

Marion Karl / Jürgen Schmude

# Understanding the role of risk (perception) in destination choice: A literature review and synthesis

## Abstract

Safety and security are key aspects for the success of tourism in every destination. Rather than objective risks, it is rather the tourist's individual and subjective perception of these risks that mostly influence destination choice and in the long run tourism flows from one country to another. The concept of risk perception has been highly studied in tourism, however the literature remains fragmented resulting in lack of a cohesive and comprehensive framework. It is not yet clear how risk perception as one important determinant of destination choice acts as an influencing factor in the destination choice process. The purpose of this paper is to review and synthesise literature from tourism research and other disciplines on risk and particularly risk perception to develop a framework that offers a better understanding of the role of risk (perception) in the destination choice process. Although travel decision-making and destination choice is a negotiation process between tourist needs and destination offer, most past research has mainly concentrated on the tourist rather than the specific attributes of a destination. The aim is therefore to develop a literature-based framework, including tourist and destination attributes, which is built upon a meta-review of fundamental and recent studies from various disciplines.

**Key words:** risk; risk perception; destination choice; tourist behaviour; travel decision-making

## Introduction

Safety and security are considered as 'conditio sine qua non' for the positive development of a country's or region's tourism sector (Reisinger & Mavondo, 2005) and are decisive determinants in destination choice processes (Fuchs & Pizam, 2011). Especially after the terrorist attacks on September, 11th 2001 in New York, and its consequences on global tourism, both tourism industry and tourism research began to focus on the role of risk in tourism (Mansfeld, 2006). However, even before the terrorist attacks the question how risk influences tourists' decisions whether or not to visit a destination has already been investigated, for example, by Um and Crompton (1992), Roehl and Fesenmaier (1992) or Sönmez and Graefe (1998a, b). The results of these studies have provided a basis for post-September 11<sup>th</sup> research on risk perception and destination choice including aspects related to risks such as uncertainty, worry or fear.

The analysis of different aspects of risk in tourism has been relatively fragmented. Five travel risk categories are often used to investigate the influence of risk on tourism: natural disasters (Birkland, Herabat, Little & Wallace, 2006; Park & Reisinger, 2010); health risks (Jonas, Mansfeld, Paz & Potasman, 2011); crime (Ryan, 1993); political instability (Fletcher & Morakabati, 2008); and terrorism (Mansfeld, 1999; Pizam & Fleischer, 2002). These five risk categories are particularly interesting because they represent risk factors which could lead to a physical injury of tourists and will have a strong influence on tourist decision-making and tourism flows.

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**Marion Karl**, MSc., Ludwig-Maximilians-University of Munich, Department of Geography, Munich, Germany  
e-mail: marion.karl@lmu.de

**Jürgen Schmude**, PhD, Ludwig-Maximilians-University of Munich, Department of Geography, Munich, Germany  
E-mail: j.schmude@lmu.de

Studies on risk and tourism can be conducted using two different scales: the macro level using aggregated data and the micro level focusing on the individual tourist. Macro scale studies concentrate on the influence of safety and security events on tourism flows on an aggregated level (Enders, Sandler & Parise, 1992; Mansfeld, 1999; Pizam & Fleischer, 2002; Morakabati, 2013; Saha & Yap, 2014). While this stream of research concentrates on the outcome of the destination choice process, another research area emphasises the importance of the tourists' interpretations of risk on the individual level of the tourist. These micro scale studies investigate either tourists' interpretations of particular risk factors that occur in holiday destinations (Fuchs & Reichel, 2004, 2006; Adam, 2015). Other studies focus on differences in perceptions of risk caused by attributes of tourists and how these varying perceptions of risk influence the destination choice process (Sönmez & Graefe, 1998a, b). A paper on risk and uncertainty by Williams and Baláz (2014) represents one of the few theoretical contributions to a better understanding of the concept of risk and its relation to tourism. The authors propose an agenda for future research on the role of risk in tourism. They state that while many studies have already concentrated on the level of the individual tourist, "this is still one of the most fruitful areas for further research" (Williams & Baláz, 2014, p. 13).

While research on the aggregated as well as individual level has made meaningful and important contributions to our knowledge of the role of risk in destination choices, it would be helpful to summarise this evidence into a literature-based framework. The purpose of this paper is to review and synthesise literature from tourism research and other disciplines on risk and particularly risk perception to develop a better understanding of the role of risk (perception) in the destination choice process. The focus of this article is on studies dealing with risk (perception) and destination choice applying a positivist approach where empirical data is collected and interpreted. After theoretical reflections on the role of risk (perception) in destination choice, empirical studies on this research topic from the last decades including, for example, influencing factors of risk perception and destination choice in the context of risk are analysed and presented in a synthesising manner. This meta-review of fundamental and recent studies further serves as a basis for the literature-based framework which combines tourist and destination attributes in the context of risk (perception) and destination choice. The paper concludes with a discussion on contradictions and limitations in past research and implications for future research.

## The theory of risk (perception) in tourism research

The concept of risk can be considered from different perspectives leading to different understandings of risk. From a constructionist perspective, Douglas and Wildavsky's (1982) cultural theory of risk claims that risk is constructed by society in a certain historical and cultural context. Consequently, risk or rather what is recognised as risk depends on when and where a phenomenon occurs. According to Williams and Baláz (2014, p. 10), social constructionist research on risk and tourism "focuses on the individual tourist or how discourses are produced about tourism risk" while positivist approaches define risk as the probability of a negative or positive outcome of an event or decision. Risks which are measurable and calculable (Knight, 1921) can then be assessed in a formal normative manner. Tourism research on risk generally follows a theory which concentrates on a negative outcome and risk is then defined as a combination of the probability of occurrence and the severity of the damage (Kaplan & Garrick, 1981). In a more social approach which concentrates on consequences for a person, Kates, Hohenemser and Kasperson (1985, p. 21) define risk as an "uncertain consequence of an event or activity with regard to something that humans value". In this definition, risks have to involve a potential loss (e.g. money, health, or life), be of significance to an individual or a society and include

a certain degree of uncertainty (Yates, 1992). The component of uncertainty in this definition stands in contrast to Knight (1921) who states that risk is measurable while uncertainty is not.

Since risks "are created and selected by human actors" (Renn, 2006, pp. 23-24), a certain array of perceived risks of the same situation is possible. In consumer research, risk perception is defined as "a consumer's perception of the overall negativity of a course of action based upon an assessment of the possible negative outcomes and the likelihood that those outcomes will occur" (Mowen & Minor, 2001, p. 176). According to Fischhoff, Watson and Hope (1984, p. 129) two dimensions have to be considered in the concept of risk perception: "the degree to which the risk is unknown" representing a cognitive component and "the degree to which the risk evokes a feeling of dread" as an affective component. Loewenstein, Weber, Hsee and Welch (2001, p. 280) follow this distinction in their discussion on the 'risk-as-feelings'-hypothesis and state the following: "People react to the prospect of risk at two levels: they evaluate the risk cognitively, and they react to it emotionally. Although the two reactions are interrelated, with cognitive appraisals giving rise to emotions influencing appraisals, the two types of reactions have different determinants." In fact, judgements of risk "seldom occur in an emotionally neutral context" which influences the judgements (Johnson & Tversky, 1982, p. 3). An important contribution to the understanding of risk perception is Tversky and Kahnemann's (1974) availability heuristics based on a study on judgment under uncertainty and Kahnemann and Tversky's prospect theory (1979) evolved from a study on decisions under risk. In an advanced version of prospect theory, Tversky and Kahneman (1992) introduce a fourfold pattern of risk attitudes and claim that people tend to overestimate low probabilities for uncertain situations with low probabilities of loss or gain.

Risk perception is a multidimensional concept (Yang & Nair, 2014) related to aspects such as uncertainty avoidance, worry, anxiety or fear. Risk perception is furthermore seen as a psychological concept that is not static and anchored in an individual person but dynamically interwoven with the environment, for example with culture, society, politics or media (Kasperson et al., 1988). Research focusing on the understanding of risk in relation to its environment such as the discourse of fear and risk, risk communication and the influence of politics or media on society's interpretation of risks can be found in articles by Altheide and Michalowski (1999), Altheide (2006, 2010), Bianchi (2006), Korstanje (2009) or Korstanje and Tarlow (2012). These studies use qualitative approaches or theoretically discuss influencing factors of risk perception and changes in the discourse of fear. While they provide interesting and critical insight into this topic, they will not be further elaborated in this article since the focus is on empirical studies testing various influencing factors to develop a literature-based framework for the analysis of the role of risk (perception) in destination choice.

## The role of risk (perception) in destination choice: Theoretical reflections

Risk (perception) plays an important role in the travel decision-making process on several layers (e.g. travel mode, travel organisation, travel time, travel style, travel costs, travel destination). For example, the type of preferred travel organisation (e.g. package tour vs. individual travelling, travelling in groups vs. travelling alone; Adam, 2015) depends on tourists' risk perceptions. Risk externalisation strategies (i.e. shifting of risk to a third party through the payment of travel insurance; Hajibaba, Gretzel, Leisch & Dolnicar, 2015) or substitutability of risk factors (i.e. physical risk is transferred to financial risk through an increase of travel costs by the payment of well-educated tour guides, experienced tour operators or expensive hotels with higher security standards) could explain why the preference for a certain type of travel organisation and the level of risk perception are related. The higher the degree of

travel organisation, the less risk has to be considered by tourists themselves. However, this literature review and synthesis focuses on the decision concerning the travel destination since this decision is seen as most important in the hierarchical order of sub-decisions (Fesenmaier & Jeng, 2000; Oppewal, Huybers & Crouch, 2015) and its impact on the tourism industry is rather substantial (i.e. possibility of a tourism crisis due to a decline in tourist arrivals).

Tourists' destination choices are shaped by risk as well as uncertainty, both concepts that are in a way related to potential loss as a consequence of an event (Quintal, Lee & Soutar, 2010b). The influence of these factors differs between destinations and changes during the destination choice process (Williams & Baláz, 2014), for example through the acquisition of new information. Although researchers often use the terms risk and uncertainty interchangeably in the context of decision-making, they "can be distinguished by the probability of their outcomes" (Quintal, Lee & Soutar, 2010a, p. 322). However, Quintal et al. (2010b) point out that two perspectives exist in tourism research concerning the definition of risk and uncertainty: risk and uncertainty as the same concept where risk is a feeling of uncertainty about the consequences; risk and uncertainty as separate concepts where risk is associated with a certain probability of occurrence and uncertainty as the unknown consequence. This means that if decisions are made under uncertainty, information on the possible outcomes (type and probability of occurrence) is missing. Consequently, unless they relate to routine short trips to surrounding areas, destination choices are always associated with a high level of uncertainty. Uncertainty arises from partial knowledge (Knight, 1921) often caused by the tourists' inability to process the mass of information about all possible travel destinations to which every potential tourist is exposed (Crompton, 1992). The specific characteristics of the product 'travel' – intangibility, inseparability, variability, and perishability (Fuchs & Reichel, 2006) – add to the high level of uncertainty in the travel decision-making process.

Travel decision-making and destination choices are furthermore risky choices: "choices among alternatives that can be described by probability distributions over possible outcomes" (Weber & Bottom, 1989, p. 114). An important element of risky choices in tourism is the perceived negativity of at least one of the outcomes (Weber & Bottom, 1989) that is consistent with Yates' (1992) second element of risk, the significance of the loss. From a consumer's point of view risks are bound to costs and therefore "[p]otential tourists select the destination which best matches their needs by offering the most benefits for the least cost (or risk)" (Sönmez & Graefe, 1998a, p. 125). However, the assumption of a rational travel decision without consideration of situational constraints or personality traits in normative theories such as expected utility theory (von Neumann & Morgenstern, 1953) does not reflect actual travel decisions (Bruhin, Fehr-Duda & Epper, 2010). It has to be noted that tourists make destination choices based on their perceptions of risks (Roehl & Fesenmaier, 1992), on "intuitive risk judgments" (Slovic, 1987, p. 280), which might not even reflect the actual risk level at a destination (Fuchs & Reichel, 2006). Consequently, tourists' travel behaviours and destination choices will only be affected, if the level of perceived risk is beyond the tourist's individual acceptable risk threshold (Mansfeld, 2006).

Past studies have shown that perceived risks which sometimes differ from objective risks (Fuchs & Reichel, 2006) are stronger determinants in destination choice than objective risks (Mansfeld, 1992; Mäser & Weiermair, 1998; Sönmez & Graefe, 1998b; Fuchs & Reichel, 2004). The risk components, objective risk as the measurable calculation of possible outcomes or future consequences and perceived risk as the subjective interpretation of possible outcomes or future consequences, are sometimes referred to by different adjectives (e.g. actual or subjective, individual). In this review, a single term will be used for each with the understanding that it also means the other terms.

## The role of risk (perception) in destination choice: Empirical evidence

The selection of articles for this review and synthesis of existing literature on risk (perception) and destination choice was conducted in a systematic manner. Literature with keywords such as risk, risk perception, safety or security and tourism, destination choice or travel decision-making was chosen for further examination of suitability. Published articles from double-blind reviewed journals were preferred to ensure the quality and reliability of the content. The articles from the first selection were scrutinised, firstly to exclude articles that are not directly dealing with the topic and secondly to gather more literature using a snowballing technique (i.e. literature through the reference list). The snowballing technique has also facilitated identifying the core and main studies that are involved in this research area.

### Risk perceptions as a determinant of destination choice

Numerous studies assess the role of risk (perception) in travel decision-making and destination choice and mostly agree on the fact that risk perception plays an important role in destination choices but not on the degree of the influence.

Sönmez and Graefe's (1998a) study on risk perception and its influence on international travelling for example reveals that risk perception has a direct impact on destination choice. In a similar study, Sönmez and Graefe (1998b) integrate the factor travel experience and demonstrate that high risk perception encourages the decision not to visit a destination which is perceived to be risky. A study among New York residents on the influence of risk perceptions on intentions to travel that was conducted shortly after the terrorist attacks on September 11th, 2001 gives an interesting insight into the relationship between travel behaviour and risk perception (Floyd, Gibson, Pennington-Gray & Thapa, 2004). This study finds that some components of risk perception such as perceived social risks but also general safety concerns have an impact on tourists' future travel behaviour. Whereas Floyd et al. (2004) show that high risk perceptions could lead to an avoidance of international travelling, other studies indicate that high risk perception in regard to some factors such as terrorism risk directs destination choice only to a visit of a different destination (Rittichainuwat & Chakraborty, 2009).

The influence of risk on destination choice is also supported on the aggregated level, for example by Drakos and Kutan's (2003) econometric study on the immediate and delayed impact of terrorism on Mediterranean tourism. Their study reveals that low levels of terrorism in one country lead to an increase in other Mediterranean countries while high levels of terrorism lead to a decrease in the whole region. This result can be explained with the concept of spillover or neighbouring effect as the negative influence on tourism in a destination caused by a destination in crisis in the same region (Steiner, Al-Hamarneh & Meyer, 2006). The choice of an alternative destination (national or international) is a risk reduction or risk avoidance strategy that can be applied by tourists as a reaction to high levels of perceived risks.

Studies on risk perception generally investigate generators of potential travel risk (e.g. terrorism, criminality, political instability, natural catastrophe) or a compilation of many risk factors (Table 1).

Table 1

**Risk factors concerning (international) travelling**

<b>Risk factor</b>	<b>Definition</b>
Functional	Possibility of mechanical, equipment or organisational problems while travelling internationally
Physical / health	Possibility of physical danger, injury or illness while travelling internationally
Financial	Possibility that the vacation will not provide value for the money spent
Social	Possibility that the vacation will affect others' opinion of the tourist
Psychological	Possibility that the vacation will not reflect the tourist's personality or self-image
Time	Possibility that the vacation is a waste of time
Satisfaction	Possibility that the vacation does not to provide personal satisfaction
Political instability	Possibility to be affected or injured by any form of political instability while travelling internationally
Terrorism	Possibility to be affected or injured by an act of terrorism while travelling internationally

Based on: Roehl & Fesenmaier (1992); Sönmez & Graefe (1998b); Pizam & Smith (2000); Fuchs & Reichel (2006).

A study by Gray and Wilson (2009) on 17 travel hazards and how these deter a tourist from travelling gives insight into the evaluation of these risk factors. Risk factors such as terrorism or physical risk that are able to pose a threat to tourists' physical well-being are strong determinants of destination choice in contrast to risk factors related to tourists' emotional well-being such as social risk. The strong impact of terrorism on tourism (Sönmez, Apostolopoulos & Tarlow, 1999) can be explained by the special kind of relationship between terrorism and tourism being logical companions (Richter & Waugh, 1986). Another reason for the high relevance is the discrepancy between actual and perceived terrorism risk as people generally misjudge dramatic and sensational causes of death (Slovic, Fischhoff & Lichtenstein, 1981). The high frequency of media reports on terrorism could lead to a further misjudgement of risks since, following Tversky and Kahnemann's (1974, p. 1127) availability heuristic, risks are judged "by the ease with which instances or occurrences can be brought to mind".

A recent study by Sharifpour, Walters and Ritchie (2014a) on the interplay between risk perception, prior knowledge and intention to visit a region associated with a high level of risk emphasises the importance of physical risk in the destination choice process. However, destination-specific risk as "one's subjective interpretation of the possible benefits achieved from visiting a destination" was found to be the strongest factor of destination choice and will probably dominate other risk factors (Sharifpour et al., 2014a, p. 115). The specific context of the chosen case example (i.e. three countries as representatives for the Middle East) could limit the transferability to other regions with lower perceived levels of risk where general risk or physical risk may play a more important role. However, Adam (2015) also confirms the high relevance of destination-specific and physical risk for international backpacking tourists to Ghana.

Studies using the aggregated macro level perspective underline the high relevance of terrorism as an influencing factor of tourism. For example, Mansfeld (1999) using the destination Israel as an example states that cycles of war, terror and peace have shaped the development of Israel's tourism industry. Pizam and Smith's (2000) as well as Pizam and Fleischer's (2002) studies on the impact of terrorism on the destination Israel using panel data furthermore proves that serious but one-time safety or security events result in a sharp drop in tourist arrivals, frequently repeated events, however, have a stronger negative impact on tourism even if the events are less severe. Saha and Yap (2014) investigate the impact of terrorism on tourism using cross-sectional panel data from 139 countries over a ten year period and detect that terrorism does not always diminish tourism in an affected country. A decline in tourist arrivals will only occur in case that terrorism is combined with political instability.

A limitation of past research on risk perception and destination choice is that it has not been able to unravel whether a destination is rejected due to a high level of perceived travel risks or a general high risk perception in everyday life as a personality trait.

### Information sources as influencing factors of destination choice in the context of risk

Travel information is relevant at every stage of the travel decision-making process, in particular in regard to risk. Mansfeld (1992) states that suitable travel information minimises perceptions of risk in the pre-purchase phase, helps to create a destination image in the purchase phase and is useful to justify the decision to oneself and others in the post-purchase phase. A study by Jonas and Mansfeld (2015) on information search and risk perception during the travel consumption sequence (i.e. prior to destination choice, after destination choice, during the trip, after return; Mansfeld, 2006) confirms a positive correlation between the level of risk perception and the use of travel information.

Searching for suitable travel information is seen as an important risk reduction strategy (Sönmez & Graefe, 1998a; Fuchs & Reichel, 2004). However, tourists cannot reduce the actual risk level at a destination but they can reduce their perceived level of risk through information search as it helps to reduce the discrepancy between objective and (often overrated) perceived risk. A significant relation between perceived risk, information search and destination choice has been identified by Mäser and Weiermair's (1998). Since tourists choose a destination for their next holiday in most cases while at home, they are not able to assess risk factors directly. The assessment is instead based on communicated travel information of various forms such as 'objective' data from official sources, tourists' micro social environments or media representations. 'Objective' information such as travel advisories from the Ministry of Foreign Affairs play a key role in the context safety and security (Sönmez & Graefe, 1998a), in particular prior to the destination choice (Jonas & Mansfeld, 2015). However, past research reveals that tourists prefer social-communicative and personal information sources to impersonal, official sources (Sönmez & Graefe, 1998a). Direct exchange of information with friends, acquaintances or family members, and word-of-mouth information is highly rated (Jonas & Mansfeld, 2015) and can be seen as one of the strongest factors influencing destination choices in the context of risk.

### Experiences as influencing factors of destination choice in the context of risk

Past studies integrating experience as a determinant of destination choice mostly consider two components: prior visitation of a certain (type of) destination and general (international) travel experience. Past research further indicates that prior visitation and general travel experience determine risk perception in various ways. Whereas tourists with travel experience in a certain destination solely perceive some dimensions of risk lower, international well-travelled tourists have an overall lower risk perception (Sönmez & Graefe, 1998a,b; Fuchs & Reichel, 2011) or at least a reduced perception of some dimensions of risk (Rittichainuwat & Chakraborty, 2009). Sönmez and Graefe (1998a, b) show that prior visitation of a destination renowned for being risky and general experience with international travelling leads to a decline in risk perception, which reflects on destination choices. Studies on first-time and repeat visitors of a destination, such as Fuchs and Reichel's (2011) survey with visitors to Israel, corroborate these results. For example, first-time visitors rate risk factors such as terrorism or crime higher than repeat visitors. Rittichainuwat and Chakraborty (2009) gain contrasting results and show that first-time and repeat visitors of the destination Thailand differ significantly in their perception of only one risk category (i.e. health risk) but not in their perception of other risk factors (e.g. terrorism risk).

An explanation for the influence of travel experience on risk perception and consequently destination choice can be tourist knowledge. Tourist knowledge, gained through general travel experience as well as experience with a specific destination, move a tourist from a layman to a (perceived) expert position regarding travel risks. Studies by Sharifpour et al. (2014a, b) investigate the interplay between tourist knowledge, risk perception and destination choice more closely. They found that subjective knowledge, a feeling of self-confidence in one's knowledge about a destination, and risk perception are negatively correlated. In contrast to this, objective knowledge, the actual knowledge about a destination, is not significantly related to risk perception in a tourism context. The more tourists travel internationally, the more likely they will have experienced risky situations, achieved adequate coping skills and thereby react differently to risk.

Past research is not able to answer the question if prior visitation of a destination leads to a lower level of perceived risk of a bigger geographical region or a specific destination. Williams and Baláz (2014, p. 4) encourage an interesting question in the context of travel experience and risk perception: "has travel experience made individuals risk tolerant, or was the initial predisposition to travel selectively influenced by risk tolerance?" A study by Hajibaba et al. (2015, p. 49) on crisis-resistant tourists, tourists with low risk avoidance tendencies who "tend to absorb risks instead of engaging in risk avoidance strategies" and wide experience with international travelling, proceeds on the assumption that these tourists have a stable risk propensity that influences their travel behaviour. However, past research has not been able to fully explain whether travelling reduces risk perception through the improvement of coping strategies or whether risk perception is more stable and independent from external influencing factors.

## Tourist attributes as influencing factors of risk perception

### *Tourist attributes as influencing factors of risk perception: Personality traits*

Destination choice studies often include personality traits as determinants, which influence the outcome of destination choices. Past research demonstrates that the personality trait sensation seeking, a "generalized tendency to seek varied, novel, complex, and intense sensations and experiences and the willingness to take risks for the sake of such experiences" (Zuckerman, 2010, p. 1545), is particularly important in the context of risk perception and destination choice. Zuckerman's Sensation Seeking Scale is adapted for several studies from tourism research (Pizam et al., 2004; Lepp & Gibson, 2008; Fuchs, 2013). While Zuckerman's (1971) concept of sensation seeking helps to understand risky behaviour generally, only experience seeking, one of the four factors of sensation seeking (i.e. Thrill and Adventure Seeking, Experience Seeking, Disinhibition, Boredom Susceptibility) explicitly refers to travelling. People with a high sensation seeking tendency are not attracted by risk but are more willing to take risks in order to gain sensation as a reward. So far, it is however not clear how and to what extent sensation seeking and risk perception are related in terms of tourism. A negative correlation between sensation seeking and social risk perception was found by Fuchs (2013), while high and low sensation seekers in Lepp and Gibson's (2008) study do not differ significantly in their perception of risk but in their travel intentions concerning destinations with a specific level of perceived risk. The concept of sensation-seeking implies that risk may be a bonus of travelling or a travel motivator for some tourists (Adam, 2015), a view of risk in tourism that has not been studied extensively. Research such as studies from Fuchs (2013) on Israeli backpackers or Hajibaba et al. (2015) on crisis-resistant tourists can be seen as a starting point in this research area.



### *Tourist attributes as influencing factors of risk perception: Nationality*

A considerable amount of tourism research literature has been published on differences in risk perception caused by the nationality or the cultural background of a tourist (Fuchs & Reichel, 2004; Pizam et al., 2004; Reisinger & Mavondo, 2006; Kozak, Crotts & Law, 2007; Seabra, Dolnicar, Abrantes & Kastenholz, 2013). In an exploratory study, Fuchs and Reichel (2004) investigate how cultural background and nationality influences the perception of various risk factors concerning the destination Israel and the choice of risk reduction strategies. Their results demonstrate that highly significant differences between nationalities exist in the perception of human-induced risks (e.g. terrorism, crime, political unrest), financial risks and overall risk in Israel. Not only differences between the levels of perceived risks are found but also risk categories are evaluated differently. While Fuchs and Reichel (2004) include the distinctiveness of the destination Israel with its religious relevance as a relevant factor in this destination choice, other influencing factors such as motivation for the trip are not further observed. However, the concentration on one single destination with specific travel motives for the visit of this destination (e.g. pilgrimage) complicate more general statements concerning risk (perception) and destination choice. Another example incorporating nationality provides the cross-cultural study by Pizam et al. (2004) in eleven countries that investigates the influence of risk-taking and sensation-seeking on travel behaviour. People from different countries and thus diverse cultural backgrounds vary significantly in their perception and evaluation of risks. A study of Kozak et al. (2007) investigates the impact of risk related to safety or security on destination choices and explores differences between nationalities with low and high levels of uncertainty avoidance according to Hofstede's cultural dimensions. Their results indicate that nationalities do not only differ in regard to types of risk but also in the assessment of how likely and how severe a safety or security event will occur.

Not only nationality or cultural background itself but also familiarity of a destination (Karl, Reintinger & Schmude, 2015), for example due to a high similarity between host and guest culture, play an important role in destination choice. Reisinger and Mavondo (2005, 2006) focus their studies on tourists' risk perceptions on differences between national (same cultural background) and international (different cultural background) tourists or tourists from nationalities with different uncertainty avoidances. They detect that national tourists perceive travel risks in their home country to be lower than international tourists and that nationalities vary significantly in their risk perceptions. Seabra et al. (2013) investigate influencing factors of risk and safety perceptions achieve similar results. Their types of international tourists differ significantly according to the national background, income, travel motives and crime experience. Moreover, not only differences between national and international but also inter- and intraregional tourists are important which is underlined by macro perspective studies such as Fleischer and Buccola (2002) or Morakabati (2013). A study on tourist demand in Israeli hotels from international and national tourists indicates that foreign demand reacts stronger to risk than domestic demand (Fleischer & Buccola, 2002). Morakabati's (2013) analysis of secondary data on tourism flows in the Middle East further shows that interregional tourism is more affected by safety and security events than intraregional tourism. Tourists from the same region may perceive a lower level of risk because of cultural proximity (e.g. language, religion, traditions) and extended knowledge on destinations from the same region.

### *Tourist attributes as influencing factors of risk perception: Sociodemography*

Previous research into the question whether sociodemographic variables such as gender and age are influencing factors of risk perception is inconsistent and contradictory. According to Sönmez and Graefe (1998a, b), no relation exists between the demographic variables age, gender and risk perception.

Similar conclusions are drawn from a study by Mäser and Weiermair (1998) that applies perception of various risk factors as dependent and independent variable. Their results suggest that while risk perception influences decision-making (and consequently destination choice), it is not influenced by tourist (e.g. gender, age) as well as travel-related characteristics (e.g. length of travel). However, no detailed information on which risk factors influence decision-making or how risk perception is operationalised is given which complicates the comparison to other studies. The relative small sample size in this study could also explain lack of significance. Reisinger and Movando (2006) reach contrasting conclusions and detect a correlation between age, gender and risk perception. However, this correlation is limited to certain subcategories of risk perception. Pizam et al. (2004) demonstrate that gender but not age influences perception, evaluation and behaviour in regard to risk. Their results should be considered carefully due to the fact that only students from the field of tourism and hospitality were interviewed. Differences in age are therefore difficult to detect as all respondents are part of the same age group. According to Lepp and Gibson's (2008) study, gender is not significant in regard to terrorism risk but in regard to strangeness of food in a destination. This implies that gender does not influence risk factors that threaten someone's life but does have an impact on risk factors which could disrupt a holiday. In a survey on determinants of perception of natural as well as general risk and the relation to travel behaviour, Park and Reisinger (2010) detect that female tourists perceive both types of risk to have a greater impact than male tourists.

Age can furthermore be seen as one indicator for the tourists' current phase of life. The components familial and marital status as well as qualification and income are other relevant indicators for phase of life. A strong determinant of risk perception regarding the phase of life is the question whether or not children, especially young children under six years, are participating in the trip (Roehl & Fesenmaier, 1992). The assumption is that tourists travelling with young children have a specific perception of risk and make destination choices based on different criteria than tourists who travel alone. For example, Roehl and Fesenmaier's (1992) risk typology based on three dimensions of risk perception proves that functional risk tourists (i.e. tourists with a medium risk perception who concentrate on organisational risks) are more likely to be travelling with young children than the other risk types. Functional risk tourists could have a lower level of perceived risks before the phase of travelling with young children and return to the former level of risk perception later in life. Longitudinal studies accompanying tourists from pre- to post holiday with young children would help to clarify this assumption.

Although income and education are two variables which are in many cases highly interwoven, results in regard to risk perception are contradictory. While income is not always a significant explanatory variable, most studies agree on the influence of educational level on risk perception.

Educational attainment is negatively correlated with risk perception (Sönmez & Graefe, 1998a; Park & Reisinger, 2010). Higher educated tourists perceive the influence of risk on travel intention in general lower, particularly some risk factors such as social risks (Park & Reisinger, 2010). This result is confirmed by a study from Thapa, Cahyanto, Holland and Absher (2013) on the influence of natural hazards on tourism and how tourists react to such natural hazards. They identify three tourist types with varying levels of perceived risks that show significant differences according to education and income. In this study, tourists with a lower level of education and higher income tend to perceive a higher level of risk. It is difficult to explain the contradictory results of income as an influencing factor. A reason may be that income is not highly correlated to educational level in some countries and depends on many external factors, regarding for example the political environment. For studies on destination choice, it might therefore be more suitable to use travel expenses (proportional to income) as an indicator for wealth but also for personal significance of travelling in respondents' lives.

Many different interconnected internal and external factors play a role in destination choice which impedes the investigation of an isolated factor such as risk perception. Past research on determinants of risk perception is ambivalent but nevertheless indicates that several factors concerning the tourist such as age should be considered, at least to eliminate them as indirect influencing factors of destination choice.

## Discussion and conclusion

Although travel decision-making and destination choices are determined by internal (i.e. individual, socio-psychological characteristics of tourists; Decrop, 2006) and external factors (e.g. destination attributes such as climate), most past research has mainly concentrated only on the tourist and not the destination. While the tourist side is important as tourists process external factors differently depending on the specific structure of their internal factors (Dreyer et al., 2001), the destination side should also be included to produce a more realistic total picture of destination choice in the context of risk. In fact, destination-specific risk was found to be one of the strongest influencing factors of destination choice (Sharifpour et al., 2014a).

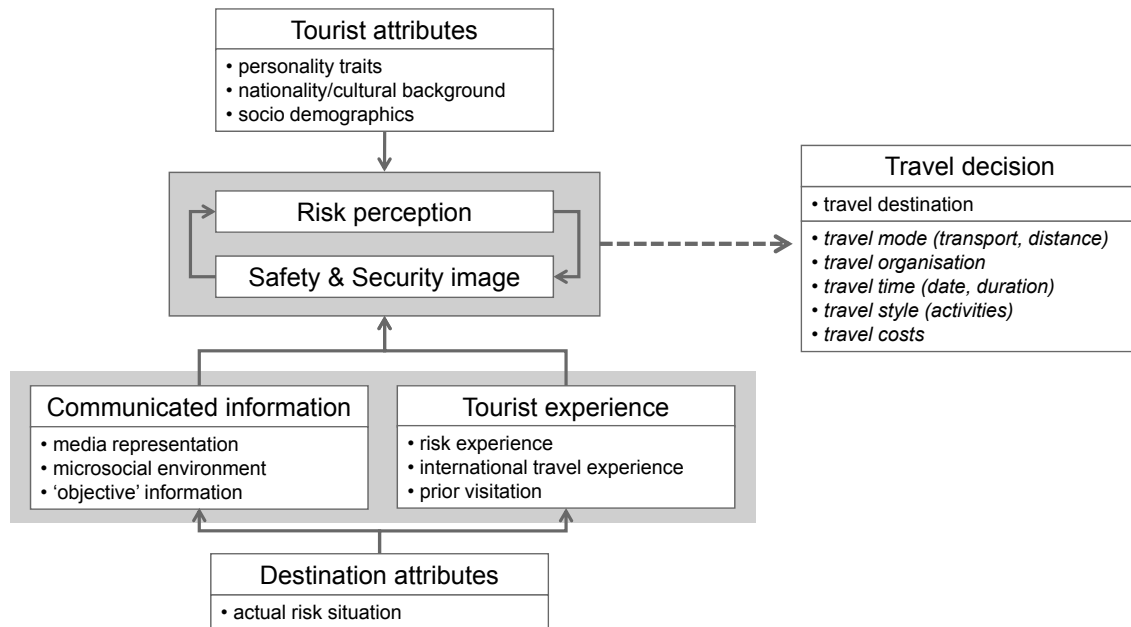
Neither tourist nor destination attributes influence destination choice in an isolated way, however, the interaction between both sides is not (yet) at the core of studies. An exemption is Plog's (1974, 2001) psychographic tourist typology which considers tourists' needs for familiarity and the level of familiarity offered by destinations. Karl et al. (2015) operationalise this concept and develop a destination index to empirically investigate tourists' destination choice processes in regard to familiarity. They found that certain tourists consider familiar and safe destinations for their holidays while others prefer less familiar and sometimes unsafe destinations which offer a feeling of novelty or adventure. This implies that the latter tourists may perceive a destination as risky but that is not an obstacle for travelling there and probably even a travel motivator.

The separate analysis of some influencing factors and the lack of consideration of the destination choice process in a broader context complicate the achievement of generalisable research results. An analysis on the role of risk and particularly of risk perception in destination choice should therefore be implemented from two perspectives: tourist attributes (i.e. characteristics, traits and other elements directly or indirectly derived from the tourist's personality) and destination attributes (i.e. specific features of a destination including the actual risk situation).

The literature review and synthesis covers a range of studies from tourism research dealing with various determinants which are investigated in the context of risk (perception) and destination choice. It can be seen as a continuation of Williams and Baláz's (2014) theoretical reflections on risk and uncertainty in tourism since it focuses on perceptions of risk while the former article offers a more general revision of the topics risk and uncertainty. Moreover, this article mainly concentrates on the methodology and results of empirical studies on risk (perception) and destination choice to better understand the different influencing factors that are relevant for the investigation of the role of risk (perception) in destination choice processes.

The synthesis of fundamental and recent literature on the role of risk and in particular of risk perception in tourists' destination choice processes and outcomes serves as a basis for a literature-based framework (Figure 1) which can support future research on the role of risk (perception) in destination choice.

Figure 1  
Literature-based research framework



This synthesis of literature gives evidence that safety and security images as well as risk perceptions operate on the nexus between destination and tourist attributes and crucially alter destination choice processes. It moreover indicates that tourists' destination choices are not directly influenced by destination attributes, particularly in lack of personal experience, and that various forms of communicated information operate as a filter or modifier between tourists' perceptions and the actual situation in a given destination. This interaction often entails aspects of framing theory in the communication and reception of information through the media. The analysis of media frames (i.e. selection and promotion of particular aspects to generate a certain interpretation of a situation; Entman, 1993) could contribute to a better understanding of the role of media in destination choice, in particular in terms of risk (perception).

The literature review and synthesis has furthermore addressed commonalities and inconsistencies in past research on the role of risk (perception) in destination choice. Some contradictions, contraries and gaps can partly be explained by the multitude of methodologies (e.g. operationalisation of risk perception), survey settings and sample compilations. Question wording, questionnaire structure and items included in the questionnaire are important variables to be considered while interpreting results from quantitative surveys based on questionnaires.

Risk perception is operationalised in various ways in past studies. Some surveys concentrate on how strong respondents perceive risk to be an influencing factor in destination choice, while others assess the level of perceived risk or perception of the probability and severity of an outcome related to risk while travelling or at a destination. Another variation is the geographical reference regarding risk perception. Risk perception is attributed to destination(s) or region(s) as well as to (international) travelling generally.

The variety in the selection of risk factors or risk categories as potential risk generators such as terrorism or criminality is another aspect that explains inconsistencies of research results (e.g. varying significance

of socio demographics as influencing factor). Neither operationalisation of risk perception is preferable to others but the way of structuring a questionnaire, wording of questions and reference in risk perception should be taken into consideration more closely. Future research could expand quantitative studies for more qualitative approaches which could help to answer doubts in this context.

Other aspects to be considered during the interpretation of research results are the setting or design of the survey (e.g. location or timing of interviews) or the composition of the sample (e.g. tourist vs. resident). The studies which were analysed in this literature review interviewed respondents at international airports, attractions at the destination or in the home country. While surveys at the airport enable researchers to target tourists to or from specific destinations and allow relatively long questionnaires in the waiting areas, they exclude certain groups of tourists (e.g. national tourists travelling by car). In terms of risk perception this is problematic since research highlights that national and international tourists vary significantly in their perceptions of risk (Reisinger & Mavondo, 2005). Non-flight tourists may have a higher risk perception and therefore choose not to fly. Surveys at important tourist attractions might focus stronger on tourists with a cultural interest and not recreation tourists, visitors of friends and family or repeat visitors who have already visited main attractions in the past.

The timing of interviews is another important aspect which influences research on risk perception and destination choice. During the travel decision-making process and especially during the trip itself, tourists actively and passively acquire new information from various sources and this changes the basis for their future destination choices. Tourists will react if they perceive the risk as being too high, for example choosing an alternative destination or, after completion of the destination choice, by cancellation of the trip (Mansfeld, 2006). Both risk reaction strategies can then be investigated in studies on an aggregated level since they reflect in the tourism flows into affected destinations. In past studies, tourists are interviewed before the holiday (before, during or after the destination choice) in the home country, at arrivals before or departures after a holiday at the airport or during a holiday at the destination. Tourists at different stages of the destination choice process may vary in their risk perception since the importance of inhibitors such as risk as decision criteria and hence the presence of risk factors in tourists' minds increases by the end of the destination choice process (Um & Crompton, 1992). Moreover, tourists' experiences and impressions of a destination in general and in regard to risk are more vivid at the destination but this memory will fade over time. Information from other sources (e.g. media representations) starts to mingle with personal experiences after a holiday and will have a growing importance in destination choices. Research like Rittichainuwat and Chakraborty's (2009) study on risk perception in regard to Thailand is particularly interesting as it was conducted while the destination was affected by terrorism and health risks and moves to a non-hypothetical level. Other examples which incorporate this aspect are Fuchs and Reichel's (2011) or Fuchs et al.'s (2013) investigation of Israeli tourists' risk perceptions and rationalisation strategies in Sinai. A different option to investigate non-hypothetical behaviour is applied by Lepp and Gibson (2008) who measure risk perception using past destination choices (i.e. tourists are classified according to their most risky destination) as a reference point.

Another limitation of past studies on the role of risk (perception) in destination choice is causation. By not integrating trip specific characteristics, causal links between risk perception, destination choice and other variables can be misinterpreted. Some factors might not play an important role in the context of risk and risk perception at first but indirectly through other variables. The theoretical framework (Figure 1) is therefore extended for other reciprocally linked determinants. It seems possible that trip specific characteristics operate as intermediary between risk perceptions as well as safety and security images and destination choice.

An example for trip specific characteristics is the type of planned holiday. Someone who is choosing a destination for a sea-sand-sun all-inclusive holiday has other safety and security demands than someone who is choosing a destination for a backpacking holiday. While the first tourist can assign safety and security concerns to travel agencies and tour operators, the second tourist is responsible for his/her own safety and security which requires for example a better knowledge about the destination (e.g. places to avoid, up-to-date travel information). Hence, even if both tourists have a similar level of risk perception, the outcome of their destination choices will still be different since the chosen type of holiday may not be suitable for the destination.

Besides the type of holiday, other trip specific characteristics which have been proven to be linked to risk perception are: length of trip; travel party composition (i.e. size, presence of young children); travel motive; and type of accommodation (Roehl & Fesenmaier, 1992). Tourists going on a holiday to visit or stay with friends or family members have a lower level of perceived risk than other tourists (Roehl & Fesenmaier, 1992). The direct contact to people at the destination enables gathering the latest information on safety and security issues which could counterbalance distorted media images. Another argument is that no real substitution for a destination where friends or family members live exists for the tourist. In order to fulfil the wish to visit friends or family members, tourists may trivialise safety and security. Fuchs et al. (2013) found that this risk reduction strategy is also applied by tourists to high-risk destinations.

Closely linked to travel motives are tourists' preferred types of activities at the destination which should be included in trip specific characteristics in future studies. Cohen's (1972) tourist roles (i.e. organised mass tourist, individual mass tourist, explorer, drifter) state that tourists who are looking for familiarity while travelling, are indirectly avoiding uncertainty or risk arising from unknown or novel experiences and places. The multidimensionality of risk (perception) and the variety of determinants of destination choice should be integrated in research on the role of risk (perception) in destination choice, instead of one-dimensional research focusing on separate influencing factors. The combination of data on destinations with tourists' risk perception as well as safety and security images as suggested in the literature-based framework may offer an initiation for future studies. Qualitative research methods, accompanying tourists throughout their destination choice process, could furthermore help providing a better insight into causation in the destination choice process.

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