

INVESTIGATING PERCEIVED RISKS IN INTERNATIONAL TRAVEL

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This study analyses perceived risks in international tourism and looks at how several key indicators contribute to the individuals' perception of risk in international travel. The purpose of this article is twofold: firstly, to explore the primary risk dimensions associated with international travel; and secondly, to investigate whether sociodemographic variables and past travel experience influence perceived risks. To achieve these purposes, a scale of perceived risks was previously tested using a sample of 530 respondents. An exploratory factor analysis was conducted and a scale of five factors of perceived risks towards travelling internationally was obtained, namely: physical risk, destination risk, value-time risk, personal concerns and inconveniences. This study also revealed that perceptions of risk involved while travelling internationally vary according to personal characteristics, such as gender, age and level of education, as well as past travel experience. Theoretical and practical implications are also discussed.

Keywords: *Risk perception, risk factors, international travel, past travel experience, sociodemographic background*

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INTRODUCTION

The tourism experience is susceptible to the effects of a wide range of natural and manmade risk events such as natural disasters, contagious diseases, wars and terrorist attacks (Chew & Jahari, 2014; Lehto, Douglas, & Park, 2008; Sönmez & Graefe, 1998b). Awareness of these events might exacerbate the level of risk perception and discourage people from travelling internationally to a tourism destination or even to an entire region or country (Fuchs, 2013; Lehto et al., 2008; Sönmez & Graefe, 1998b). Given that, safety and security has become a determining attribute for international travellers (Omar, Abukhalifeh, & Mohamed, 2015). Besides, the impact of such events affects not only the natural environment and the immediate local communities, but also the minds of potential travellers (Lehto et al., 2008). In this regard, it is important to identify what risks potential travellers may perceive when planning an international trip and assess if these perceptions vary according to individuals' characteristics. Hence, this study sheds light on the complexity of risk-related perceptions among travellers.

In an attempt to provide further insights into this field, the purposes of this study are (1) to determine whether the degree of perceived risk associated with each factor differs according to gender, age, level of education and past travel experience and how and (2) to propose a comprehensive scale for risk perception measurement in tourism research. Accordingly, two research questions guide this study: (1) Do sociodemographic variables and past travel experience influence perceptions of risk associated with international travel? And if so how? (2) How can the scale for risk perception measurement in tourism research be operationalized?

This study contributes to the literature by proposing a scientific framework to better assess risk perception in tourism quantitative research for international travel. In addition, it indicates which factors influence perceived risks.

LITERATURE REVIEW

Risk perception in tourism research

The literature on risk perception is well established in tourism research. Originally, academics identified perceived risks associated with consumer behaviour and the main risk dimensions brought to light were physical, financial, performance, social, psychological and time (Conchar, Zinkhan, Peters, & Olavarrieta, 2004; Dowling & Staelin, 1994; Roselius, 1971). In tourism literature, the concept was pioneered by Roehl and Fesenmaier (1992) and the three main dimensions were physical-equipment, vacation and destination risks. Recently and with the current intensification of risk events that may threaten the safety of travellers, numerous authors have examined perceived risks in the tourism field, as shown in Table 1 and Table 2.

Most risk perception studies approach the study of perceived risks differently. Over the past two decades this has resulted in a large number of different scales, with a large variety of risk typologies and risk attributes. A closer analysis of previous scales reveals a lack of homogeneity in conceptualizing and operationalizing the concept. Hence, a lack of consensus on what elements to take into account when determining risk perception and its measurement scale has led to confusion on how to assess risk perception in tourism research.

For some authors 'attributes' are considered 'typologies' and for other authors the opposite is the case. For instance, some authors consider terrorism as an attribute of the political risk typology

(Dolnicar, 2005; Gray & Wilson, 2009; Seddighi, Nuttall, & Theocharous, 2001) or as an attribute of the physical risk typology (Fuchs, 2013; Reichel, Fuchs, & Uriely, 2007), while other authors consider terrorism a risk perception typology (He, Park, & Roehl, 2013; Law, 2006; Reisinger & Mavondo, 2005, 2006; Rittichainuwat & Chakraborty, 2009; Sönmez & Graefe, 1998b). Taking this into account, the concept of risk perception in tourism literature presents numerous and differing typology approximations. Consequently, these elements run the risk of giving results that are incomparable and non-generalizable across studies.

The tourism experience is not only influenced by consumer risks but it is also prone to be influenced by particular events such as adverse weather, natural disasters, contagious diseases, political unrest, hostile locals and crime, among others (Reichel et al., 2007; Simpson & Siguaw, 2008). Therefore, the scope of risks first introduced in consumer behaviour literature has been widened in tourism literature. Even though previous authors developed scales of perceived risks specific to travel, there is still the need to develop a more comprehensive itemized typology of perceived risks related to international travel, and this study addresses that gap.

This study contributes to the existing body of tourism literature by providing a measurement scale for risk perception, which includes all possible aspects of risk that could be used in an instrument to assess the concept. Perceived risks included in scales developed in previous tourism studies were identified, redefined and reorganized as follows. The 26 risk typologies identified are shown in Table 1 and Table 2 presents the 50 risk attributes identified.

Table 1. Risk perception typologie

	Environment/Natural risk	Financial/Monetary risk	Physical risk	Psychological risk	Social risk	Time risk	Functional–Equipment risk	Satisfaction/Expectation risk	Health/Disease risk	Political risk	Terrorism risk	Travel/Tourism I/General risk	Food risk	Cultural risk	Crime risk	Planning/Performance risk	Political and religious dogma	Property risk	Site/Destination-related risk	Mass risk	Behavioural risk	Interpersonal risk	Transportation risk	Travel service risk	Concern for/about others	Human induced risks	Σ
Chew & Jahari, 2014		x	x	x	x																						4
Chiu & Lin, 2011															x												1
Dolnicar, 2005		x							x	x						x	x										5
Fuchs, 2013			x	x	x	x			x	x									x	x	x						9
Fuchs & Reichel, 2011		x	x		x	x								x									x	x			7
Fuchs et al., 2012											x				x				x	x							4
He et al., 2013			x	x	x	x	x	x	x	x	x	x															10
Gray & Wilson, 2009				x		x				x																	3
Jonas et al., 2011									x		x																2
Law, 2006		x							x	x																	3
Lepp & Gibson, 2003									x	x	x		x	x	x		x										7
Lepp et al., 2011														x	x				x			x					4
Lin & Hsu, 2013												x															1
Maser & Weiermair, 1998												x															1
Morakabati, 2011																			x								1
Morakabati et al., 2012												x															1
Moreira, 2008												x															1
Park & Reisinger, 2010		x										x															2
Reichel et al., 2007			x	x	x	x		x	x										x	x	x						9
Reisinger & Mavondo, 2005			x		x				x	x	x				x												5
Reisinger & Mavondo, 2006			x	x	x	x	x	x	x	x	x			x	x	x											13
Rittichainuwat & Chakraborty, 2009		x							x	x	x								x								5
Schroeder et al., 2013												x															1
Seabra et al., 2013												x															1
Sedighi et al., 2001										x																	1
Sharifpour et al., 2014a			x									x							x								3
Sharifpour et al., 2014b				x								x								x							3
Simpson & Siguaw, 2008			x						x			x			x			x	x				x	x	x		9
Sönmez & Graefe, 1998			x	x	x	x	x	x	x	x	x	x															10
Tavitiyaman and Qu, 2013													x														1
Tsaur et al., 1997			x					x																			2
Σ		4	10	10	7	9	3	4	5	10	9	8	13	2	5	5	2	1	2	9	3	2	1	1	2	1	1

Influences on risk perception

In reality, not all travellers perceive risks in the same way. According to Roehl and Fesenmaier (1992), the significance of each risk dimension varies according to individuals and their particular circumstances. Previous studies indicate that risk perceptions are influenced by personal factors such as gender, age, nationality, income and education (Gibson & Yiannakis, 2002; Lepp & Gibson, 2003, 2008; Pizam et al., 2004; Reisinger & Mavondo, 2005, 2006; Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998a, 1998b) and by stimulus factors, such as travel information search (Kozak, Crofts, & Law, 2007; Pizam et al., 2004; Sönmez & Graefe, 1998a) and past travel experience (Lepp & Gibson, 2003; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b). This research is principally interested in gender, age, education and past travel experience as factors that shape tourists' risk perceptions towards travelling internationally.

Regarding the sociodemographic background, researchers revealed that risk perception varies according to gender (George & Swart, 2012; Lepp & Gibson, 2003; Pizam et al., 2004; Qi, Gibson, & Zhang, 2009; Reichel et al., 2007), contrary to Moreira (2008) and Sönmez and Graefe (1998b), who did not find gender influences perceptions of risk. Lepp and Gibson (2003) found that men perceived health and food risks to a lesser degree than women, while war, political stability, crime, cultural barriers and political-religious dogma risks did not vary by gender. Qi et al. (2009) found that women perceived risk of violence more than men and, that men perceived health and cultural risks more than women. Yet, men and women were not different when it comes to perceiving socio-psychological risks. Reichel et al. (2007) revealed that men were concerned about risk dimensions related to socio-psychological, socio-political, mass tourism and behavioural risks, whereas women were more worried about physical, expectations and financial risks.

Researchers have also reported that age influences risk perceptions (George & Swart, 2012; Gibson & Yiannakis, 2002). George and Swart (2012) found that older tourists were more concerned about becoming victims of crime. Gibson and Yiannakis (2002) revealed that perceptions of risk tended to decrease with age. However, Sönmez and Graefe (1998b) did not find age influenced risk perceptions. In addition, education has also been found to impact perceptions of risk (Sonmez & Graefe, 1998b). Individuals with a higher level of education had a more positive attitude towards international travel. As a consequence of these conflicting results, and the need to understand risk perception by the individual's sociodemographic characteristics, this study examines risk perception by gender, age and education.

Finally, previous studies indicate that perceived travel risks are affected by past travel experience. Research shows that risk perception decreases when past travel experience increases (Lepp & Gibson, 2003; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b). Lepp and Gibson (2003) found that less experienced international travellers perceived a higher risk in relation to health, terrorism and food than more experienced travellers. Similarly, Sharifpour et al. (2014) found that past international travel experience is significantly related to perceived risk dimensions. Their results show that less experienced travellers perceive more risk in relation to physical, destination-related and general risks than more experienced tourists. However, Qi et al. (2009) found no significant relationship between previous travel experience and the level of perceived risks. Given these diverse results, there remains a need to further address the influences of past travel experience on risk perceptions. This issue is addressed in the present study.

METHODOLOGY

Sampling plan

A population of university members and a convenient sampling method were used. From the 553 questionnaires collected, 23 were deleted due to contradictory answers. The final valid sample was 530 respondents and their profile is shown in Table 3. Sample descriptive and frequency statistics were analysed using statistical software SPSS 21 for Windows.

Table 3. Profile of participants (N=530)

Variable	Sample (N=530)	Percentage (%=100)
Gender		
Female	393	74.2
Male	137	25.8
Age		
18-27	352	66,4
28-37	66	12,5
38-47	63	11,9
48+	49	9,2
Education		
High school	99	18.7
Bachelor's degree	260	49.1
Master's degree	82	15.5
Doctorate	47	8.9
Other	42	7.8
Nationality		
Spanish	502	94.7
Other	28	5.3
N° past international trips (Last 5 years)		
1-5	339	64.0
6-10	119	22.5
11+	54	10.2

None	18	3.4
Nº of continents visited (Lifetime)		
1	287	54.2
2	144	27.2
3	64	12.1
4	25	4.7
5	2	0.4
None	8	1.5
Africa		
Visited Africa before	121	22.8
Not visited Africa before	409	77.2
America		
Visited America before	174	32.8
Not visited America before	356	67.2
Asia		
Visited Asia before	77	14.5
Not visited Asia before	453	85.5
Europe		
Visited other European countries before	502	94.7
Not visited other European countries before	28	5.3
Oceania		
Visited Oceania before	7	1.3
Not visited Oceania before	523	98.7

Research design and attribute development

The risk attributes were mined from the risk perception literature in the tourism field and the questionnaire was designed according to accumulated literature on perceived risks. In total, 50 risks specific to travel were identified (Table 2).

To ensure that these covered all risk-related issues and that the wording was appropriate, a content validity examination was conducted. The final version of the questionnaire was pilot-tested by

university members through an online version in order to test comprehensibility, clarity and reliability. Finally, minor changes to wording were made.

Data collection

The questionnaire was developed to test the scale of perceived risks resulting from the attribute mining and identification. A structured, self-administered questionnaire was used to collect primary data and required approximately 10 minutes to complete. The questionnaire was online, ensuring anonymity and eliminating interviewer bias as well as the likelihood of socially desirable responses. In order to increase the response rate, an incentive was offered to all participants, with the chance to win a weekend for two people.

The questionnaire was divided into two sections. The first collected sociodemographic data related to gender, age, level of education and nationality. With this the researchers could determine whether differences exist in risk perception among respondents. Information regarding past travel experience was collected using a multi-faceted approach. Respondents noted the number of trips made over the previous five years and continents visited in their lifetime. The second section comprised a multi-dimensional scale of 50 attributes of perceived risks, which had been previously identified in the tourism literature (Table 2). In an international pre-trip context for leisure purposes, respondents were requested to rate their level of perceived risk for each item on a 7-point Likert-type scale. The scale ranged from 1 = “no risk” to 7 = “very high risk”. In line with previous studies (Reichel et al., 2007; Sharifpour, Walters, & Ritchie, 2014), the respondents were asked about pre-trip perceptions in order to assess their level of risk prior to the potential experience. Moreover, all the items were presented randomly every time the questionnaire was conducted in order to reduce possible

biases caused by the item sequence. Note that other available risk perception studies relied on reconstructing past travel experiences (Maser & Weiermair, 1998; Simpson & Siguaw, 2008).

Data analysis

Data analysis was carried out using SPSS 21 software. Firstly, the validity and reliability of the analysis was examined by undertaking an Exploratory Factor Analysis (EFA) with the purpose of ensuring that the scale served the purpose of this research. A series of one-way analysis of variance (ANOVA), Pearson correlations and independent sample *t* tests were performed to investigate the influences of sociodemographic variables and past travel experience variables on perceived risk factors associated with international travel.

FINDINGS

Exploratory factor analysis of risk attributes

An EFA was conducted to examine the appropriateness of each risk item in addition to improving the validity and reliability of the scale for measuring risk perception. The Kyser-Meyer-Olkin (KMO) measurement and Bartlett's test of sphericity were conducted to ensure that the data had sufficient inherent correlations to perform EFA. The KMO result of 0.968 indicated that sufficient items were predicted by each factor and the Bartlett's test was significant at the level of 0.000, which indicated that the variables were correlated highly enough to justify the use of EFA. Hence, EFA with principle component and varimax rotation was undertaken with the aim of reducing the dimensions of the risk attributes and identifying the determinant risk dimensions. The cut-off point of item inclusion in a factor was above 0.4. EFA performed item examination and all 50 risk attributes associated with international travel were grouped into

5 factors: (1) physical risks, (2) destination risks, (3) value-time risks, (4) personal concerns and (5) inconveniences. The total cumulative variance explained by these factors was 60.955%. The value of Cronbach's alpha for all the factors was satisfactory and above the recommended value of 0.7, which assured the reliability of the scale as well as the consistency between responses. These results are presented in Table 4.

Table 4. Exploratory Factor Analysis (N=530)

	Factor loading	Com-munal ities	Mean score	Eigen-value	Variance (%)	α
Factor 1: Physical risks				19.679	39.357	0.964
Kidnappings	.894	.814	4.12			
Murders	.888	.808	4.02			
Criminal attacks	.882	.799	4.25			
Terrorist attacks	.870	.774	4.51			
War	.852	.748	4.71			
Contagious diseases	.839	.731	4.40			
Sexual harassment	.805	.696	3.82			
Being arrested	.772	.693	3.89			
Natural disaster	.768	.661	3.86			
Harassment by locals	.754	.666	3.47			
Muggings	.724	.688	4.32			
Drug problems	.681	.639	3.25			
Racism	.664	.646	3.38			
Political instability	.660	.556	3.75			
Not clean food/water	.645	.618	4.33			
Lack of healthcare	.610	.528	4.27			
Robberies	.595	.666	4.46			
Accidents	.525	.581	3.83			
Fraud/Deceit	.517	.637	4.15			
Police & legal issues	.504	.450	3.45			
Hostile locals	.439	.545	3.32			
Factor 2: Destination risks				6.406	12.811	0.930
Bad roads	.756	.673	2.91			

Chaotic traffic	.731	.634	3.20			
Transport problems	.649	.625	3.35			
Telecom. problems	.638	.563	3.00			
Lack of hygiene	.612	.619	3.77			
Equip.Org. problems	.602	.614	3.19			
Getting lost	.580	.512	3.21			
Electrical outage	.596	.631	2.80			
Loss of items	.593	.607	3.92			
Trip disapproval	.521	.474	2.24			
Dislike food	.515	.463	2.64			
Lodging problems	.518	.556	3.42			
Pollution	.505	.503	3.43			
Bad experiences	.480	.665	3.25			
Factor 3: Value-time risks				1.733	3.465	0.869
Extra expenses	.771	.689	3.57			
Extra travel costs	.722	.608	3.67			
Bad value for money	.598	.647	3.49			
Delays	.553	.623	3.13			
Long waiting times	.549	.642	3.13			
Crowded attractions	.528	.383	3.55			
Waste of time	.489	.572	2.74			
Sickness/Illness	.461	.400	3.46			
Factor 4: Personal concerns				1.385	2.770	0.753
Trip not self-image	.580	.526	2.50			
Dissatisfaction	.501	.658	2.93			
No adjust to lifestyle	.491	.548	2.48			
Factor 5: Inconveniences				1.275	2.550	0.737
Cultural barrier	.607	.610	3.10			
Language barrier	.561	.531	2.92			
Adverse weather	.566	.514	3.15			
Strikes	.439	.454	2.75			

Rotation method: Variamax with Kaiser. Extraction Method: Principal Component Analysis.

Sociodemographic and past travel experience influences

ANOVA was used to determine the effect of certain variables on risk factors associated with international travel. The five risk factors were used as dependent variables, while gender, age groups, education and number of past trips were independent variables. A one-way ANOVA revealed that perceived risks vary based on gender, age and education.

As illustrated in Table 5, physical risk is the only risk factor that varies according to gender. The level of perceived physical risk was significantly different between male participants (Mean $M=3.70$, Standard Deviation $SD=1.48$) and female participants ($M=4.07$, $SD=1.53$). Women showed higher levels of perceived physical risks than men. No significant differences were found across gender for the other risk factors.

Age significantly influenced four risk factors. The youngest age group, from 18 to 27, was characterized by showing the highest levels of risk perception in relation to physical risks ($M=4.18$, $SD=1.50$), destination risks ($M=3.30$, $SD=1.17$), personal concerns ($M=2.73$, $SD=1.30$) and inconveniences ($M=3.07$, $SD=1.19$). The oldest age group showed the lowest levels of risk perception regarding physical risks ($M=3.11$, $SD=1.47$) and personal concerns ($M=2.17$, $SD=1.08$) whereas the 28-37 age group showed the lowest levels of risk perception with regard to destination risks ($M=2.80$, $SD=1.13$) and inconveniences ($M=2.66$, $SD=1.07$). In general, younger participants tend to show higher levels of perceived risks toward international travel than older participants. In other words, risk perception for international travel decreases with age.

Risk perception varies based on education. The level of perceived destination risks was significantly different between those who had high school education ($M=3.46$, $SD=1.30$) or a bachelor's degree ($M=3.19$, $SD=1.17$), compared to those who had a master's degree ($M=2.97$, $SD=1.12$) or a PhD degree ($M=2.78$, $SD=1.02$). Regarding value-time risks, significant differences were found

between those who had high school ($M=3.57$, $SD=1.36$) and those who had a doctorate ($M=2.96$, $SD=1.02$). The level of perceived personal risk was significantly different between those who had high school ($M=2.98$, $SD=1.43$) and those who had a doctorate ($M=2.26$, $SD=1.12$). For risk of inconveniences, there were significant differences between those who had high school ($M=3.28$, $SD=1.24$) and a bachelor's degree ($M=2.91$, $SD=1.15$) compared to those who had a master's degree ($M=2.84$, $SD=1.13$) and a doctorate ($M=2.79$, $SD=1.14$). In general, the degree of perceived risks for these four risk factors decreases the higher the level of education.

Table 5. ANOVA - Influence of sociodemographic variables

Variables	Mean square	F	Significance	
Gender				
Physical risks	14.205	6.097	0.014	*
Destination risks	4.029	2.829	0.093	
Value-time risks	1.237	0.842	0.359	
Personal concerns	0.001	0.001	0.981	
Inconveniences	3.159	2.248	0.134	
Age				
Physical risks	19.755	8.768	0.000	**
Destination risks	7.102	5.084	0.002	**
Value-time risks	1.587	1.081	0.357	
Personal concerns	5.310	3.187	0.024	*
Inconveniences	3.997	2.867	0.036	*
Education level				
Physical risks	2.091	0.888	0.471	
Destination risks	4.914	3.503	0.008	**
Value-time risks	3.587	2.470	0.044	*
Personal concerns	4.932	2.967	0.019	*
Inconveniences	3.587	2.576	0.037	*

* $p < .05$; ** $p < .01$.

As shown in Table 6, Pearson correlations showed that perceptions of risk varied significantly regarding past travel experience. Risk perception for international travel decreases the higher the number of past trips made and the more continents visited. Therefore, the least experienced travellers perceive higher levels of risk for international travel than the most experienced ones. More experienced travellers perceived less risk for physical risks factor than less experienced travellers; a pattern that is repeated for each of the five factors.

Table 6. Pearson - Influence of past travel experience

Variables		N° Past trips abroad (Last 5 years)	N° Continents visited (Lifetime)
Physical risks	Pearson correlation	-0.132**	-0.149**
	Significance (two-tailed)	0.002	0.001
	N	528	530
Destination risks	Pearson correlation	-0.165**	-0.261**
	Significance (two-tailed)	0.000	0.000
	N	528	530
Value-time risks	Pearson correlation	-0.059	-0.175**
	Significance (two-tailed)	0.177	0.000
	N	528	530
Personal concerns	Pearson correlation	-0.152**	-0.246**
	Significance (two-tailed)	0.000	0.000
	N	528	530
Inconveniences	Pearson correlation	-0.161**	-0.234**
	Significance (two-tailed)	0.000	0.000
	N	528	530

* $p < .05$; ** $p < .01$.

As presented in Table 7, independent t tests revealed that physical risk varied significantly $t(530) = -2.479$, $p < 0.05$ between those who have been to Africa ($M=3.67$, $SD=1.50$) and those who have not ($M=4.06$, $SD=1.53$), and $t(530) = -3.225$, $p < 0.01$ showed a

significant difference between those who have been to America (M=3.67, SD=1.47) and those who have not (M=4.12, SD=1.54).

According to the results, those who have been to Africa, America and Asia perceive less risk for international travel compared to those who have not been to these continents. Destination risk varied significantly between those who have been to Africa (M=2.78, SD=1.11), America (M=2.83, SD=1.11) and Asia (M=2.67, SD=1.13), and those who have not. The perceived risk for those who have never travelled to Africa was (M=3.27, SD=1.19), America (M=3.32, SD=1.20) and Asia (M=3.25, SD=1.18).

Likewise, value-time risks varied significantly between those who have been to Africa (M=3.04, SD=1.13), America (M=3.11, SD=1.16) and Asia (M=3.00, SD=1.17) and those who have not. For those who had not travelled to Africa the perceived risk was (M=3.43, SD=1.22), America (M=3.45, SD=1.21) and Asia (M=3.40, SD=1.21). Personal concerns also varied significantly between those who have been to Africa (M=2.27, SD=1.17), America (M=2.23, SD=1.11) and Asia (M=2.21, SD=1.23) and those who have not been to Africa (M=2.73, SD=1.31), America (M=2.82, SD=1.34) or Asia (M=2.70, SD=1.29). Equally, inconveniences risk factor varied significantly between those who have been to Africa (M=2.56, SD=1.05), America (M=2.70, SD=1.14) and Asia (M=2.67, SD=1.06) and those who have not been to Africa (M=3.10, SD=1.31), America (M=3.11, SD=1.18) or Asia (M=3.03, SD=1.19). In particular, prior visits to Africa and America reduce the perceived risk levels of the five factors for international travel.

Prior visits to other European countries only reduced the inconvenience risk factor $t(530) = -2.387, p < 0.05$; those who have visited other European countries before perceive lower levels of inconveniences (M=2.95, SD=1.17) compared with those who have not visited the rest of Europe (M=3.50, SD=1.21).

Table 7. Influence of continents visited on risk factors

<i>t</i> Test for the equality of means					
	<i>t</i>	Significance (two-tailed)	Mean difference	Standard error difference	
AFRICA (visited Africa before, not visited Africa before)					
Physical risks	-2.479	0.013	*	-0.39161	0.15795
Destination risks	-4.013	0.000	**	-0.48954	0.12199
Value-time risks	-3.083	0.002	**	-0.38352	0.12442
Personal concerns	-3.508	0.000	**	-0.46647	0.13299
Inconveniences	-4.432	0.000	**	-0.53512	0.12073
AMERICA (visited America before, not visited America before)					
Physical risks	-3.225	0.001	**	-0.45355	0.14062
Destination risks	-4.498	0.000	**	-0.48859	0.10863
Value-time risks	-3.045	0.002	**	-0.33871	0.11123
Personal concerns	-4.982	0.000	**	-0.58544	0.11752
Inconveniences	-3.805	0.000	**	-0.41255	0.10842
ASIA (visited Asia before, not visited Asia before)					
Physical risks	-1.139	0.255		-0.21530	0.18900
Destination risks	-3.960	0.000	**	-0.57568	0.14536
Value-time risks	-2,698	0.007	**	-0.40066	0.14851
Personal concerns	-3.066	0.002	**	-0.48701	0.15883
Inconveniences	-2.431	0.015	*	-0.35399	0.14564
EUROPE (visited other European countries before, not visited other European countries before)					
Physical risks	-0.980	0.328		-0.29181	0.29783
Destination risks	-1.566	0.118		-0.36294	0.23183
Value-time risks	-0.506	0.613		-0.11920	0.23549
Personal concerns	-1.139	0.255		-0.28723	0.25212
Inconveniences	-2.387	0.017	**	-0.54781	0.22947
OCEANIA (visited Oceania before, not visited Oceania before)					
Physical risks	,214	0.831		0.12499	0.58408
Destination risks	,016	0.988		0.00712	0.45530
Value-time risks	,581	0.561		0.26823	0.46140
Personal concerns	-,907	0.365		-0.44815	0.49423
Inconveniences	,122	0.903		0.05531	0.45205

* $p < .05$; ** $p < .01$.

DISCUSSION

This study has identified perceptions of risk towards international travel and its influences. The EFA confirmed five significant factors reflecting perceived risks for international travel: physical risk, destination risks, value-time risks, personal concerns and inconveniences. This study identified 50 risk attributes loading on these five risk factors, which constitute a valid and reliable scale for risk perception measurement for international travel.

The physical risk factor in this study corresponds to previous literature (Chew & Jahari, 2014; Fuchs, 2013; Gray & Wilson, 2009; Reichel et al., 2007; Reisinger & Mavondo, 2006; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b; Tsaur, Tzeng, & Wang, 1997) and refers to the likelihood of encountering physical danger or injury detrimental to health while travelling or at the destination (Park & Reisinger, 2010; Reisinger & Mavondo, 2006; Roehl & Fesenmaier, 1992). Past studies on physical risk focused on terrorism, political turmoil, crime, accidents, natural disasters, contagious diseases and food issues (Fuchs, 2013; Reichel et al., 2007; Sharifpour, Walters, & Ritchie, 2014). In this study, the physical factor equally covers the same risks, but it goes into more detail regarding what sort of criminal activities travellers may encounter. The physical risk factor of this study also covers hospitality clashes, referring to any form of hostile behaviour from locals towards tourists that could lead to conflicts between hosts and visitors, such as harassment and racism. These risks refer to both human-induced and external dangers that may physically harm travellers or threaten their personal safety, and which are beyond travellers' control.

The destination risk factor refers to the functional difficulties travellers may encounter at the destination regarding transportation, accommodation, communication and orientation. Although many

people like to try out new dishes at the destinations visited, there are still many travellers concerned about food. Hence, food issues are seen as a source of risk as well as the absence of cleanliness, which includes both pollution and lack of hygiene.

According to previous studies, financial and time risks represent separate typologies of risk perception (He et al., 2013; Reisinger & Mavondo, 2005; Sönmez & Graefe, 1998a). In contrast, the results of this study suggest a risk factor that embraces both value and time risks, in accordance with Sharifpour, Walters and Ritchie (2014). Value refers to monetary losses and time refers to the possibility of losing time during the travel experience (Björk & Kauppinen-Räsänen, 2011; Boo & Gu, 2010; Park & Reisinger, 2010; Reisinger & Mavondo, 2006).

The factor of personal concerns expresses that the travel experience may not reflect the travellers' self-image or personality and that the personal self-actualization with the travel experience may not be achieved. These risks associated with personal concerns are congruent with several authors (Fuchs, 2013; He et al., 2013; Park & Reisinger, 2010; Reichel et al., 2007; Reisinger & Mavondo, 2006).

Finally, the last factor gathers perceived risks that are inconveniences for the traveller, for example social barriers that may cause difficulties in communicating with foreigners or comprehending other cultures. These findings are also consistent with previous authors (Lepp, Gibson, & Lane, 2011; Reisinger & Mavondo, 2005; Sharifpour, Walters, Ritchie, & Winter, 2014; Sharifpour, Walters, & Ritchie, 2014).

Regarding the factor loadings revealed by EFA (Table 4), this study demonstrates that the risk items related to crime in an international travel context show the highest factor loadings, followed by the perceived risks of terrorism, war and contagious diseases. In other contexts, e.g. backpacking, crime showed lower factor loadings within the physical risk factor (Reichel et al., 2007).

Instead, food issues were of more concern for backpackers. Sharifpour, Walters, Ritchie, et al. (2014) showed that factor loadings of terrorist attacks and political turmoil are higher than becoming a victim of crime in the Middle East, and Adam (2015) showed that backpackers travelling to Ghana are more concerned with accidents and terrorism than crime. This brief explanation indicates that perceived risks depend on the travel context, on the segment of tourists or on the particular destination analysed. Therefore, some of the perceived risks will be more notorious than others, depending on the case.

Another aim of this research was to consider the influences of sociodemographic variables and past travel experience on the aforementioned five dimensions of risk perception. The findings indicate that perceived risks when travelling internationally vary across gender, age, education and past travel experience. Physical risk is the only factor that differs according to gender, with women showing higher levels of risk perception than men, which supports the findings of Reichel et al. (2007). However, no significant differences were found across gender for the other four risk factors, upholding findings in previous studies (Moreira, 2008; Sönmez & Graefe, 1998a). Regarding age, the results of this study support previous authors (Gibson & Yiannakis, 2002) indicating that the level of risk perception for international travel decreases with age. The results also revealed that the degree of perceived risk decreased with higher levels of education, in accordance with Sönmez and Graefe (1998b). Differences in risk perception were also found between more experienced travellers and less experienced ones, and this was influenced by number of past trips and continents visited. This last point supports previous studies (Lepp & Gibson, 2003; Sharifpour, Walters, & Ritchie, 2014; Sönmez & Graefe, 1998b) indicating that risk perception decreases when past travel experience increases.

Theoretical implications indicate that future studies would benefit from using the scale developed in this article, as it would

make results comparable across studies. Due to the varied content of the scale, it is possible to develop different versions, customizing criteria in the most efficient way for the purpose of the planned research. Therefore, the scale provides an adaptive assessment system to evaluate risk perception in several study contexts. Overall, this study attempts to provide new theoretical insights into perceived risk of people travelling internationally.

Regarding the practical implications, individuals understand that there are some inherent risks associated with international travel. This study demonstrates that an individual's background matters in risk perception. Perceived risks for international travel decrease with age, with higher levels of education and with more past travel experience. Hence, younger individuals who have a lower level of education and less past travel experience tend to show higher levels of perceived risks toward international travel. Tourism managers of a particular destination should acknowledge risk perceptions specifically associated with their destination. If it is known that the destination is perceived as risky or highly risky, according to the findings of this study, they should endeavour to attract more experienced travellers, as they have lower levels of risk perception when travelling internationally.

CONCLUSIONS

This study contributes to the existing body of tourism knowledge by developing a 50-attribute scale of perceived risks for risk perception measurement in international travel. This scale suggests a variety of critical indicators gathered from a thorough literature review. A wide range of risk items was mined from an extensive literature and they were all proven to be significant and to fit in the aforementioned five determinant factors. Furthermore, the resulting five-factor model indicated an adequate level of reliability and validity. The added value of this scale is that it gathered and

considered all possible risk events that could happen to individuals during any travel experience; both those risks that are of a more general nature and those that are specific to a destination. Therefore, this study has established an appropriate scale to measure perceived risks that might discourage people from travelling. In accordance with several authors (He et al., 2013; Reichel et al., 2007; Sharifpour, Walters, & Ritchie, 2014), this study further confirms that risk perception is a multidimensional construct, and that each factor comprises several items, especially the physical and destination factors. For future research, it is recommended that risk factors should not be considered under a single item. This study has also identified significant differences in risk perception due to the effects of gender, age, level of education and past travel experience.

Finally, it should be noted that the data from this study was limited to Spanish university members. Travellers from different nationalities, social cohorts or tourism segments may have different views, as previous studies indicate (Dayour, 2014; Kozak et al., 2007; Pizam et al., 2004; Reisinger & Mavondo, 2006; Seddighi et al., 2001; Sönmez, 1998). Therefore, future studies should contribute to empirically confirm the current findings for a wider range of nationalities, social communities or tourism segments.

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