and Schroeder, A. (2016), "The dynamics of travel avoidance: the case of Ebola in the US", *Tourism Management Perspectives*, 20,195-203.
- Chen, C. F. & Tsai, D. (2007), "How destination image and evaluative factors affect behavioral intentions?", Tourism Management, (28) 4, pp.1115-1122.
- Chen, L., Ma, Z., (2015), "The Construct and Measurement of Perceived Risk of

- Nonremunerated Blood Donation: Evidence from the Chinese Public", *BioMed Research International*, pp.1-13.
- Chien, P. M., Sharifpour, M., Ritchie, B. W., and Watson, B. (2016). Travelers' health risk perceptions and protective behavior: A psychological approach. *Journal of Travel Research*, 56(6), pp.744-759.
- Chin, K. T., Zulfakar, Z. A., Hussain, N. H. C., (2021),"Would you come back to visit Malaysia? Understanding tourists perceived risks towards revisit desire", CoMBInES Conference on Management, Business, Innovation, Education and Social Sciences, Sl, v. 1, n. 1, pp. 90-100
- Chiu, C. Hsu, M. Lai, H. & Chang, C. (2012),
 "Re-examining the influence of trust on online repeat purchase intention: The moderating role of habit and its antecedents", *Decision Support Systems*.53 4, pp.835-845.
- Cho, S.-H., Ali, F., & Manhas, P. S. (2018),
 "Examining the impact of risk perceptions on intentions to travel by air: A comparison of full -service carriers and low-cost carriers", *Journal of Air Transport Management*, 71, pp.20–27.
- Choe, Y. and Kim, H. (2021), "Risk perception and visit intention on Olympic destination: Symmetric and asymmetric approaches", *Journal of Vacation Marketing*, 27(3), pp. 314–329.
- Chung, N., & Kwon, S. J. (2009), "Effect of trust level on mobile banking satisfaction: A multi-group analysis of information system success instruments", *Behaviour & Information Technology*, 28(6), pp.549–562.
- Cui, B. J. (2015), "Review and prospect of consumer perceived risk in the context of product injury crisis", *Business Economics and Management*, 65–73.
- Cui, F., Liu, Y., Chang, Y., Duan, J.& Li, J., (2016), "An overview of tourism risk perception". *Nat Hazards* **82**, pp.643–658.
- Deng, R., & Ritchie, B. W. (2018).
 International university students' travel risk perceptions: an exploratory study. *Current Issues in Tourism*, 21(4), pp.455-476.
- Dowling, G., and R. Staelin (1994), "A Model of Perceived Risk and Intended Risk-Handling Activity." *Journal of Consumer Research*, 21 (1), pp.119-35.
- Falahuddin, A.F. Tergu, C.T. Brollo, R. & Nanda, R.O. (2020), "Post COVID-19 Pandemic International Travel: Does Risk

- Perception and Stress-Level Affect Future Travel Intention?, *Jurnal Ilmu Sosial dan Ilmu Politik*, 24(1), pp.1-14.
- Floyd, F. Gibson, H., Pennington-Gray, L. & Thapa, B., (2004), "The Effect of Risk Perceptions on Intentions to Travel in the Aftermath of September 11, 2001", *Journal of Travel & Tourism Marketing*, 15:2-3, 19-38.
- Fuchs G, & Reichel A, (2011), "An exploratory inquiry into destination risk perceptions and risk reduction strategies of first time vs. repeat visitors to a highly volatile destination", *Tour Management*, 32, pp. 266–276.
- Godovykh, M., Pizam, A. and Bahja, F. (2021), "Antecedents and outcomes of health risk perceptions in tourism, following the COVID-19 pandemic", *Tourism Review*, 76 (4), pp.737-748.
- Golets, A.; Farias, J.; Pilati, R.; Costa, H. (2020), "COVID-19 Pandemic and Tourism: The Impact of Health Risk Perception and Intolerance of Uncertainty on Travel Intentions", *Preprints*, 2020100432.
- Hair, J., Black, W., Babain, B. & Anderson, R.
 (2010), Multivariate data analysis. 7th ed.
 Pearson, Prentice Hall.
- Han, H. & Hyun, S. (2013), "Image Congruence and Relationship Quality in Predicting Switching Intention: Conspicuousness of Product Use as a Moderator Variable", *Journal of Hospitality & Tourism Research*. 37 (3), pp.303-329.
- Han, H. & Hyun, S. (2015), "Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness", *Tourism Management*, 46. 20-26.
- Hasan, Md. Kamrul; Ismail, Ahmed Rageh; Islam, MD. Faridul. (2017), "Tourist risk perceptions and revisit intention: A critical review of literature", Cogent Business & Management, (4),1-21.
- Hashim, N., Yusoff, A.M., Awang, Z., Aziz,
 R., Shah, Ramlee, I.F., Bakar, N.F., Noor, M.,
 & Fatt, B.S. (2019), "The Effect of Domestic
 Tourist Perceived Risk on Revisit Intention in
 Malaysia" International Journal of Innovative
 Technology and Exploring Engineering
 (IJITEE), 8(10), pp.2278-3075.
- Hassan, S.B. & Soliman, M. (2021), "COVID-19 and repeat visitation: Assessing the role of destination social responsibility, destination

- reputation, holidaymakers' trust and fear arousal", *Journal of Destination Marketing & Management*, 19, 100495.
- Holland, J. (2020), "Risk perceptions of health and safety in cruising". *AIMS Geosciences*, 6 (4). pp. 422-436.
- Hong, I. B. (2015), "Understanding the consumer's online merchant selection process:
 The roles of product involvement, perceived risk, and trust expectation", *International Journal of Information Management*, 35(3), pp.322-336.
- Hunter-Jones, P., Jeffs, A., & Smith, D. (2008), "Backpacking your way into crisis: An exploratory study into perceived risk and tourist behaviour amongst young people", *Journal of Travel & Tourism Marketing*, 23(2/4), pp.237–247
- Isaac R. K. and Keijzer, J. (2021), "Leisure travel intention following a period of COVID-19 crisis: a case study of the Dutch market", *International journal of tourism cities*, Vol. ahead-of-print No. ahead-of-print.
- Jeon, H. M., Sung, H. J., and Kim, H. Y. (2020)," Customers' acceptance intention of self-service technology of restaurant industry: expanding UTAUT with perceived risk and innovativeness", Service. Business, 14, pp.533–551.
- Kaplan, L. B., Szybillo, G. J., & Jacoby, J. (1974), "Components of perceived risk in product purchase: A cross-validation", *Journal of Applied Psychology*, 59(3), 287–291. https://doi.org/10.1037/h0036657
- Kaulu, Byrne; Kabala, Edna; Mapoma, Rosemary; and Munyonzwe, Christopher (2020), "Risk Perception, Behavioural Response to COVID-19, and the Mediating Role of Information Sources in Zambia", Southern African Journal of Policy and Development, 5(1), article 8, pp.44-63.
- Khan, M.J., Chelliah, S., Khan, F. and 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.
- Khan, A., Bibi, S., Lyu, J., Latif, A., and Lorenzo, A. (2020). COVID- 19 and sectoral employment trends: assessing resilience in the US leisure and hospitality Industry. Current Issues Tourism. 7, pp.952–969.
- Khasawneh, M.S., Alfandi, A.M., (2019), "Determining behavior intentions from the

- overall destination image and risk perception", *Tourism and Hospitality Management*, 25 (2), pp.355-375.
- Kozak, M., Crotts, J. C., & Law, R. (2007)," The impact of the perception of risk on international travelers", *International Journal of Tourism Research*, 9(4), pp.233–242.
- Lee, C. K., Song, H. J., Bendle, L. J., Kim, M. J., & Han, H. (2012), "The impact of non-pharmaceutical interventions for 2009 H1N1 influenza on travel intentions: A model of goal-directed behavior", *Tourism Management*, 33(1), pp.89–99.
- Leggat, P.A., Franklin, R., (2013), "Risk Perception and Travelers", *Journal of Travel Medicine*, 20, (1), 1, 1–2.
- Lenggogeni, S. (2015), Travel risk perceptions, travel intentions, and influencing factors: A natural disaster context Ph.D. Thesis, UQ Business School, The University of Queensland]. UQ e-Space.
- Li, J., Nguyen, T. H. H., & Coca-Stefaniak, J. A. (2020), "Coronavirus impacts on post-pandemic planned travel behaviors", *Annals of Tourism Research*, Advance online publication.
- Li, Si Ru and Ito, Naoya, (2021), "Nothing Can Stop Me!" Perceived Risk and Travel Intention Amid the COVID-19 Pandemic: A Comparative Study of Wuhan and Sapporo", In W. Wörndl et al. (Eds.): Information and Communication Technologies in Tourism 2021, pp. 490–503.
- Liang, X.B., Li, J.J and Xu, Z. (2018). The impact of perceived risk on customers' intention to use An empirical analysis of DiDi car-sharing services. In *Proceedings of the 18th International Conference on Electronic Business* (pp. 644-653). ICEB, Guilin, China, December 2-6.
- Lin PJ, Jones E, Westwood S (2009) Perceived risk and risk-relievers in online travel purchase intentions. *J Hosp Mark Manag* 18: 782–810.
- Malazizi, N., Alipour, H., & Olya, H. (2018). "Risk Perceptions of Airbnb Hosts: Evidence from a Mediterranean Island", *Sustainability*, 10(5), pp.1-23.
- Martín -Azami, M., Ramos -Real, F.J., (2019), "The importance of perceived risk in destination image and its effects on behavioral intention", *Revista de Turismo y Patrimonio Cultural*, 17, (5), pp.915-928.

- Martin, P., & Priest, S. (1986). Understanding adventure experience. Adventure Education, 3(1), pp.18–21.
- Neuburger, L., & Egger, R. (2020)," Travel risk perception and travel behavior during the COVID-19 pandemic 2020: a case study of the DACH region", *Current Issues in Tourism*, pp.1–14.
- Pavlou, P. A., Liang, H., & Xue, Y. (2007), "Understanding and mitigating uncertainty in online exchange relationships: a principalagent perspective", MIS Quarterly, 31, 105-136.
- Perić, G., Dramićanin, S. & Conić, M. (2021).
 "The impact of Serbian tourists' risk perception on their travel intentions during the COVID-19 pandemic". European Journal of Tourism Research 27, 2705.
- Phau, I., Quintal, V., Marchegiani, C., and Lee,
 S. (2015), "Looking beyond pasta and pizzas:
 Examining personal and historical nostalgia as travel motives". *International Journal of Culture, Tourism and Hospitality Research*, 10(3), pp.296-309.
- Pujiastuti, E., Utomo, H & Novamayanti, R. (2020). Millennial tourists and revisit intention.
 Management Science Letters, 10(12), pp.2889-2896.
- Promsivapallop, P. & Kannaovakun, P. (2018), "Travel risk dimensions, personal-related factors, and intention to visit a destination: A study of young educated German adults", *Asia Pacific Journal of Tourism Research*, 23(7), pp.639-655.
- Rahman MK, Gazi M.AI, Bhuiyan MA, Rahaman M.A., (2021), "Effect of Covid-19 pandemic on tourist travel risk and management perceptions", *PLOS ONE*,16(9), pp.1-18.
- Reisinger, Y., and F. Mavondo (2005), "Travel Anxiety and Intentions to Travel Internationally: Implications of Travel Risk Perception", *Journal of Travel Research*, 48, pp.212 225.
- Rittichainuwat, B. N., & Chakraborty, G. (2009)," Perceived travel risks regarding terrorism and disease: The case of Thailand", *Tourism Management*, *30*(3), pp.410-418.
- Roehl, W., and D. Fesenmaier (1992), "Risk Perceptions and Pleasure Travel: An Exploratory Analysis." *Journal of Travel* Research, 30 (4), pp. 17-26.

- Roodurmun, J. & Juwaheer, T.D. (2010),
 "Influence of trust on destination loyalty An empirical analysis The discussion of the research approach", *International Research Symposium in Service Management*, pp.1-23.
- Sánchez-Cañizares, S. M., Cabeza-Ramírez, L. J., Muñoz-Fernández, G., and Fuentes-García, F. J., (2021), "Impact of the perceived risk from Covid-19 on intention to travel", *Current Issues in Tourism*, 24(7), pp.970-984.
- Schusterschitz, C., Schütz, H., & Wiedemann, P. M. (2010), "Looking for a safe haven after fancy thrills: a psychometric analysis of risk perception in alpine tourist destinations", *Journal of Risk Research*, 13(3), pp.379-398.
- Stone, R.N.; Grønhaug, K. (1993),"Perceived Risk: Further Considerations for the Marketing Discipline", *European Journal of Marketing*, 27, pp.39–50.
- Su, D. N. Tran, K.P. T. Nguyen, L. N. T. Thai, T. H. T. Doan, T. H. T. and Tran, V. T. (2021), "Modeling behavioral intention toward traveling in times of a health-related crisis" *Journal of Vacation Marketing*, pp.1–17
- Su, L. Hsu, M. K. Swanson, S. (2017), "The Effect of Tourist Relationship Perception on Destination Loyalty at a World Heritage Site in China: The Mediating Role of Overall Destination Satisfaction and Trust", *Journal of Hospitality & Tourism* Research. 41(2), pp.180–210.
- Tassawa, C., and Banjongprasert, J., (2019), "The Effects of Destination Competitiveness and Tourist Trust on Destination Advocacy: The Case of International tourists", *Humanities, Social Sciences and arts*, 12 (5), pp.203-228.
- Thomson, M. MacInnis, D. Park, W. (2005), "The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands", *Journal of Consumer Psychology*, 15 (1), pp.77-91.
- Turnšek, M. Gorenak, M. Brumen, B. Mekinc, J. Rangus, M. Lešnik Štuhec, T., (2020), "Perceived Threat of COVID-19 and Future Travel Avoidance: Results from an Early Convenient Sample in Slovenia", Academica Turistica - Tourism and Innovation Journal, University of Primorska Press, vol. 13(1), pp.3-19.
- UNWTO, The UNWTO World Tourism Barometer, Impact assessment of the covid-19

- outbreak on international tourism, December 2020.
- Wachyuni, S. S., & Kusumaningrum, D. A. (2020), "The Effect of COVID-19 Pandemic: How are the Future Tourist Behavior?", *Journal of Education, Society and Behavioral Science*, 33(4), pp.67-76.
- 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, 5454. https://doi.org/10.3390/su12135454
- Xueqing Qi, C. Gibson, H. J.& Zhang, J. J., (2009), "Perceptions of Risk and Travel Intentions: The Case of China and the Beijing Olympic Games", *Journal of Sport & Tourism*, 14:1, pp.43-67
- Yang, E. C. L., & Nair, V. (2014), "Tourism at risk: A review of risk and perceived risk in tourism". Asia-Pacific Journal of Innovation in Hospitality and Tourism, 3(2), 1–21.
- Yin, E. T. C., & Jahari, S. A. (2014),
 "Destination image as a mediator between perceived risks and revisit intention", *Tourism Management*, 40, pp.382-393.
- Yu, M., Li, Z., Yu, Z., He, J., & Zhou, J.
 (2020), "Communication related health crisis on social media: a case of COVID-19 outbreak", *Current Issues in Tourism*, pp.1-7.
- Zhan, L., Zeng, X, Morrison, A.M., Liang, H, and Coca-Stefaniak, J.A. (2020), "A risk perception scale for travel to a crisis epicenter: Visiting Wuhan after Covid-19", Current Issues in Tourism.
- Zeugner-Roth, K. P., & Žabkar, V. (2015), "Bridging the gap between country and destination image: Assessing common facets and their predictive validity". *Journal of Business Research*, 68(9), pp.1844-1853.
- Zulfakar, Z. A., & Abdul Rahim, F. (2019),
 "Malaysia vs Thailand Millennial Travellers:
 Understanding the Behaviour and Pattern of Young Tourists", *Journal of Marketing Advances and Practices*, 1(2), pp.25-37.