The influence of terrorism risk perception on purchase involvement and safety concern of international travellers

Cláudia Seabra\textsuperscript{a}, José Luís Abrantes\textsuperscript{a} & Elisabeth Kastenholz\textsuperscript{b}

\textsuperscript{a} Higher School of Technology and Management, Polytechnic Institute of Viseu, Portugal
\textsuperscript{b} Department of Economics, Management and Industrial Engineering, University of Aveiro, Portugal

Published online: 21 Jul 2014.

To cite this article: Cláudia Seabra, José Luís Abrantes & Elisabeth Kastenholz (2014) The influence of terrorism risk perception on purchase involvement and safety concern of international travellers, Journal of Marketing Management, 30:9-10, 874-903, DOI: 10.1080/0267257X.2014.934904

To link to this article: http://dx.doi.org/10.1080/0267257X.2014.934904

Taylor & Francis makes every effort to ensure the accuracy of all the information (the “Content”) contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &
The influence of terrorism risk perception on purchase involvement and safety concern of international travellers

Cláudia Seabra, Higher School of Technology and Management, Polytechnic Institute of Viseu, Portugal
José Luís Abrantes, Higher School of Technology and Management, Polytechnic Institute of Viseu, Portugal
Elisabeth Kastenholz, Department of Economics, Management and Industrial Engineering, University of Aveiro, Portugal

Abstract Using a sample of 600 international tourists travelling in Portugal, Spain and Italy, this study identifies key issues related with terrorism, risk perception, involvement and safety concerns of international tourists. A structural equation model reveals that tourists are motivated to acquire information about terrorism in the media, revealing attention to and interest in news regarding this topic, which in turn influences directly their risk perception. This risk perception influences directly the tourist’s involvement in trip planning, specifically information seeking before and during the trip. Tourists’ risk perception and involvement finally influences their safety concern. Discussion centres on the implications of this model for both theory and tourism management strategies. Last, recommendations are proposed to tourism service and destination managers and promoters regarding ways to deal with terrorism and tourists’ safety concerns.

Keywords consumer behaviour in tourism; involvement; media; safety concern; risk perception; terrorism

Introduction

International travel has contributed to the development and industrialisation in most countries (Göymen, 2000). The interdependence of international tourism with many other economic activities results in a multiplier effect visible in employment, foreign exchange and increased overall welfare (Seabra, Abrantes, & Lages, 2007). Globalisation of tourism has led to its expansion at an international level (Levitt, 1983). Consequently, the tourism industry is nowadays also confronted with an increased amount of global risks. The world has, in fact, become more interdependent. Crises of minor scale in one part of the world may trigger strong repercussions in other localities (Ritchie, 2004).

© 2014 Westburn Publishers Ltd.
Tourism crises are most often caused by incidents that affect the reputation of safety, comfort and attractiveness of the destinations. As a result of crises, there may be a drop in the local tourism industry by a reduction of tourist arrivals (Sönmez, Apostolopoulos, & Tarlow, 1999). A terrorist incident or repeated attacks may create a crisis in the tourism industry if the destination’s image of security is significantly affected. The 9/11 is the best example, where the tourism industry felt severe aftershocks, namely, in income generation and job creation (Floyd, Gibson, Pennington-Gray, & Thapa, 2004).

Some authors predicted already in the 1980s that terrorist attacks would become more indiscriminate. Terrorism would be institutionalised and spread geographically as a method of armed conflict. We would witness more terrorism than at any other time in history, partly due to the capacity and interest of the media to cover terrorist incidents (Atkinson, Sandler, & Tschirhart, 1987). Unfortunately they were right.

The fear of terrorism may exist due to many factors: past experiences with terrorist attacks, conflict proximity, negative tourist destination image, social interaction, influence of travel agents and tour operators (Sönmez & Graefe, 1998a) and exposure to media information (Seabra et al., 2007).

We are faced with both a complex and multidisciplinary problem. There are several factors that affect consumer behaviour (Oliver, 1999) and the consumption patterns of tourism in particular (Sirakaya & Woodside, 2005), due to these products’ specific characteristics. It is essential to understand tourists’ processes of cognitive and affective responses when they feel threatened. Travel, especially for leisure purposes, should be a pleasurable experience. When negative elements enter in the equation, the experience changes, pleasure is replaced by apprehension and anxiety.

Several researchers tried to understand the connections between risk perception, safety concerns and tourists behaviours, namely, studies on the effects of terrorism in tourism decisions (Bonham, Edmonds, & Mak, 2006; Coshall, 2003, 2005; Floyd et al., 2004; Goodrich, 2002; Neumayer, 2004; Pizam & Fleischer, 2002; Ritchie, 2004; Sönmez & Graefe, 1998a; Sönmez et al., 1999), the impact of risk and safety on travel behaviours (Goodrich, 1991; Hunter-Jones, Jeffs, & Smith, 2008; Irvine & Anderson, 2006; Kozak, Crotts, & Law, 2007; Lepp & Gibson, 2008; Reisinger & Mavondo, 2005; Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998b) and the impact of various elements on risk and safety perception (Barker, Page, & Meyer, 2003; Lennon, Weber, & Henson, 2001; Lepp & Gibson, 2003; Reisinger & Crotts, 2009; Reisinger & Mavondo, 2006).

However, scarce research has been done on the linkages between involvement, terrorism risk perception and contact, and safety concerns in international tourism. Additionally, to the best of our knowledge, no study has so far been published with a focus on the impact of the perceived risk of terrorism, depending on the levels of involvement and consequently on the safety concern of international tourists. The intention of this study is to help close this gap.

In this study, we try to analyse the traveller’s contact with terrorism and risk perception as an antecedent of their involvement with product purchase, also considering the consequences of this involvement, especially regarding the traveller’s safety concerns.

It is necessary to create reliable tools to analyse this relationship (Sönmez, 1998). It is important to understand consumers’ involvement, their purchase and consumption behaviour in the tourism market. It is also important to analyse the influence that the
perceived risk of terrorism may have on the decision to purchase travel services, especially international travel services.

The process involves integrating several decision-making paradigms that reflect the decision involved in the acquisition and implementation of international travel, in view of the fear that tourists may have regarding hypothetical terrorist attacks.

Providing security for visitors before and during a trip can be a critical success factor for the competitiveness of a particular tourism destination, organisation or business when tourists consider multiple alternatives (Huan & Beaman, 2003). As far as the business sector is concerned, the instruments will help marketing managers of tourist destinations, businesses and all tourism entities, to define strategies addressing a crisis arising from terrorist incidents. We expect to also contribute to theory development in the domain of travel decision-making.

**Literature review**

Tourists are becoming increasingly demanding in their travel behaviour, which makes its study more complex. Also, the purchasing process of tourism products has some peculiarities (Gursoy & Gavcar, 2003). Consumers buy and consume the majority of tourist products outside the places where they live (Sirakaya, Mcelless, & Uysal, 1996). The decision-making process used in the tourism context is longer than in that of much of tangible products (Gursoy & Gavcar, 2003). More often the tourist does not receive anything tangible in return for his investment (Seabra et al., 2007). Tourists plan and save money over a long period of time to be able to travel (Moutinho, 1987), dealing with a high level of perceived risk due to personal investment of time, effort and money (Teare, 1990). Consequently, this leads them to have a greater level of involvement in the decision-making, selection and purchase process of such products (Gursoy & Gavcar, 2003).

The purchase of tourism products requires thus highly involving decision-making due to the before-mentioned features of tourist services, generally implying multiple phases as well as impacted by a variety of variables (Swarbrooke & Horner, 1999), with the final decision being a result of the combined influences of personal, social and commercial variables (Sönmez & Graefe, 1998b).

Potential tourists in their decision-making processes form complex perceptions of the destination’s attributes, which may be divided into two major groups (Um & Crompton, 1990, 1992):

- **Facilitators**: destination attributes that tourists think will help them meet their specific motivations.
- **Inhibitors**: attributes that are not congruent with their motivations and that may adversely influence tourists’ decision-making.

Tourists evaluate destinations measuring the impacts of those factors, with facilitators influencing more the early stages of decision-making, while inhibitors have more impact in the final stages when the process becomes more serious (Um & Crompton, 1992).

When the consequences of travel decisions are uncertain, this process is perceived as containing risk. Decision-makers compare costs and benefits and choose the less
risky alternative. The inputs of the perception of risk and ways to respond to it vary depending on many factors, such as situational, tourists’ characteristics and the way consumers relate to the product (Sirakaya & Woodside, 2005).

We now present the model suggesting the effects of contact with, interest in and attention to terrorism and crime on risk perception and its impact on purchase involvement and finally on the importance attached by international tourists to safety (Figure 1).

In the conceptual model, there are three major groups of factors related to each other in explaining the importance attributed to safety for international travel:

- Antecedents of risk perception: contact terrorism, interest and attention to terrorism in the media, contact with crime in daily life.
- Perceptions of risk in international travel: risk perception and safety perceptions.
- Purchase involvement, analysed in the four stages of the buying decision of tourism products: involvement with pre-purchase of the product, with the decision to purchase, consumption and the post-purchase.

**Antecedents of risk perception**

There is a clear differentiation in the tourism studies literature between the concepts of risk, fear and insecurity. Literature on criminology attempts to separate these concepts, given that fear is in most cases considered irrational, while the term risk is referred to as rationally induced (Hough & Mayhew, 1983, in Brunt, Mawby, & Hambly, 2000; Garofalo, 1979).
The concepts of fear and risk perception are difficult to measure since the respective measuring instruments can be used by the respondents to express other types of fear, vulnerability, powerlessness (Garofalo, 1979) or feelings of unsafety or uncertainty about the forms of life in contemporary urban society (Giddens, 1990). Thus, some authors argue that direct and indirect experiences with various types of crime may contribute to the existence of structures of psychological disorder that underlie individuals’ perceptions of risk. These experiences interact with the physical and social vulnerability of people and their tendency to generate high levels of fear and anxiety (Hough, 1995, in Brunt et al., 2000).

Given the fundamental goals of this study, two concepts were defined as antecedents of perceived risk in international travel: contact with terrorism directly or through the interest in and attention to the media reporting on terrorism and contact with crime in daily life.

**Terrorism**

The danger threat associated with terrorism or political instability deters more tourists than any other natural or human disaster (Sönmez, 1998). The psychological impact of terror may have less to do with its destructive power than with its ability to evoke fear and anxiety (Spilerman & Stecklov, 2009). Random terrorist activity intimidates tourists and redefines the tourist lines until the public forgets those incidents. The tourism industry suffers from terrorist attacks since it affects the perceptions of the destination’s safety (Sönmez, 1998).

Most studies in the terrorism area conclude that terrorist activity in a particular destination increases the level of perceived risk and thus has negative effects on tourism demand, reflecting a decline in visitation patterns (Bar-On, 1996; Blake & Sinclair, 2003; Enders & Sandler, 1991; Mansfeld, 1996; Roehl & Fesenmaier, 1992; Sönmez, 1998; Sönmez & Graefe, 1998a, 1998b).

Fear of terrorism is irrational and the probability of a tourist being involved in a terrorist incident is minimal (Sönmez et al., 1999). However, physical threats, real or perceived, are enough to influence the individual’s decisions.

The physical proximity of traumatic events, such as terrorist attacks, is related with the probability of symptoms of trauma (Schlenger et al., 2002; Schuster et al., 2001). Nevertheless, individuals who have not directly experienced these events may reveal the same symptoms (Pfefferbaum et al., 1999; Schlenger et al., 2002; Schuster et al., 2001). In the real-world context, the contact with terrorism is part of the daily life of individuals in two manners (Somer, Ruvio, Soref, & Sever, 2005): directly, by being present when an attack occurs, becoming injured due to a terrorist incident or by participating in rescue operations; indirectly, by feeling to have escaped a terrorist attack due to luck, by having been at the site shortly before the incident occurred, by having provided any kind of aid or by knowing people who have experienced terrorist incidents in the past.

**Mass media** assume a fundamental role in terrorist activities. Terrorists use the mass communication means to transmit their message to the largest possible audience since media base their information activity on real-time transmission in times of crisis (O’Connor, Stafford, & Gallagher, 2008).

Media transmit news to their public during the periods of crisis and it is a fact, reflected in the respective media’s market success, that the majority of the audience consider negative, even dramatic reports much more interesting than positive news.
*Media* do understand this phenomenon and consequently tend to explore the negative aspects of reality (Cavlek, 2002). As a whole, *media* ensure that any terrorist act enters immediately in a global domain (Sönmez, 1998).

As a consequence for tourism, the *media* exploration of terrorist attacks potentiates the creation and transformation of public images held on tourism, particularly in international traveling (Sönmez, 1998) and in specific destinations or entire destination regions. The power of *media* may even change pre-existing images and attitudes. This power is due to the fact that, in many cases, the mass communication means are the only source of information available to the audience, or at least they are considered the most important for interpreting facts, terrorist motives and the implications of their actions (Weimann & Winn, 1994). The tourists, in turn, reveal a high level of interest and dedicate considerable attention to news regarding terrorism, retaining in their memory information about this type of events (Jin, 2003).

In short, the perceived risk that tourists associate with destinations and international travel is based on a variety of factors ranging from their experiences, the context in which incidents occur, to how the *media* spread those events and kept them alive in people’s minds (Fletcher & Morakabati, 2008). Therefore, the role of terrorism in tourists’ risk perception was analysed from two different perspectives: the direct or indirect contact with terrorist attacks and the interest that tourists have in the news about it. Thus, we propose the following hypotheses:

H1a: More intense direct and indirect contact of tourists with terrorist attacks increases their risk perception in international travel.

H1b: Higher interest in and attention to terrorism in the *media* by tourists increases their risk perception in international travel.

**Contact with crime**

Crime has been defined as an ‘an act committed or omitted in violation of a law forbidding or commanding it’ (Black, 1979, p. 334, in Pizam, 1999) and violence as ‘an unjust or unwarranted exercise of force, usually with the accompaniment of vehemence, outrage or fury’ (Black, 1979, p. 1408, in Pizam, 1999). Both concepts must be considered since in many cases violent acts are viewed as crime, such as an assault, aggression, violation, murder, among others. In other cases, violent acts like international wars, civil wars, upheaval, tumults, political protest and terrorism are considered by some as criminal acts, by others as ‘glorified acts of struggle for freedom or liberation’ (Pizam, 1999, p. 5).

In tourism research, the relationship between tourism and crime is explained partly by the fact that tourists are victims of crime numerous times (Chesney-Lind & Lind, 1986) and that tourist areas are, disproportionately, localities of crime (Fujii & Mak, 1979; Prideaux, 1996).

Researchers have studied and tested the effects of violence and crime against tourists on travellers’ behaviours (Bloom, 1996; Chesney-Lind & Lind, 1986; Cohen, 1987; Lankford, 1996; Pizam & Mansfeld, 1996; Prideaux, 1996).

In the risk context, criminologists agree that the fear of crime is, in most cases, disproportionate to the actual risk (Brunt et al., 2000). However, previous exposure to crime influences the general sense of security and safety of travellers, more specifically,
tourists who are exposed to crime before their trips have higher risk perceptions (Milman & Bach, 1999). In line with the above, the following hypothesis is proposed:

H1c: More intense/frequent contact of tourists with crime in their daily life increases their risk perception in international travel.

Risk perception

Most consumer behaviour models in tourism present the tourist as a consumer who makes rational choices between several destination alternatives and will choose the most useful one, both from an individual and social perspective. The selection process presents itself in a funnel format, where consumers make choices between alternatives, being influenced by psychological and non-psychological factors while advancing in the decision-making process (Sirakaya & Woodside, 2005). Tourists compare costs and benefits when choosing a tourist destination (Sönmez, 1998) and generally do not travel to seek risk. This factor is rather perceived as negative, a threat or possible disaster to be avoided when on holidays (Law, 2006).

Most researchers have focused on perceived rather than on objective or real risk (Bauer, 1967) since individuals are generally concerned with just one part of possible consequences (Budescu & Wallsten, 1985). Individuals respond and react to risk that they perceive subjectively, even if not existing in reality. It is this perception that will influence actions and behaviours (Bauer, 1967).

Risk perception in this study was defined as the amount and types of risk associated with travel by tourists and international tourism. This perception was measured with two subscales: generic types of perceived risk and unsafety perceptions.

Risk perception is explained by a multiplicity of factors. The first studies on risk perception in the field of leisure adopted the five risk dimensions suggested by Jacoby and Kaplan (1972): Financial, performance, physical, social and psychological risk (see Cheron & Ritchie, 1982; Mitra, Reiss, & Capella, 1999; Stone & Gronhaug, 1993). To these five previous factors risk of time was added (Roselius, 1971). These six dimensions were used in studies in the field of tourism by Stone and Gronhaug (1993). Cheron and Ritchie (1982) suggested the risk of satisfaction dimension in studies in the leisure field. The thereby resulting seven dimensions were used in Roehl and Fesenmaier’s study (1992). More recent approaches further considered risk dimensions associated to political instability/unrest (Seddighi, Nuttal, & Theocharous, 2001; Sönmez & Graefe, 1998b), health and terrorism (Sönmez & Graefe, 1998a, 1998b).

In this study, we considered all 10 dimensions of risk in an aggregated form. A separate measure would add unnecessary complexity as it was intended only to evaluate the effects of certain independent variables on risk perception, as in other studies (Laroche, Bergeron, & Goutaland, 2003).

The perceptions of insecurity in general domestic or international travel are also part of risk perceptions that individuals associate with tourist experiences (Floyd & Pennington-Gray, 2004; Floyd et al., 2004).

Involvement

Involvement is the degree of commitment in which consumers are committed in different aspects of the process of consumption: product, demand for information,
decision-making and the purchase (Broderick & Mueller, 1999; Zaichkowsky, 1985). It is the basis of the decision to purchase (Zaichkowsky, 1986a) and affects profoundly the perceived value of products and their evaluation (Bolton & Drew, 1991).

Tourist products are by nature highly engaging, especially regarding destination choice, since high-involvement processes are required due to this ‘product’s’ intangibility and inseparability (Swarbrooke & Horner, 1999). The decision structure is cognitive and sequential (Stewart & Stynes, 1995). When consumers are involved, they give attention, perceive the importance and behave in a different way than when they are not (Zaichkowsky, 1986a). Involvement is related to all stages of purchase since the pre-purchase standards to the subsequent evaluations (Shaffer & Sherrell, 1997).

In this study, the concept of involvement is considered in all stages of the tourist buying process, following the Theory of Information Processing (Bettman, Payne, & Staelin, 1986; Gabbott & Hogg, 1994), where the process is understood as an optimal alternative individual choice by a series of rational steps (Chen, 1997).

- Involvement in pre-purchase or with the generic product
- Involvement with the decision to purchase the product
- Involvement with the product’s consumption
- Involvement in product evaluation or post-purchase

Involvement occurs at the individual level and in a result of his interaction with products (Chaudhuri, 2000; Zaichkowsky, 1985), so the way how consumers relate to them always appears as a fundamental dimension used by researchers to understand and analyse involvement (Zaichkowsky, 1985). In fact, some researchers use the involvement concept to define a relationship between individual and products (Engel & Blackwell, 1982). The focus in this research area is on the relevance or importance that a product has for consumers (Howard & Sheth, 1969; Hupfer & Gardner, 1971). More specifically, the relevance that products have to the consumer’s needs and values (Engel & Blackwell, 1982; Zaichkowsky, 1986a).

One important area of research in involvement is the commitment to the decisions regarding the purchase or simply with the buying act. Involving decisions are considered as relevant and therefore consumers will be motivated to make a decision in a cautious and thoughtful way (Clarke & Belk, 1978). Information search has always been related with the concept of involvement (Bloch, Sherrel, & Ridgway, 1986; Zaichkowsky, 1985). Involvement with the buying decision is conceptualised as the behaviour that occurs when the consumer faces the situation of acquisition or consuming as personally relevant or important (Clarke & Belk, 1978; Howard & Sheth, 1969). When the purchase is considered important, consumers will spend more efforts to obtain information in order to reduce uncertainty (Howard & Sheth, 1969; Zaichkowsky, 1986b). A tourist’s information search involves both information contents and channels. Fodness and Murray (1998) conceptualised information search as the dynamic process whereby individual use various amounts and types of information sources in response to internal and external contingencies to facilitate trip planning decisions for primary and secondary decisions.
Tourism involvement can be viewed from the perspective of affect, in so far as it can be defined as 'the intensity level of interest or motivation' (Ratchford & Vaughn, 1989, p. 28) with a specific tourism product and with certain consequences (Lehto, O'Leary, & Morrison, 2004). This perspective assumes that involvement can be measured, directly or indirectly, by its consequences. Several variables can be used to operationalise the concept, such as the degree of interest, the intensity of information search, planning time, intensity and degree of participation in activities and expenditures made. Accordingly, a tourist’s involvement with consumption can be measured by his/her participation in activities and attractions visited and the monetary investment made in the trip (Lehto et al., 2004).

Involvement is strongly correlated with product evaluation (Day, 1977). Several empirical studies have confirmed the influence of involvement in the processes of post-purchase (Richins & Bloch, 1991). It has been suggested that the greater involvement, the more likely the occurrence of post-consumer ratings and more extreme and meticulous they will be (Oliver & Bearden, 1983; Petty & Cacioppo, 1983; Petty, Cacioppo, & Schumann, 1983). Products are evaluated in a deeper way if the consumer is highly involved (Richins & Bloch, 1991).

The overall involvement assessment in the post-purchase tourist experience includes the experience of travel or stay and influences the perceived quality, perceived value, overall satisfaction and intentions of future behaviour (Bolton & Drew, 1991; Chen & Tsai, 2008).

A considerable number of studies examined the relationship between involvement and risk perception (Richins, Bloch, & McQuarrie, 1992; Venkatraman, 1988). This interest can be explained by the important role played by these constructs as moderators or as motivational factors in a number of consumer behaviour facets (Laurent & Kapferer, 1985). There also commonalities in their conceptualisations, both constructs incorporate the notion of the product’s importance to the consumer (Bloch & Richins, 1983). Risk perception reveals the purchase and product importance (Dholakia, 2001). On the other hand, the level of involvement and the amount and nature of risk perception during the purchasing process influences the depth, complexity and extent of behaviours during the decision process (see Celsi & Olson, 1988; Laurent & Kapferer, 1985), pointing to the similarities between the effects of these constructs.

However, there are also significant differences between the two concepts. The perception of risk considers only the negative consequences of buying and consuming the product, while the level of involvement is affected by the consequences of that acquisition and use (Dholakia, 2001). Many researchers studied the relationship between the two concepts, sometimes analysing risk as an antecedent (Bloch, 1981), a component (Bloch & Richins, 1983; Laurent & Kapferer, 1985) or a consequence of involvement (Venkatraman, 1988). In this study, risk perception is perceived as an antecedent of involvement. In line with the above, the following hypothesis is proposed:

H2: Greater perceived risk in international travel increases the level of tourists’ involvement in the decision-making process.

Safety concern

Risks have been identified as a major concern for international tourists in their decisions (Sönmez & Graefe, 1998b; Yavas, 1990). As a matter of fact, the need
for security must be recognised as an innate feature of human nature (Maslow, 1954), making the concern for security a basic factor influencing destination choice (Crotts, 2003). Nowadays international or domestic travellers’ safety is becoming a global concern and the lack of safety is one of the factors negatively affecting international tourism (Kozak et al., 2007; Reisinger & Mavondo, 2005).

Research in tourism confirms that one of the main travel motivations is relaxing (Kozak, 2002). Even when relaxation is not the main motivation for travelling, tourists do not want to be bothered with negative incidents (Kozak et al., 2007).

Risk perception determines whether the potential tourist feels safe on his trip. Individuals who associate high levels of uncertainty to the trip feel less secure (Reisinger & Mavondo, 2005), so the perception of risk is one of the main predictors of sense of safety (Sönmez & Graefe, 1998b) and concerns about safety increase the perceived risk levels (Sönmez & Graefe, 1998a).

Tourists consider safety and their personal integrity being as a major factor in their travel behaviours, especially when they perceive that the situation may involve any risk (Kozak et al., 2007). In line with the above, we propose the following hypothesis:

**H3:** A higher perception of risk in international travel increases the perception among tourists of the importance of security in international travel.

When concerns with safety are introduced in travel decisions, it becomes a major factor changing and conditioning the contexts of buying decision models (Floyd et al., 2004). When the individual feels that the product is highly related to his/her ego, self-concept and values, in other words when he/she is highly involved with the product he/she will be motivated to ensure right decisions and actions (Dholakia, 2001).

Moreover, the decision process regarding a tourist product marked by high level of involvement will lead consumers to spend more effort with the cognitive elements of risk consideration, reflecting more on the importance of safety importance (Flynn & Goldsmith, 1993). Thus, a greater involvement with the buying decision will lead the consumer to have a greater safety consciousness/concern, especially in international trips:

**H4:** A greater involvement of tourists with the buying decision increases their safety importance perception in international travel.

The fear of terrorism can exist in a tourist due to many factors: contact with terrorist attacks, proximity to those conflicts and events, negative destination images, social interaction and influence of travel agents or tour operators (Sönmez & Graefe, 1998b). Terrorist activity in a particular destination or in tourism generally increases the level of perceived risk and hence has a negative effect on tourist decisions and behaviours (Bar-On, 1996; Blake & Sinclair, 2003; Enders & Sandler, 1991; Roehl & Fesenmaier, 1992; Sönmez, 1998; Sönmez & Graefe, 1998a, 1998b).

Additionally, there is a strong relationship between perceived risk and involvement (Celsi & Olson, 1988; Chaudhuri, 2000; Dholakia, 2001), yet no study, to our knowledge, has examined the perceptions of specific risks, such as terrorism, on the involvement of tourists with purchasing decisions.

Several studies concluded about the existence of a chain reaction to terrorism (Enders & Sandler, 1991), particularly in terms of buying decision behaviour and
safety concerns (Sönmez & Graefe, 1998a, 1998b). In line with the above, we propose the following hypotheses:

H5: An increased contact of tourists with terrorism increases their level of involvement in tourism decision-making process.

H6: A greater contact of tourists with terrorism increases the safety importance perception in international travel.

Methodology

Sample and data collection

The research setting refers to a survey approach, applied in three European countries – Portugal, Spain and Italy – more specifically in an international air travelling context.

The final data were collected from January 2009 to March 2009. Tourists were randomly selected in loco across three international airports: Madrid/Barajas, Lisbon/Portela and Milan/Malpensa, from those agreeing to participate in the study. These three countries were chosen because they have different levels of terrorism risk associated (GTD, 2014): (a) Spain – high level due to attacks from Islamic extremists (trains in Madrid in March 2004) and several attacks from ETA since the 1990s; (b) Italy – medium level, derived from the various terrorist attempts in the Mediterranean in the 1980s and beginning of the 1990s; and (c) Portugal – low level of risk since there are no records of terrorism attempts in this country.

For the sample definition, we used the cluster sampling in space and time. A total of 200 questionnaires were administered in each of the three airports with a distance of approximately 1 month on the same days of the week – Fridays, Saturdays and Sundays – in the same time intervals – from 06:00 to 17:00. At each airport, it took about 3 days to apply 200 questionnaires. Barajas Airport in Madrid in January 2009, Malpensa, Milan, in February 2009 and Portela, Lisbon, in March 2009. Tourists were approached at random after having carried out their check-in.

Only tourists who had undertaken an international trip were interviewed. Most of them were returning from an international trip in those countries or were in transit to arrive from an international trip in other countries. Two of the authors of this study administered the questionnaires explaining the aim of the study to the tourists at the moment after proceeding with the check-in of their return trip. The questionnaires were self-administered, which allowed us to ensure that the data were not biased. We obtained a final sample of 613 questionnaires and a total of 600 valid ones, equally divided among the three international airports. The final sample allowed us to have a proportion of five observations for each indicator, 120 variables (see Bentler, 1989, in Westland, 2010). The final model represents a 22:1 proportion, 27 observable indicators integrated in the model. The missing responses in the questionnaires were replaced by the average of each variable obtained from the other responses.

Measures

We sourced measures from the literature and adapted them to the current research context (see Churchill, 1979). Constructs were first order, and we measured them with multi-item scales.
Antecedents of risk perception

We developed scales to capture the antecedents of risk perception of international tourists using scales previously established in the literature, namely, contact with terrorism (Somer et al., 2005), interest in and attention to terrorism on the media (Jin, 2003) and contact with crime (Brunt et al., 2000).

Direct and indirect contact with terrorism. We adapted the scale developed by Sommer and colleagues (2005) to measure the types of contact with terrorism that international tourists may experience. Respondents rated their level of contact (1 = never; 7 = many times) with several situations associated with terrorism: directly, by being present when an attack occurs, becoming injured due to a terrorist incident or by participating in rescue operations; and indirectly, by feeling to have escaped a terrorist attack due to luck, by having been at the site shortly before the incident occurred, by having provided any kind of aid or by knowing people who have experienced terrorist incidents in the past.

Contact with crime in daily life. We used the scale of Brunt and his colleagues (2000) to measure the types of contact with crime that international tourists may experience in their daily lives. Respondents rated their level of contact (1 = never; 7 = many times) with several situations of crime, like burglary, attempt of burglary, kidnapping, attempt of kidnapping, physical or psychological violence, attempt of physical or psychological violence.

Attention to/interest in terrorism. To measure this constructs a scale developed by Jin (2003) was used. Respondents rated their level of agreement with statements regarding their level of interest in and attention to (1 = strongly disagree; 7 = strongly agree) information about terrorism in the media.

Risk perception

To measure the risk perception of international tourists, we used the scales suggested by Mitra and colleagues (1999) and Sönmez and Graefe (1998b). Respondents rated their level of risk felt when travelling internationally with a scale ranging from 1, very low risk, to 7, extremely high risk. The risks presented were financial, performance, physical, social and psychological risk, risk of time, risk of satisfaction, political instability/unrest, health and terrorism.

Involvement

This construct, as explained before, was considered in four different facets:

- Involvement in pre-purchase or with the generic product
- Involvement with the decision to purchase the product
- Involvement with the product’s consumption
- Involvement in product evaluation or post-purchase
Involvement in pre-purchase or with the generic product. To measure the involvement of international tourists with tourism products, we adapted scales developed by Park, Mothersbaugh, and Feick (1994) and Gursoy and Gavcar (2003). Respondents rated their level of agreement with statements regarding their knowledge, pleasure/interest, risk probability and importance attributed to and prestige related with tourism products, namely, travelling.

Involvement with the decision to purchase the product. We considered involvement with the decision to purchase the product in terms of information that tourists sought for preparing the trip. So, the respondents had to classify the importance of several information sources to take the primary and secondary trip decisions (1 = not important at all; 5 = very important). This scale is composed of items regarding personal sources, marketing communication sources, neutral and experience information sources and were adapted from Assael (1998), Fodness and Murray (1998) and Seabra et al. (2007).

Involvement with the product’s consumption. As far as tourism product consumption is concerned, we considered the money tourists spent with many items during their trip. Also, the activities that tourists engaged in during their trip were considered (Lehto et al., 2004).

Involvement in product evaluation or post-purchase. To measure involvement with evaluation, respondents had to rate their quality perception (1 = very unsatisfied; 7 = extremely satisfied) regarding four specific items of their trip, namely, hospitality, attractions, transportation and infrastructures (Chen & Tsai, 2008). The perceived value was the other scale used to measure involvement with evaluation (Bolton & Drew, 1991).

Safety concern
For measuring safety concern/importance, we adapted a scale developed by Floyd and Pennington-Gray (2004), where tourists rated their level of agreement (1 = strongly disagree; 7 = strongly agree) with statements regarding safety in travelling.

Survey instrument development
After selecting the scales from the literature, they were discussed with experts. We then translated the initial scales into three languages – Portuguese, Spanish and German – and then the instrument was back-translated to English. After revision, we used a pre-test sample of 30 international travellers in order to test the scales’ reliability (through Cronbach’s alpha). The pre-test results were used to further refine the questionnaire.

Data profile
Tourists in this study sample were from 41 countries, from all over the world. The sample was mainly composed of men (56%), with ages mostly under 35 years (56%). Approximately 74% had university education, 22% were middle and senior
management, 20% were businessmen, about 19% were freelancers/self-employed and 15% students. The average income ranged from 2000 to 3000 Euros per month. The sample was mainly composed of frequent travellers, who had undertaken, on an average, seven international trips in the last three years, lasting 9 days each. There was a relatively high degree of familiarity with the destination visited since tourists had in average visited the destination 3.5 times before. Each tourist used, on the average, 15 days to plan the trip, and referred to reservations planning with a period of 25 days in advance.

Data analysis

In order to assess the validity of the measures, the items were subjected to a confirmatory factor analysis using full-information maximum likelihood (FIML) estimation procedures in LISREL 8.54 (Jöreskog & Sorbom, 1996).

Measurement model

To assess the adequacy of the measurement model, we examined initially the Cronbach’s alphas from each construct of the conceptual model. In result, several factors were eliminated and were not included in the measurement because they presented alphas less than 0.65 and/or for revealing no significant values when tested to incorporate the final model.

We also examined individual item reliabilities, convergent validity and discriminant validity (see Appendix). We assessed item reliabilities by examining the loadings of the individual items in the respective constructs.

In this model, each item is restricted to load on its pre-specified factor, with the factors allowed to correlate freely. The chi-square for this model is significant ($\chi^2 = 1924.84$). We also assessed additional fit indices: the comparative fit index (CFI), the incremental fit index (IFI) and the Tucker–Lewis fit index (TLI). The CFI, IFI and TLI of this model are 0.92, 0.92 and 0.90, respectively. The GFI, AGFI and PGFI of the measurement model are 0.81, 0.77 and 0.68, respectively. Since fit indices can be improved by allowing more terms to be freely estimated, we also assessed the root mean square error of approximation (RMSEA), which assesses fit and incorporates a penalty for lack of parsimony. An RMSEA of 0.05 or less indicates a close fit to the population, while 0.08 to 0.10 indicates a satisfactory fit, with any score over 0.10 indicating an unacceptable fit. The RMSEA of this measurement model is 0.092.

Internal consistency was evidenced by composite validity ($\rho$) (Bagozzi, 1980). All the constructs passed the minimal acceptable values of 0.7 (Nunnally, 1978) and are valid presenting internal consistency above 0.81 and Cronbach’s alphas of 0.808. Convergent validity is evidenced by the large and significant standardised loadings of each item on its intended construct (average loading size was 0.72). Discriminant validity among the constructs is stringently assessed using the Fornell and Larcker (1981) test; all possible pairs of constructs passed this test. Appendix presents all the constructs, scale items and reliabilities.

To assess convergent validity, we measured the average variance extracted ($\rho_{vcl(n)}$) (AVE) (Fornell & Larcker, 1981) for all constructs. It is recommended that the AVE should be greater than 0.5, meaning that 50% or more variance of the indicators
should be taken into account. All AVE values are greater than 0.5, indicating convergent validity. Evidence of discriminant validity was also revealed by the fact that the shared variance between any two constructs (i.e. the square of their inter-correlations) was less than the average variance extracted for each construct (Fornell & Larcker, 1981; Mackenzie, Podsakoff, & Rich, 2001).

We assessed discriminant validity by comparing the correlation between each pair of constructs with the root of AVE among those constructs (Fornell & Larcker, 1981) and by analysing cross-loadings between items and constructs. By analysing the values in Table 1, we confirmed that the square root of AVE between any two constructs (diagonal) is greater than the correlation between those constructs (off-diagonal), thus indicating discriminant validity. The results show that items load higher on the respective construct than on any other construct. Hence, none of the correlations in the final model was sufficiently high to jeopardise the construct’s discriminant validity (Anderson & Gerbing, 1988).

### Structural equation model

The conceptual framework was simultaneously estimated in a structural equation model using FIML estimation procedures in LISREL 8.54. Specifically, this model contains four constructs, 27 observable indicators, measurement and latent variable errors, and inter-correlations between the latent constructs. The estimation results for the significant structural paths are exhibited in Figure 2. This model has a chi-square of 1925.78; the fit indices suggest a good fit of the model to the data (CFI = 0.92, IFI = 0.92, TLI = 0.91, RMSEA = 0.92, GFI = 0.81, AGFI = 0.77 and PGFI = 0.68).

The hypotheses defined in the conceptual model that linked those eliminated constructs presenting low Cronbach’s alphas and not included in the measurement model were not tested (H1a, H1c; H3). The hypotheses relating the constructs fixed in the CFA model were tested. The following are the results (see Figure 2) through measures of standardised coefficients and t-values.

The hypothesis H1b that related positively interest in and attention to terrorism in the media by tourists and their perception of risk in international travel has been proven. The results show the existence of a significant and positive relationship between those constructs (γ_{11} = 0.26, p < 0.05, t = 5.59). The proposed relationship between perceived risk in international travel and the level of involvement of tourists with the decision process (H2) was confirmed in the analysis: β_{21} = 0.27 p < 0.05 (t = 5.38). The hypothesis that the involvement of tourists with the buying decision could have a positive impact on their perception of the importance of security in international travel (H5) was confirmed with a significant and positive relationship between constructs (β_{32} = 0.15, p < 0.05,
Support was also found for the relationship between the contact of tourists with terrorism and their level of involvement with the tourist decision process, as proposed in hypothesis H6. The results show that this relationship is significant and positive ($\gamma_{12} = 0.11, p < 0.05, t = 2.47$). The hypothesis that tourists’ contact with terrorism further increases safety concern in international travel was also supported by the results (H7) ($\gamma_{31} = 0.36, p < 0.05, t = 7.56$).

One of the advantages of using a model of causal relations is the possibility of estimating not only the direct effects, but also the indirect and total effects among latent constructs (Lages & Lages, 2004; Lages & Montgomery, 2005). Table 2 shows that all indirect effects are statistically significant, which reinforces in a more sustained way the final model.

Thus, the interest and attention to terrorism on media has significant and positive direct effects ($0.11, p < 0.05, t = 2.47$) and indirect ($0.07, p < 0.05, t = 4.04$) in buying decision involvement. Consequently, the indirect relationship strengthens the total effect ($0.18, p < 0.05, t = 4.03$). The interest and attention to terrorism on media also has significant and positive direct effects ($0.36, p < 0.05, t = 7.56$) and indirect ($0.03, p < 0.05, t = 2.58$) in the safety importance perception in international travel reinforcing the total effect ($0.39, p < 0.01, t = 8.06$). The risk perception in international travel revealed also to have significant and positive indirect effects in the safety importance perception ($0.04, p < 0.01, t = 2.82$).

Making a comparison between the standardised coefficients and $t$-values of effects between the constructs allows us to draw more results. With regard to major determinants of involvement with the buying decision, we can conclude that the most relevant is the risk perception in international travel ($\beta_{21} = 0.27, p < 0.06, t = 5.38$) in detriment of interest and attention to terrorism on media ($\gamma_{12} = 0.11, p < 0.05, t = 2.47$). In determining the safety importance perception in international travel, interest and attention to terrorism on media showed to have a greater effect ($\gamma_{31} = 0.36, p < 0.05, t = 7.56$) compared to the direct influence of involvement in buying decision ($\beta_{32} = 0.15, p < 0.05, t = 3.23$).
### Table 2: Direct and indirect effects of model.

| EFFECT OF/ON       | \( \eta_1 \) | \( \eta_2 \) | \( \eta_3 \) |
|-------------------|------------|------------|------------|
|                   | Direct     | Indirect   | Total      | Direct     | Indirect   | Total      | Direct     | Indirect   | Total      |
| \( \xi_1 \)       | 0.26*      |            | 0.26**     | 0.11*      | 0.07*      | 0.18*      | 0.36*      | 0.03*      | 0.39**     |
| IATERROR          | (5.59)     | (0.05)     | (5.59)     | (2.47)     | (4.04)     | (4.03)     | (7.56)     | (2.58)     | (8.06)     |
| \( \eta_1 \)     |            | 0.27*      |            | 0.27*      |            |            | 0.04**     |            | 0.04**     |
| RISKP             | (5.38)     |            | (5.38)     | (2.82)     |            | (2.82)     |            |            |            |
| \( \eta_2 \)     | 0.11*      | 0.11*      |            | 0.15*      |            | 0.15*      | 0.15*      |            |            |
| BUYINGDECINVOLVEMENT | (2.47)   | (2.47)     | (2.47)     | (3.23)     |            | (3.23)     |            |            |            |

Notes: Values in the upper rows are completely standardised estimates. Values in the lower rows are \( t \)-values.

* \( p < 0.05 \), ** \( p < 0.01 \) (two-tailed test). Because of rounding, sometimes the ‘total effect’ is not the same as ‘the direct effect plus the indirect effect’.

The signs for the expected indirect and total effects were established by implication. We assume that if all the direct relationships involved in an indirect relationship are positive, the final indirect relationship is also expected to be positive. The same principle applies to the total effects. If both direct and indirect effects are expected to be positive, then the sign for the total effect is also expected to be positive (Lages & Montgomery, 2005).
Conclusions

The present study aimed at analysing the consumer’s behaviour in tourism market. Taking into account the effect that terrorism might have on the decision to undertake international travel, we tried to show how the contact of tourists with such events will influence their international travelling behaviour.

Our results show that terrorism influences the perceptions of risk that tourists associate with international travel. However, and surprisingly, we could not confirm that the direct or indirect contact has a significant impact on risk perceptions. It has been demonstrated that the interest in and attention to terrorism as reported in the media is a significant antecedent of risk perception in international travel. This relationship confirms the important effect of mass media on tourists’ perceptions (Baral, Baral, & Morgan, 2004; Sönmez, 1998; Taylor, 2006).

The existence of a significant and positive relationship between risk perception and involvement in international travel was demonstrated, but only in information search at the level of the buying decision-making. The perceived risk is usually higher in the tourist buying decision-making process, which suggests that tourists are more involved in seeking information to reduce the uncertainty involved in this purchase (Wahab, Crampon, & Rothfield, 1976). The greater the perceived risk felt by tourists, the more they seek information and become more rational in their decision-making process (Maser & Weiermair, 1998). On the other hand, tourists have a tendency to seek information, when they consider the product or its category as important or with a symbolic value (Laurent & Kapferer, 1985), which is the case for travel.

It was likewise established the hypothesis that the involvement in tourists purchase decision could have a positive impact on safety concern in international travel. The results confirmed the significant relationship between these two constructs reinforcing other studies that considered the importance of safety in travel decisions (see Dholakia, 2001).

Finally, we suggested several hypotheses of direct links between terrorism, risk perceptions in international travel and involvement with the safety concern. The results revealed that the interest in and attention to terrorism in the media and involvement in the purchase decision has a significant and positive impact on the safety concern by international tourists. This relationship demonstrates again the critical importance of the indirect contact with terrorism through the media, from the perspective of international tourists (Kozak et al., 2007; Reisinger & Mavondo, 2005).

A relationship that was not substantiated in this study was the contact with crime in daily life and the perception of risk in international travel, maybe because tourists face travelling as a stop in their daily lives.

We were unable to demonstrate the existence of a relationship between risk perception in international travel, involvement in pre-purchase, consumption and post-purchase. This result was probably due to the fact that most tourists in the sample have revealed low levels of perceived risk associated with international travel, high travel experience and high contact with the destination visited.

In summary, we conclude that the interest in and attention given to terrorism in the media by tourists increases the risk perception in international travel, their involvement in seeking information for travel and the consequent safety concern. Moreover, this effect of attention to and interest in the contents of mass media about terrorism raises the risk perception of individuals in their international travel, which
in turn contributes to a greater involvement of tourists with the buying decision, namely, regarding their information search.

**Implications**

Tourists are increasingly demanding in their travel behaviour, making their study more complex. The travel decision process is the result of an intersection of some personal (sociodemographic and psychographic), social and commercial variables (Sönmez & Graefe, 1998a). Tourists are rational consumers that pass through various stages in their decision-making, weighing the benefits and costs in their choices (Sönmez, 1998).

Tourists’ decisions and behaviours might change, especially in the pre-purchase, due to many factors. The perceived risk of travel can alter their travel decisions (Boshoff, 2002). Given the already high complexity of the tourist decision-making process, a high-risk perception associated to an event that should be pleasant is, in fact, problematic (Taylor, 2006), also is clear that risk perceptions are highly subjective in nature and frequently do not reflect real risk. Mainly risk perceptions are linked with safety images that individuals hold from destinations (Sönmez & Graefe, 1998b). Different levels of safety concerns may influence the destination choice process and subsequent decisions. One of the phenomena that has most contributed to the deterioration of security image of tourist destination is the occurrence of terrorist attacks, which have recently broken out all over the world, even in destinations once supposedly very safe.

This work had as main objective to analyse the consumer’s behaviour in tourism market, taking into account the effect that terrorism might have on the decision to undertake international travel. It was intended to understand how the contact of tourists with such events could influence the international travelling behaviour and their safety concerns.

Terrorism has unfortunately become a constant part of our lives and will not simply disappear. It is thus fundamental to accept its presence and inevitability for effectively coping with the phenomenon from a managerial point of view. This is imperative not only for countries that directly suffer terrorist attacks, but also for countries that may be indirectly affected and for the tourism industry as a whole. Terrorism has serious negative effects on the demand of tourist destinations, which are further boosted by media coverage of corresponding incident. Through negative publicity, a tourism destination that suffers a terrorist attack may be confronted with a severely damaged reputation and dramatic consequences for its tourism industry. Inclusively, a negative image of one destination resulting from terrorism may be generalised over a range of other countries in proximity or affect entire regions for large periods in time (Taylor, 2006).

It is therefore necessary to better analyse this issue and create more effective crisis management tools, based on cooperative solutions among members of the industry, government entities linked to tourism as well as academia (Sönmez, 1998). Crisis management in face of terrorism is an area of particular importance to managers. The selection of a marketing strategy for tourism organisations and destinations depends on how tourists perceive the risk of being affected by terrorism, which is in turn a result of their exposure mainly to media information regarding this type of risk.
We consider that the here presented model may help tourism firms and destinations better understand the type of contact tourists have with terrorism and what its impact on tourists’ decision-making, by learning from the here identified results and by eventually applying the model in the context of their own market studies, analysing similar data. They may as a consequence use a framework to develop and implement strategies that might reduce perceived risk and increase the value associated with destinations and their services. Our model gives an extended and integrated vision of the tourist’s risk perception of terrorism in tourist involvement and safety concern. When marketers understand how consumers react to risk perception regarding terrorism, they can create more effective campaigns to influence consumers’ expectations and decisions.

Derived from the results of this study, we can draw some practical implications for tourism organisations’ and destinations’ managers:

- It is important to understand that tourists have a real interest; they are curious and give attention to news and reports related with terrorism. This has influence on risk perception in international trips, specifically physical, psychological, social and satisfaction risk, and they feel the menace of being involved in political turmoil or terrorist attacks in the visited destination.
- Both interest in and attention to terrorism news and risk perception impacts positively the involvement of tourists in the search for information to plan international trips. Based on this, managers should develop promotion strategies based on four main areas:
  - advertising in radio, TV, press and brochures
  - tourist-specific information such as travel agents, travel clubs/books/magazines and welcome centres
  - Public relations to get reports in TV, radio and press
  - virtual visits
- Managers and governments should know that safety is a major attribute that a destination can offer and is seriously taken into consideration when choosing a destination and could be improved by creating additional security measures at airports for instance.
- But managers should also consider that in a direct or indirect way, safety concern is impacted positively by interest in and attention to in terrorism on media, risk perception and involvement in information search when international tourists buy and plan their trips.
- The image that tourists have about destinations can be influenced by incidents in other regions. The impact of media must be recognised as an important indicator of their own image.
- Safety is a major concern for tourists, especially in a context of increasing terrorism also affecting and sometimes even targeting tourists. Organisations and destinations must therefore be concerned about minimising the risk of terrorism as well as about the impact of terrorist activities on their image, requiring a careful and credible communication strategy whenever terrorism is associated to a destination/service. Organisations must invest in good communication materials that are credible in reducing the perception of risk.
From a theoretical perspective, to our knowledge, no study exists with a focus on the impact of the perceived risk of terrorism on involvement and the consequent safety concern of international tourists. The intention of this study is to help close this gap. Also, this study revealed the relevance of risk perception acquired via media exposure to terrorism, a topic that has been neglected in literature so far.

In sum, at a time when marketing researchers are challenged to provide research with practical implications, it is believed that this theoretical framework may be used as a basis to pursue sensitive customer-oriented destination and business strategies, recognising the role of tourists’ risk perception regarding terrorism, frequently acquired via media exposure and impacting on their pre-purchase involvement and general safety concern.

Limitations and directions for future research

There are some limitations to the presented research approach to be considered. The first limitation is that the final instrument (i.e. the questionnaire) may have created common method variance that could have inflated construct relationships. This could be particularly threatening if the respondents were aware of the conceptual framework of the study. However, they were not informed about the specific purpose of the study, and all of the construct items were separated and mixed so that no respondent should have been able to detect which items were affecting which factors.

Additionally, while the reported research project investigates contact of tourists travelling by plane regarding terrorism risk perceptions, care should be taken in extending the study beyond this specific research framework. Hence, although the fit indices suggest a good fit of the model to the data, future research is encouraged to test our instrument across other tourism settings and types of travelling with larger samples. To do so, researchers may add new items and factors applicable to the specific research setting. It should furthermore be interesting to analyse the antecedents of interest in terrorism in the media and consequences of safety concern. Thus, we suggest to investigate how contact with terrorism and risk perception is associated with other variables, such as tourists’ lifestyles, culture background, country of origin, social, demographic and personality features and to also look at travel behavioural preferences (e.g. travel mode, type of accommodation, trip organisation, destination type and familiarity) as a function of safety concern.

Funding

We would like to thank the support from the Portuguese Foundation for Science and Technology and Center for Studies in Education, Technologies and Health in the conduct of the studies reported in this paper.

References

Anderson, J., & Gerbing, D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103(3), 411–423. doi:10.1037/0033-2909.103.3.411
Assael, H. (1998). *Consumer behavior and marketing action* (6th ed.). Boston, MA: Kent Publishing.

Atkinson, S., Sandler, T., & Tschirhart, J. (1987). Terrorism in a bargaining framework. *The Journal of Law and Economics, 30*(1), 1–21. doi:10.1086/467127

Bagozzi, R. (1980). *Causal models in marketing*. New York, NY: John Wiley.

Baral, A., Baral, S., & Morgan, N. (2004). Marketing Nepal in an uncertain climate: Confronting perceptions of risk and insecurity. *Journal of Vacation Marketing, 10*, 186–192. doi:10.1177/135676670401000208

Barker, M., Page, S., & Meyer, D. (2003). Urban visitor perceptions of safety during a special event. *Journal of Travel Research, 41*(4), 355–361. doi:10.1177/0047287503041004004

Baker, M., Sandler, T., & Tschirhart, J. (1987). Terrorism in a bargaining framework. *The Journal of Law and Economics, 30*(1), 1–21. doi:10.1086/467127

Bar-On, R. (1996). Measuring the effects on tourism violence and of promotion following violent acts. In A. Pizam & Y. Mansfeld (Eds.), *Tourism, crime and international security issues* (pp. 159–174). New York, NY: Wiley.

Bauer, R. (1967). Consumer behavior as risk taking. In D. Cox (Ed.), *Risk taking and information handling in consumer behavior* (pp. 23–33). Cambridge, MA: Harvard University Press.

Bettman, J., Payne, J., & Staelin, R. (1986). Cognitive considerations in designing effective labels for presenting risk information. *Journal of Marketing and Public Policy, 5*, 1–28. Retrieved from https://faculty.fuqua.duke.edu/~jrb12/bio/Jim/26.pdf

Blake, A., & Sinclair, M. (2003). Tourism crisis management: US response to September 11. *Annals of Tourism Research, 30*(4), 813–832. doi:10.1016/S0160-7383(03)00056-2

Bloch, P. (1981). An exploration into the scaling of consumer’s involvement with a product class. *Advances in Consumer Research, 8*, 61–65.

Bloch, P., & Richins, M. (1983). A theoretical model for the study of product importance perceptions. *Journal of Marketing, 47*(3), 69–81. doi:10.2307/1251198.

Bolton, R., & Drew, J. (1991). A multistage model of customers’ assessments of service quality and value. *Journal of Consumer Research, 17*, 375–384. doi:10.1086/208564

Bonham, C., Edmonds, C., & Mak, J. (2006). The impact of 9/11 and other terrible global events on tourism in the United States and Hawaii. *Journal of Travel Research, 45*(1), 99–110. doi:10.1177/0047287506288812

Boshoff, C. (2002). Service advertising: An exploratory study of risk perceptions. *Journal of Service Research, 4*, 290–298. doi:10.1177/1094670502004004006

Broderick, A., & Mueller, R. (1999). Theoretical and empirical exegesis of the consumer involvement construct: The psychology of the food shopper. *Journal of Marketing Theory and Practice, 7*, 97–108. Retrieved from http://www.jstor.org/stable/23232704

Brunt, P., Mawby, R., & Hambly, Z. (2000). Tourist victimisation and the fear of crime on holiday. *Tourism Management, 21*(4), 417–424. doi:10.1016/S0261-5177(99)00084-9

Budeescu, D., & Wallsten, T. (1985). Consistency in interpretation of probabilistic phrases. *Organizational Behavior and Human Decision Processes, 36*, 391–405. doi:10.1016/0749-5978(85)90007-X

Cavlek, N. (2002). Tour operators and destination safety. *Annals of Tourism Research, 29*(2), 478–496. doi:10.1016/S0160-7383(01)00067-6

Celsi, R., & Olson, J. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research, 15*(2), 210–224. doi:10.1086/209158

Chaudhuri, A. (2000). A macro analysis of the relationship of product involvement and information search: The role of risk. *Journal of Marketing Theory and Practice, Winter*(8), 1–14. Retrieved from http://digitalcommons.fairfield.edu/business-facultypubs/48
Chen, C., & Tsai, M. (2008). Perceived value, satisfaction, and loyalty of TV travel product shopping: Involvement as a moderator. *Tourism Management*, 29, 1166–1171. doi:10.1016/j.tourman.2008.02.019

Chen, J. (1997). The tourists’ cognitive decision making model. *Revue de Tourisme*, 4, 4–9. doi:10.1108/eb058263

Cheron, E., & Ritchie, B. (1982). Leisure activities and perceived risk. *Journal of Leisure Research*, 14(2), 139–154. doi:10.1177/004728758301402401

Chesney-Lind, M., & Lind, I. (1986). Visitors as victims: Crimes against tourists in Hawaii. *Annals of Tourism Research*, 13, 167–191. doi:10.1016/0160-7383(86)90036-8

Churchill, G. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73. doi:10.2307/3150876

Clarke, K., & Belk, R. (1978). The effects of product involvement and task definition on anticipated consumer effort. *Advances in Consumer Research*, 5, 313–318. Retrieved from http://www.acrwebsite.org/search/view-conference-proceedings.aspx?Id=9220

Cohen, E. (1987). The tourist as victim and protégé of law enforcing agencies. *Leisure Studies*, 6, 181–198. doi:10.1080/02614368700390141

Coshall, J. (2003). The threat of terrorism as an intervention on international travel flows. *Journal of Travel Research*, 42(1), 4–12. doi:10.1177/0047287503253901

Coshall, J. (2005). Interventions on UK earnings and expenditures overseas. *Annals of Tourism Research*, 32(3), 592–609. doi:10.1016/j.annals.2004.09.004

Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.

Crotts, J. (2003). Theoretical perspectives on tourist criminal victimization. *Journal of Tourism Studies*, 14(1), 92–98. doi:19961809302

Day, R. (1977). Toward a process model of consumer satisfaction. In H. Hunt (Ed.), *Conceptualization and measurement of consumer satisfaction and dissatisfaction* (pp. 153–186). Cambridge, MA: Marketing Science Institute.

Dholakia, U. (2001). A motivational process model of product involvement and consumer risk perception. *European Journal of Marketing*, 35(11/12), 1340–1362. doi:10.1108/EUM0000000006479

Enders, W., & Sandler, T. (1991). Causality between transnational terrorism and tourism: The case of Spain. *Terrorism*, 14(1), 49–58. doi:10.1080/10576109108435856

Engel, J., & Blackwell, R. (1982). *Consumer behavior*. New York, NY: Dryden Press.

Fletcher, J., & Morakabati, Y. (2008). Tourism activity, terrorism and political instability within the commonwealth: The cases of Fiji and Kenya. *International Journal of Tourism Research*, 10, 537–556. doi:10.1002/jtr.699

Floyd, M., 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. doi:10.1300/J073v15n02_02

Floyd, M., & Pennington-Gray, L. (2004). Profiling risk perceptions of tourists. *Annals of Tourism Research*, 31(4), 1051–1054. doi:10.1016/j.annals.2004.03.011

Flynn, L., & Goldsmith, R. (1993). Application of the personal involvement inventory in marketing. *Psychology & Marketing*, 10(4), 357–366. doi:10.1002/mar.4220100409

Fodness, D., & Murray, B. (1998). A typology of tourist information search strategies. *Journal of Travel Research*, 37(2), 108–119. doi:10.1177/004728759803700202

Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. doi:10.2307/3151312.

Fujii, E., & Mak, J. (1979). The impact of alternative regional development strategies on crime rates: Tourism vs agriculture in Hawaii. *The Annals of Regional Science*, 13(3), 42–56. doi:10.1007/BF01287746

Gabbott, M., & Hogg, G. (1994). Consumer behaviour and services: A review. *Journal of Marketing Management*, 10(4), 311–324. doi:10.1080/0267257X.1994.9964277
Garofalo, J. (1979). Victimization and the fear of crime. *Journal of Research in Crime and Delinquency, 16*(1), 80–97. doi:10.1177/002242787901600107.

Giddens, A. (1990). *The consequences of modernity*. Cambridge, MA: Polity Press.

Global Terrorism Database. (2014). *GTD Global Terrorism Database*. Obtido em 25 de May de 2014, de GTD. Retrieved from http://www.start.umd.edu/gtd/

Goodrich, J. (1991). An American study of tourism marketing: Impact of the Persian Gulf War. *Journal of Travel Research, 30*(2), 37–41. doi:10.1177/004728759103000208

Goodrich, J. (2002). September 11, 2001 attack on America: A record of the immediate impacts and reactions in the USA travel and tourism industry. *Tourism Management, 23*(6), 573–580. doi:10.1016/S0261-5177(02)00029-8

Göymen, K. (2000). Tourism and governance in Turkey. *Annals of Tourism Research, 27*(4), 1025–1048. doi:10.1016/S0160-7383(99)00127-9

Gursoy, D., & Gavcar, E. (2003). International leisure tourists’ involvement profile. *Annals of Tourism Research, 30*(4), 906–926. doi:10.1016/S0160-7383(03)00059-8

Howard, J., & Sheth, J. (1969). *The theory of buyer behavior*. New York, NY: John Wiley.

Huan, T., & Beaman, J. (2003). Contexts and dynamics of social interaction and information search in decision-making for discretionary travel. *Tourism Analysis, 8*(2), 177–182. doi:10.3727/108354203774076698

Hunter-Jones, P., Jeffs, A., & Smith, D. (2008). Backpacking your way into crisis. *Journal of Travel & Tourism Marketing, 23*(2–4), 237–247. doi:10.1300/J073v23n02_18

Hupfer, N., & Gardner, D. (1971). Differential involvement with products and issues: An exploratory study. In D. Gardner (Ed.), *Proceedings and annual conference of the association for consumer research* (pp. 262–270). Ann Arbor, MI: Association for Consumer Research.

Irvine, W., & Anderson, A. (2006). The effect of disaster on peripheral tourism places and the disaffection of prospective visitors. In Y. Mansfeld & A. Pizam (Eds.), *Tourism, security and safety* (pp. 169–184). Oxford: Butterworth-Heinemann.

Jacoby, J., & Kaplan, L. (1972). The components of risk perception. In M. Venkatesan (Ed.), *Proceedings of the 3rd annual conference* (pp. 382–393). Champaign: Association for Consumer Research.

Jin, H. (2003). Compounding consumer interest: Effects of advertising Campaign publicity on the ability to recall subsequent advertisements. *Journal of Advertising, 32*(4), 29–41. doi:10.1080/00913367.2003.10639145

Jöreskog, K., & Sorbom, D. (1996). *LISREL 8: User’s reference guide*. Chicago, IL: Scientific Software International.

Kozak, M. (2002). Comparative analysis of tourist motivations by nationality and destinations. *Tourism Management, 23*(3), 221–232. doi:10.1016/S0261-5177(01)00090-5

Kozak, M., Crotts, J., & Law, R. (2007). The impact of the perception of risk on international travellers. *International Journal of Tourism Research, 9*(4), 233–242. doi:10.1002/jtr.607

Lages, L., & Lages, C. (2004). The STEP scale: A measure of short-term export performance improvement. *Journal of International Marketing, 12*(1), 36–56. doi:10.1509/jmkt.12.1.36.25647

Lages, L., & Montgomery, D. (2005). The relationship between export assistance and performance improvement in Portuguese export ventures: An empirical test of the mediating role of pricing strategy adaptation. *European Journal of Marketing, 39*(7/8), 755–784. doi:10.1108/03090560510601752

Lankford, S. (1996). Crime and tourism: A study of perceptions in the Pacific Northwest. In A. Pizam & Y. Mansfeld (Eds.), *Tourism, crime and international security issues* (pp. 51–58). London: John Wiley and Sons.

Laroche, M., Bergeron, J., & Goutaland, C. (2003). How intangibility affects perceived risk: The moderating role of knowledge and involvement. *The Journal of Services Marketing, 17*(2), 122–140. doi:10.1108/08876040310467907
Laurent, G., & Kapferer, J. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research, 22*(1), 41–53. doi:10.2307/3151549.

Law, R. (2006). The perceived impact of risks on travel decisions. *International Journal of Tourism Research, 8*, 289–300. doi:10.1002/trj.576

Lehto, X., O’Leary, J., & Morrison, A. (2004). The effect of prior experience on vacation behaviour. *Annals of Tourism Research, 31*(4), 801–818. doi:10.1016/j.annals.2004.02.006

Lennon, R., Weber, M., & Henson, J. (2001). A test of A theoretical model of consumer travel behaviour: German consumers’ perception of Northern Ireland as a tourist destination. *Journal of Vacation Marketing*, 7(1), 51–62. doi:10.1177/135676670100700105

Lepp, A., & Gibson, H. (2003). Tourist roles, perceived risk and international tourism. *Annals of Tourism Research, 30*(3), 606–624. doi:10.1016/S0160-7383(03)00024-0

Lepp, A., & Gibson, H. (2008). Sensation seeking and tourism: Tourist role, perception of risk and destination choice. *Tourism Management, 29*(4), 740–750. doi:10.1016/j.tourman.2007.08.002

Levitt, T. (1983). The globalization of marketing. *Harvard Business Review, 7*(3), 92–102.

Mackenzie, S., Podsakoff, P., & Rich, G. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science, 29*(2), 115–134. doi:10.1177/03079459945006

Mansfeld, Y. (1996). Wars, tourism and the “Middle East” factor. In A. Pizam & Y. Mansfeld (Eds.), *Tourism, crime and international security issues* (pp. 265–278). New York, NY: Wiley.

Maser, B., & Weiermair, K. (1998). Travel decision making: From the advantage point of perceived risk and information preferences. *Journal of Travel & Tourism Marketing, 7*(4), 107–121. doi:10.1300/J073v07n04_06

Maslow, A. (1954). *Motivation and personality*. New York, NY: Harper.

Milman, A., & Bach, S. (1999). The impact of security devices on tourists’ perceived safety: The central Florida example. *Journal of Hospitality and Tourism Research, 23*(4), 371–386. doi:10.1177/109634809902300403

Mitra, K., Reiss, C., & Capella, L. (1999). An examination of perceived risk, information search and behavioral intentions in search, experience and credence services. *Journal of Services Marketing, 13*, 208–228. doi:10.1108/08876049910273763

Moutinho, L. (1987). Consumer behaviour in tourism. *European Journal of Marketing, 21*(10), 5–44. doi:10.1108/EUM0000000004718

Neumayer, F. (2004). The impact of political violence on tourism: Dynamic cross-national estimation. *Journal of Conflict Resolution, 48*, 259–281. doi:10.1177/0022007203262335

Nunnally, J. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

O’Connor, N., Stafford, M., & Gallagher, G. (2008). The impact of global terrorism on Ireland’s tourism industry: An industry perspective. *Tourism and Hospitality Research, 8*(4), 351–363. doi:10.1057/thr.2008.29

Oliver, R. (1999). Whence consumer loyalty? *Journal of Marketing, 63*, 33–44. doi:10.2307/1252099.

Oliver, R., & Bearden, W. (1983). The role of involvement in satisfaction processes. *Advances in Consumer Research, 10*, 205–255. Retrieved from http://www.acrwebsite.org/search/view-conference-proceedings.aspx?id=6098

Park, C., Mothersbaugh, D., & Feick, L. (1994). Consumer knowledge assessment. *Journal of Consumer Research, 21*, 71–82. doi:10.1086/209383

Pettty, R., & Cacioppo, J. (1983). *Attitudes and persuasion: Classic and contemporary approaches*. Dubuque, IA: Brown Company Publishers.

Pettty, R., Cacioppo, J., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research, 10*, 135–146. doi:10.1086/208954

Pfefferbaum, B., Moore, V, Mcdonald, N., Maynard, B., Gurwitch, R., & Nixon, S. (1999). The role of exposure in post-traumatic stress in youths following the 1995 bombing. *The
Pizam, A. (1999). A comprehensive approach to classifying acts of crime and violence at tourism destinations. *Journal of Travel Research, 38*(1), 5–12. doi:10.1177/004728759903800103

Pizam, A., & Fleischer, A. (2002). Severity vs. frequency of acts of terrorism: Which has a larger impact on tourism demand? *Journal of Travel Research, 40*(3), 337–339. doi:10.1177/004728752040003011

Pizam, A., & Mansfeld, Y. (Ed.). (1996). *Tourism, crime and international security issues*. Chichester: Wiley.

Prideaux, B. (1996). The tourism crime cycle: A beach destination case study. In A. Pizam & Y. Mansfeld (Eds.), *Tourism, crime and international security issues* (pp. 77–90). London: John Wiley and Sons.

Ratchford, B., & Vaughn, R. (1989). On the relationship between motives and purchase decisions: Some empirical approaches. *Advances in Consumer Research, 16*, 293–299. Retrieved from http://www.acrwebsite.org/search/view-conference-proceedings.aspx?id=6917

Reisinger, Y., & Crotts, J. (2009). The influence of gender on travel risk perceptions, safety, and travel intentions. *Tourism Analysis, 14*, 793–807. doi:10.3727/108354210X12645141401269

Reisinger, Y., & Mavondo, F. (2005). Travel anxiety and intentions to travel internationally: Implications of travel risk perception. *Journal of Travel Research, 43*, 212–225. doi:10.1177/0047287504272017

Reisinger, Y., & Mavondo, F. (2006). Cultural differences in travel risk perception. *Journal of Travel & Tourism Marketing, 20*(1), 13–31. doi:10.1300/J073v20n01_02

Richins, M., & Bloch, P. (1992). How enduring and situational involvement combine to create involvement responses. *Journal of Consumer Psychology, 1*(2), 143–153. doi:10.1016/S1057-7408(08)80054-X

Ritchie, B. (2004). Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry. *Tourism Management, 25*(6), 669–683. doi:10.1016/j.tourman.2003.09.004

Roehl, W., & Fesenmaier, D. (1992). Risk perceptions and pleasure travel: An exploratory analysis. *Journal of Travel Research, 30*(4), 17–26. doi:10.1177/004728759203000403

Roselius, T. (1971). Consumer rankings of risk reduction methods. *Journal of Marketing, 35*(1), 56–61. doi:10.2307/1250565

Schlenger, W., Caddell, J., Ebert, L., Jordan, B., Rourke, K., Wilson, D., ... Kulka, R. A. (2002). Psychological reactions to terrorist attacks: Findings from the national study of Americans’ reactions to September 11. *Journal of the American Medical Association, 288*, 581–588. doi:10.1001/jama.288.5.581

Seabrook, J., Stein, B., Jaycox, L., Collins, R., Marshall, G., Elliot, M., ... Berry, S. H. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine, 345*(20), 1507–1512. doi:10.1056/NEJM200111153452024

Seabra, C., Abrantes, J., & Lages, L. (2007). The impact of using non-media information sources on the future use of mass media information sources: The mediating role of expectations fulfillment. *Tourism Management, 28*(6), 1541–1554. doi:10.1016/j.tourman.2007.02.008

Seddighi, H., Nuttal, M., & Theocharous, A. (2001). Does cultural background of tourists influence the destination choice? An empirical study with special reference to political instability. *Tourism Management, 22*, 181–191. doi:10.1016/S0261-5177(00)00046-7
Shaffer, T., & Sherrell, D. (1997). Consumer satisfaction with health-care services: The influence of involvement. *Psychology & Marketing, 14*, 261–285. doi:10.1002/(SICI) 1520-6793(199705)14:3<261::AID-MAR4>3.0.CO;2-9

Sirakaya, E., Mcellland, R., & Uysal, M. (1996). Modeling vacation destination decisions: A behavioral approach. *Journal of Travel & Tourism Marketing, 5*(1/2), 57–75. doi:10.1300/J073v05n01_05

Sirakaya, E., & Woodside, A. (2005). Building and testing theories of decision making by travellers. *Tourism Management, 26*(6), 815–832. doi:10.1016/j.tourman.2004.05.004

Somer, E., Ruvio, A., Soref, E., & Sever, I. (2005). Terrorism, distress and coping: High versus low impact regions and direct versus indirect civilian exposure. *Anxiety, Stress and Coping, 18*, 165–182. doi:10.1080/10615800500205918

Sönmez, S. (1998). Tourism, terrorism and political instability. *Annals of Tourism Research, 25*(2), 416–456. doi:10.1016/S0160-7383(97)00093-5

Sönmez, S., Apostolopoulos, Y., & Tarlow, P. (1999). Tourism in crisis: Managing the effects of terrorism. *Journal of Travel Research, 38*(1), 13–18. doi:10.1177/004728759903800104

Sönmez, S., & Graefe, A. (1998a). Influence of terrorism risk on foreign tourism decisions. *Annals of Tourism Research, 25*(1), 112–144. doi:10.1016/S0160-7383(97)00072-8

Sönmez, S., & Graefe, A. (1998b). Determining future travel behavior from past travel experience and perceptions of risk and safety. *Journal of Travel Research, 37*(2), 171–177. doi:10.1177/004728759803700209.

Spilerman, S., & Stecklov, G. (2009). Societal responses to terrorist attacks. *Annual Review of Sociology, 35*, 167–189. doi:10.1146/annurev-soc-070308-120001

Stewart, S., & Stynes, D. (1995). Toward a dynamic model of complex tourism choices: The seasonal home location decision. *Journal of Travel & Tourism Marketing, 3*(3), 69–88. doi:10.1300/J073v03n03_05

Stone, R., & Gronhaug, K. (1993). Perceived risk: Further considerations for the marketing discipline. *European Journal of Marketing, 27*(3), 39–50. doi:10.1108/0309056931026637

Swarbrooke, J., & Horner, S. (1999). *Consumer behavior in tourism*. Oxford: Butterworth-Heinemann.

Taylor, P. (2006). Getting them to forgive and forget: Cognitive based marketing responses to terrorist acts. *International Journal of Tourism Research, 8*, 171–183. doi:10.1002/jtr.570

Teare, R. (1990). An exploration of the consumer decision process for hospitality services. In R. Teare, L. Moutinho, & N. Morgan (Eds.), *Managing and marketing services in the 1990s* (pp. 233–248). London: Cassell Educational.

Um, S., & Crompton, J. (1990). Attitude determinants in tourism destination choice. *Annals of Tourism Research, 17*(3), 432–448. doi:10.1016/0160-7383(90)90008-F

Um, S., & Crompton, J. (1992). The roles of perceived inhibitors and facilitators in pleasure travel destination decisions. *Journal of Travel Research, 30*(3), 18–25. doi:10.1177/004728759203000303

Venkatraman, M. (1988). Investigating differences in the roles of enduring and instrumentally involved consumers in the diffusion process. *Advances in Consumer Research, 15*, 299–303. Retrieved from http://www.acrwebsite.org/search/view-conference-proceedings.aspx?id=6829

Wahab, S., Crampon, L., & Rothfield, L. (1976). *Tourism marketing*. London: Tourism International Press.

Weimann, G., & Winn, C. (1994). *The theater of terror: Mass media and international terrorism*. New York, NY: Longman.

Westland, J. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications, 9*(6), 476–487. doi:10.1016/j.elerap.2010.07.003

Yavas, U. (1990). Correlates of vacation travel: Some empirical evidence. *Journal of Professional Services Marketing, 5*(2), 3–18. doi:10.1300/J090v05n02_02
Zaichkowsky, J. (1985). Measuring the involvement construct. *Journal of Consumer Research, 12*(3), 341–352. doi:10.1086/208520.
Zaichkowsky, J. (1986a). Conceptualizing involvement. *Journal of Advertising, 15*(2), 4–34. doi:10.1080/00913367.1986.10672999
Zaichkowsky, J. (1986b). The emotional aspect of product involvement. *Advances in Consumer Research, 14*, 32–35. Retrieved from http://www.acrwebsite.org/search/view-conference-proceedings.aspx?id=6630site

**Appendix. Scale items and reliabilities**

| Constructs, scale items and reliabilities | Standardised coefficients | T-values |
|------------------------------------------|---------------------------|---------|
| **ATTENTION TO AND INTEREST IN TO TERRORISM IN MEDIA** (scale 1 = strongly disagree/ 7 = strongly agree) | | |
| AITERROR – Attention to and interest in to terrorism in media\(^1\) | | |
| \(\alpha = 0.946, \ \rho_{\text{vc(n)}} = 0.75, \ \rho = 0.95\) | | |
| V1 I am really interested about terrorist attacks reports on news | 0.86 | 26.22 |
| V2 When I have the opportunity I watch/read/ear reports about terrorist attacks on news | 0.92 | 29.14 |
| V3 I am very curious about terrorist attacks reports on news | 0.92 | 29.36 |
| V4 I do not want to miss terrorist attacks reports on news | 0.86 | 26.02 |
| V5 I never want to change the channel during a report of terrorist attack on news | 0.75 | 21.33 |
| V6 I pay much attention on reports about terrorist attacks on news | 0.87 | 26.84 |
| \(^1\) Adapted from Jin (2003) |

| **RISK PERCEPTION** (scale 1 = very low risk; 7 = extremely high risk) | | |
| PRISK – risk perception\(^2\) | | |
| \(\alpha = 0.854, \ \rho_{\text{vc(n)}} = 0.50, \ \rho = 0.86\) | | |
| V7 Possibility of physical danger or injury detrimental to health [accidents] | 0.65 | 16.72 |
| V8 Possibility of becoming involved in the political turmoil of the country being visited | 0.73 | 19.49 |
| V9 Possibility that travel experience will not reflect the individual’s personality or self-image | 0.76 | 20.72 |
| V10 Possibility that travel experience will not provide personal satisfaction | 0.73 | 19.51 |
| V11 Possibility that travel choice/experience will affect other’s opinion of individual | 0.71 | 18.91 |

\(^1\) Adapted from Jin (2003)
Appendix (Continued).

### Standardised Constructs, scale items and reliabilities

| Constructs, scale items and reliabilities | Standardised coefficients | T-values |
|-------------------------------------------|---------------------------|----------|
| V12 Possibility of being involved in a terrorist act | 0.65 | 16.77 |

Adapted from Mitra et al. (1999), Sönmez and Graefe (1998a, 1998b)

### INVOLVEMENT

(scale 1 = not important at all/ 5 = very important)

BUYINVOLVEMENT – involvement with the buying decision:

sources for primary and secondary decisions

\[
\left( \alpha = 0.921, \rho_{vc(n)} = 0.50, \rho = 0.92 \right)
\]

| Item | Internal Reliability | T-value |
|------|----------------------|---------|
| V13 Advertising in TV, radio or press (primary decisions) | 0.66 | 17.71 |
| V14 Brochures (primary decisions) | 0.63 | 16.61 |
| V15 Virtual visits (primary decisions) | 0.73 | 20.36 |
| V16 Travel Agents (primary decisions) | 0.68 | 18.45 |
| V17 Travel clubs/books/magazines (primary decisions) | 0.64 | 17.06 |
| V18 Reports in TV, radio, press (primary decisions) | 0.77 | 22.02 |
| V19 Welcome centres (primary decisions) | 0.69 | 18.80 |
| V20 Advertising in TV, radio or press (secondary decisions) | 0.66 | 17.75 |
| V21 Internet forums (secondary decisions) | 0.68 | 18.47 |
| V22 Virtual visits (secondary decisions) | 0.78 | 22.26 |
| V23 Travel agents (secondary decisions) | 0.72 | 19.80 |
| V24 Reports/news on TV, radio and press (secondary decisions) | 0.80 | 22.97 |

Adapted from Assael (1998); Fodness and Murray (1998); Seabra et al. (2007)

### SAFETY IMPORTANCE

(scale 1 = strongly disagree/7 = strongly agree)

SAFETYIMP – safety importance

\[
\left( \alpha = 0.808, \rho_{vc(n)} = 0.60, \rho = 0.81 \right)
\]

| Item | Internal Reliability | T-value |
|------|----------------------|---------|
| V25 Additional security measures at airports make traveling safer | 0.69 | 17.54 |
| V26 Safety is the most important attribute a destination can offer | 0.86 | 22.85 |
| V27 Safety is a serious consideration when I am choosing a destination | 0.76 | 19.53 |

Adapted from Floyd and Pennington-Gray (2004)

Notes:

- \( \alpha \) = Internal reliability [Cronbach, 1951]
- \( \rho_{vc(n)} \) = [Fornell & Larcker, 1981]
- \( \rho \) = Composit Reliability [Bagozzi, 1980]
About the authors

Claudia Seabra is Associate Professor at the Polytechnic Institute of Viseu in the Tourism and Marketing area. She is director of the Tourism Management Master in the same institution. She has publications in the Journal of Business Research, Tourism Management, European Journal of Marketing, Journal of Tourism Research and Hospitality and a chapters in the following scientific books: Marketing Innovations for Sustainable Destinations and Tourism Research: An Interdisciplinary Perspective. She is affiliated with the Portuguese Foundation for Science and Technology and Centre for Studies in Education, Technologies and Health. Claudia Seabra develops her research in (1) services marketing, (2) tourism and (3) pedagogy.

Corresponding author: Claudia Seabra, Higher School of Technology and Management, Polytechnic Institute of Viseu, Campus Politécnico Repeses, 3504-510 Viseu, Portugal.

José Luís Abrantes is Professor in Polytechnic Institute of Viseu – Higher School of Technology and Management. He has publications in Journal of Business Research, Tourism Management, International Marketing Review, European Journal of Marketing, Journal of Tourism Research and Hospitality, among others. He is affiliated with the Portuguese Foundation for Science and Technology and Centre for Studies in Education, Technologies and Health. José Luís Abrantes develops his research in (1) marketing, (2) tourism and (3) pedagogy.

Elisabeth Kastenholz is Associate Professor at the Aveiro University; Department of Economics, Management and Industrial Engineering; member of the research unit of Governance, Competitiveness and Public Policies (GOVCOPP); with publications in the Journal of Travel Research, Tourism Economics, Journal of Sustainable Tourism, Journal of Vacation Marketing, Tourism Management, Tourism Management Perspectives and Anatolia, in numerous international conference proceedings and several book chapters; her research focuses on consumer behaviour in tourism, destination marketing, rural tourism, accessible tourism and sustainable destination development.