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## Moving the Travel Risk Literature Forward Conceptually and Operationally

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# Moving the Travel Risk Literature Forward Conceptually and Operationally

## Introduction

Given the significance of tourism to economies around the world, crises can have devastating impacts on the affected destination, tourism system, economy, and tourism-dependent community (United Nations World Tourism Organization [UNWTO] 2011). Tourism crises are becoming more apparent as there has been a documented increase in the quantity and severity of both nature-induced and human-induced crises across the globe in modern times (Drabek 2009). This increasing prevalence of crises has highlighted the significant need to prioritize safety and security issues in the tourism industry (Pacific Asia Travel Association [PATA] 2011). In addition, increasing pressure is being put on destinations and tourism organizations to effectively manage their businesses and safeguard both their visitors and their images.

While tourism academics have taken an organizational attribution approach to defining a crisis (Faulkner 2001; Prideaux, Laws, and Faulkner 2003; Scott and Laws 2005), tourism practitioners have taken a different approach to defining a tourism crisis. Specifically, PATA (2003) defined a tourism crisis as “any situation that has the potential to affect long-term confidence in an organization or a product, or which may interfere with its ability to continue operating normally” (p. 2). Similarly, UNWTO (2005) defined a tourism crisis as “any unexpected event that affects traveler confidence in a destination and interferes with the ability to continue operating normally” (p. 11). Accordingly, practitioners have focused on determining when a situation becomes a crisis in terms of consumer confidence and business operations within the tourism system. Through the consumer confidence element, both PATA (2003) and UNWTO’s (2005) definitions recognize that if tourists perceive a situation to be a crisis, it should be considered as a crisis and managed accordingly.

As a reflection of the current environment, practitioners have recently begun to pay an increased amount of attention to monitoring tourists’ risk perceptions. At the same time, however, there is increasing criticism of the academic literature related to travel risk (e.g., Korstanje 2011; Williams and Balaz 2015; Yang and Nair 2014). Criticisms have primarily focused on the conceptualization and operationalization of risk perceptions in tourism. Based on the main criticisms of the travel risk literature, the purpose of this paper is two-fold. First, this paper seeks to move the travel risk literature forward conceptually by proposing a theory-based conceptual model. Second, this paper seeks to move the travel risk literature forward operationally by adapting survey items used to measure risk-related constructs in the fields of health behavior and psychology to the context of tourism. The main objective of this paper is to provide a strong theoretical foundation for destination risk management.

## Literature Review

Over the past three decades, the tourism literature has examined the role of risk perceptions in an effort to gain a better understanding of the factors that influence travel decision-making. However, major criticisms of the existing body of knowledge related to travel risk stem from a lack of conceptual clarity and a lack of theoretical underpinnings.

Overall, the conceptualization and measurement of travel risk perceptions have not been consistent with the theoretical frameworks of travel risk studies. For example, Sönmez and Graefe (1998a, 1998b) indicated that protection motivation theory was one of the theories that guided their

research. However, the conceptualization of risk perceptions according to the theory was not applied in their study. Rather, Sönmez and Graefe (1998a) defined risk perception level as “the amount and types of risk potential tourists associated with international tourism” (p. 128). Thus, even when travel risk studies have adopted a theoretical lens, the conceptualization of travel risk perceptions has lacked strong theoretical underpinnings.

The fields of health behavior (Maddux and Rogers 1983; Rogers 1975, 1983) and psychology (Loewenstein, Weber, Hsee, and Welch 2001) consider risk perceptions to be multidimensional. For example, protection motivation theory, one of the most established health behavior theories, suggests that risk perceptions consist of an evaluation of the perceived vulnerability to and perceived severity of a risk (Floyd, Prentice-Dunn, and Rogers 2000; Maddux and Rogers 1983; Rogers 1975, 1983). Several tourism studies have adopted the perceived vulnerability measure of risk perceptions (Floyd, Gibson, Pennington-Gray, and Thapa 2004; Kozak, Crotts, and Law 2007; Law 2006; Pennington-Gray, Kaplanidou, and Schroeder 2013; Pennington-Gray, Schroeder, and Kaplanidou 2011; Schroeder, Pennington-Gray, Donohoe, and Kiousis 2013a; Schroeder, Pennington-Gray, Kaplanidou, and Zhan 2013b; Schroeder and Pennington-Gray 2014), while few have measured perceived severity (Kozak et al. 2007; Law 2006). Thus, while theory considers risk perceptions to be multidimensional, travel risk studies have tended to consider risk perceptions to be unidimensional. Provided that protection motivation theory is often cited as the theoretical framework for travel risk studies, tourism scholars have generally had a problem with conceptualizing and measuring travel risk perceptions in accordance with the guiding theoretical framework of their studies.

In addition, while travel risk studies have considered risk perceptions to be a factor that influences decision-making, the field of health behavior focuses on the cognitive processes from which risk is perceived (Maddux and Rogers 1983; Rogers 1975, 1983). Psychology, on the other hand, considers both the cognitive and affective processes from which risk is perceived (Loewenstein et al. 2001; Slovic and Peters 2006). Therefore, adapting the conceptualization of risk perceptions from the health behavior and psychology literature can provide a deeper understanding of the processes that tourists go through when evaluating travel risks.

Furthermore, the existing body of knowledge related to travel risk has primarily focused on risk perceptions. However, there are a variety of other risk-related constructs studied in other academic disciplines. Thus, in order to consider additional risk-related constructs in the context of travel, there is a need for an interdisciplinary approach to the study of travel risk. Specifically, the health behavior and psychology literature are more advanced and have a vast body of knowledge related to risky decision-making that should be integrated with the existing body of knowledge related to travel risk. For example, perceived efficacy is an important risk-related construct in the fields of health behavior (Floyd et al. 2000; Maddux and Rogers 1983; Rogers 1975, 1983) and psychology (Bandura 1977, 1982, 1986, 1992) that is understudied in the travel risk literature. Accordingly, there is a need to look outside of the tourism literature and to adapt risk-related constructs from the fields of health behavior and psychology to the context of tourism in an effort to provide a deeper, more critical understanding of travel risk.

In summary, the main criticisms of the existing body of knowledge stem from a lack of conceptual clarity and a lack of theoretical underpinnings. Overall, the travel risk literature has been plagued with problems from theory to application. Accordingly, there is a need to reconceptualize and reoperationalize travel risk. The conceptualization and operationalization of travel risk requires a strong theoretical foundation and an interdisciplinary perspective. There is also a need to consider

additional risk-related constructs which can be integrated with the existing travel risk literature to provide a deeper understanding of the role of risk in travel decision-making. Thus, there is a need to adopt a theory-based, interdisciplinary approach to the reconceptualization and reoperationalization of the risk-related constructs studied in tourism. Particularly, the fields of health behavior and psychology can provide theory-based conceptualizations and measures of risk-related constructs which can be adapted to the context of travel.

### **Conceptualizing Travel Risk**

Taking the major criticisms of the travel risk research into consideration, this paper adopts a theoretical lens to the study of travel risk. The theoretical lens of this paper is guided by protection motivation theory and the risk-as-feelings hypothesis.

#### *Protection Motivation Theory*

Protection motivation theory [PMT] (Rogers 1975, 1983) is considered to be one of the most prominent models in the field of health behavior (Weinstein 1993). Although originally developed as a theory of fear appeals (Rogers 1975), PMT was later revised into a general attitudinal change model (Maddux and Rogers 1983; Rogers 1983). Particularly, by adding the self-efficacy construct, PMT became an attitudinal model which focuses on the cognitive processes which mediate behavioral change (Maddux and Rogers 1983; Rogers 1983). As a general attitudinal change model, PMT offers a framework for understanding the reason for attitudinal and behavioral change in risky situations (Floyd et al. 2000). Prentice-Dunn and Rogers (1986) suggested that PMT is comprehensive enough to be applicable to any context involving risk.

A core assumption of PMT is that individuals go through two cognitive processes when deciding whether or not to engage in a behavior to protect oneself from a risk (Rogers 1983). First, individuals go through a threat appraisal process in which they evaluate risk in terms of perceived severity and perceived vulnerability (Floyd et al. 2000). Perceived severity represents the perceived level of harm to an individual that is associated with the event (Rogers 1975). Perceived vulnerability represents the perceived likelihood that a threatened event will occur (Rogers 1975). Second, individuals go through a coping appraisal process in which they evaluate behaviors to cope with risk in terms of response efficacy and self-efficacy (Floyd et al. 2000). Response efficacy represents the perception of the effectiveness of a recommended behavior in protecting oneself from a risk (Floyd et al. 2000). Self-efficacy represents the perception that an individual is able to successfully perform a recommended behavior in an effort to protect oneself from a risk (Floyd et al. 2000).

The reason that PMT assumes that the threat appraisal process comes before the coping appraisal process is that an individual must perceive a risk before assessing whether they will engage in a behavior to reduce a risk or not (Floyd et al. 2000). The outcome of the two cognitive mediational processes is that the threat appraisal and the coping appraisal processes come together to stimulate, maintain, and guide engagement in risk reduction behaviors (Floyd et al. 2000). Accordingly, PMT hypothesizes that perceived risk (in terms of perceived severity and perceived vulnerability) and perceived efficacy (in terms of response efficacy and self-efficacy) influence intentions to engage or actual engagement in risk reduction behaviors (Floyd et al. 2000). It is important to note that PMT does not assume that decision makers are rational (Floyd et al. 2000). Rather, cognitive and motivational biases are believed to have an effect on all PMT constructs and the two cognitive evaluation processes (Floyd et al. 2000).

### *Risk-as-Feelings Hypothesis*

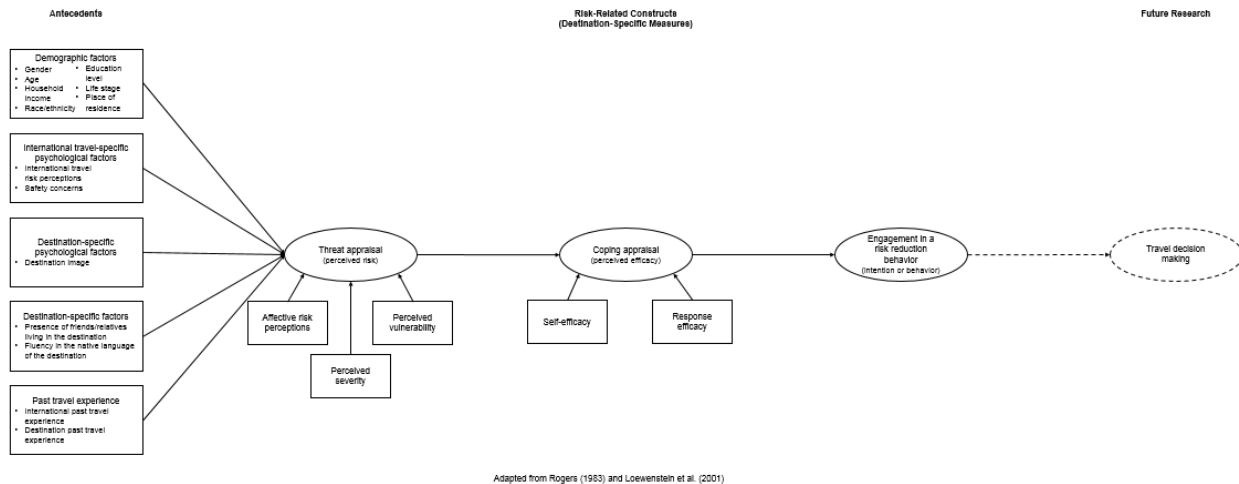
The risk-as-feelings hypothesis, a concept originating from the field of psychology, suggests that both affective and cognitive risk perceptions directly influence decision-making (Loewenstein et al. 2001). Accordingly, emotions such as anxiety, dread, fear, and worry directly influence reactions to risky situations (Loewenstein et al. 2001). Further, cognitive evaluations are hypothesized to have affective consequences (Loewenstein et al. 2001). The emotions associated with the affective consequences, in return, have an effect on cognitive evaluations (Loewenstein et al. 2001). Accordingly, the risk-as-feelings hypothesis suggests that while cognitive risk perceptions and affective risk perceptions directly influence risky decision-making, there is also an interaction between these two types of risk perceptions. Therefore, while the risk-as-feelings hypothesis acknowledges that individuals perceive risk in two different ways (Slovic and Peters 2006), it also acknowledges that cognitive risk perceptions and affective risk perceptions may be associated with one another (Loewenstein et al. 2001).

### *Developing a Theory-Based Conceptual Model for the Study of Travel Risk*

The development of the proposed conceptual model occurred in two stages. The first stage of development focused on the relationships between the risk-related constructs of perceived risk (consisting of affective risk perceptions, perceived severity, and perceived vulnerability), perceived efficacy (consisting of self-efficacy and response efficacy), and engagement in a risk reduction behavior (consisting of intention or behavior). This section of the proposed conceptual model was based on the variables of interest and hypothesized relationships of PMT and the risk-as-feelings hypothesis. Notably, of the risk-related variables included in the proposed conceptual model, only perceived vulnerability has been studied extensively in the travel risk literature. Therefore, it should be noted that the proposed conceptual model considers the role of the understudied risk-related variables of perceived severity, affective risk perceptions, self-efficacy, response efficacy, and engagement in a risk reduction behavior. In addition, PMT's threat appraisal process was extended with the inclusion of affective risk perceptions, which was derived from the risk-as-feelings hypothesis. Further, in accordance with the core assumption of PMT, perceived risk and perceived efficacy were entered in a causal string in which individuals go through the threat appraisal process before the coping appraisal process (Floyd et al. 2000).

The second stage of development focused on integrating the existing body of knowledge related to travel risk with the risk-related constructs. This was done in an effort to boost the predictive ability of the conceptual model, as well as to recognize the findings of travel risk studies over the past several decades. In particular, demographic factors, international-travel specific psychological factors, destination-specific psychological factors, destination-specific factors, and past travel experience were entered into the conceptual model as antecedents based on a review of the travel risk literature.

Overall, the proposed conceptual model suggests that the risk-related constructs (i.e., perceived risk, perceived efficacy, and engagement in a risk reduction behavior) serve as mediating variables in travel decision making. The proposed conceptual model is presented in Figure 1.



**Figure 1. Conceptual Model to Understand the Role of Perceived Risk, Perceived Efficacy, and Risk Reduction Behaviors**

### Operationalizing Travel Risk-Related Constructs

As previously noted, going from theory to operationalization has been a challenge for travel risk scholars. Current measures have mainly failed to capture the multidimensional nature of risk. A possible solution to this challenge is to look outside and turn to other fields that have extensively studied these risk-related constructs. Thus, to address the second purpose of this paper, the authors adopted measures of perceived risk, perceived efficacy, and engagement in a risk reduction behavior from the health behavior and psychology literature. The survey questions, items, and original source are provided in Table 1.

It should be noted that the measures were adapted to reflect the dynamic nature of tourism because in the health behavior literature, for example, studies have focused on topics such as AIDS prevention and breast cancer screenings. Further, tourism scholars should adapt the items to reflect the relevant risks for the destination of focus and risk reduction behaviors should be specific to this type of risk.

**Table 1. Operationalization of Risk-Related Constructs**

| Variable                   | Survey question and items  | Source                                 |
|----------------------------|--|--|
| Affective risk perceptions | Using the rating scales below, please indicate how you feel when you think about your personal safety while visiting ( <u>destination</u> ) for leisure purposes.<br>1. Relaxed-anxious<br>2. Fearless-fearful<br>3. Assured-worried | Loewenstein et al. 2001;<br>Newby 2014 |

**Table 1. Continued**

| Variable  | Survey question and items   | Source                                   |
|---|---|--|
| Perceived severity  | Please indicate your level of agreement with the following statements, on a scale of 1-5 (where 1= strongly disagree and 5= strongly agree).<br><ol style="list-style-type: none"><li>1. If I were a victim of <u>(risk type)</u> while visiting <u>(destination)</u>, I would experience serious negative consequences</li><li>2. It would have a serious negative impact on me if I were a victim of <u>(risk type)</u> while visiting <u>(destination)</u></li><li>3. If I were a victim of <u>(risk type)</u> while visiting <u>(destination)</u>, it would be harmful to my well-being</li></ol> | Witte, Cameron, Lapinski and Nzyuko 1998 |
| Perceived vulnerability                                       | Please indicate your level of agreement with the following statements, on a scale of 1-5 (where 1= strongly disagree and 5= strongly agree).<br><ol style="list-style-type: none"><li>1. It is likely that I will be a victim of <u>(risk type)</u> while visiting <u>(destination)</u></li><li>2. I am at risk for being a victim of <u>(risk type)</u> while visiting <u>(destination)</u></li><li>3. My chances of being a victim of <u>(risk type)</u> while visiting <u>(destination)</u> are high</li></ol>   | Witte et al. 1998                        |
| Self-efficacy   | How confident are you in your ability to perform the following behaviors to ensure your personal safety while visiting <u>(destination)</u> , on a scale of 1-5 (where 1= very unconfident and 5= very confident)?  | Witte et al. 1998                        |
| Response efficacy   | Please indicate how effective you believe the following behaviors would be in ensuring your personal safety while visiting <u>(destination)</u> , on a scale of 1-5 (where 1= very ineffective and 5= very effective).  | Witte et al. 1998                        |
| Intentions to engage in a recommended risk reduction behavior | Please indicate the likelihood that you would engage in the following behaviors to ensure your personal safety while visiting <u>(destination)</u> , on a scale of 1-5 (where 1= very unlikely and 5= very likely).   |  |

## Conclusion

The authors consider this paper to be a first step in the process of moving the travel risk literature forward conceptually and operationally. Adopting a theory-based, interdisciplinary approach to the conceptualization and operationalization of risk-related constructs can provide a more holistic understanding of the role of risk in travel. In particular, a majority of the risk-related variables (perceived severity, affective risk perceptions, self-efficacy, response efficacy, and engagement in

a recommended risk reduction behavior) have not been studied in the context of travel. Therefore, a natural next step in the process of moving the travel risk literature forward is to test the proposed conceptual model in a variety of settings (e.g., different types of destinations, different types of risk, different tourist origin markets). Such research can provide a better understanding of the dynamic processes between the risk-related constructs. Furthermore, in order to refine the proposed conceptual model, empirical research is needed.

The travel risk literature has tended to focus on avoidance of a destination as a risk reduction behavior (e.g., Sönmez and Graefe 1998a). In particular, travel risk studies have suggested that a destination that is perceived as risky is likely to be substituted for a destination that is perceived to be safer (Kozak et al. 2007; Sönmez and Graefe 1998a) and that tourists are likely to modify their original travel plans if a crisis were to occur at their selected destination (Law 2006). More recently, however, an emerging line of research has recognized that tourists may not necessarily abandon a purchase by way of avoiding a destination perceived to be risky or having a lower propensity to travel. Rather, recent travel risk research has both suggested (Fuchs and Reichel 2006a, 2006b; 2011) and found (Cahyanto, Pennington-Gray, Thapa, Srinivasan, Villegas, Matyas, and Kioussis 2014; Matyas et al. 2011; Villegas, Matyas, Srinivasan, Cahyanto, Thapa, and Pennington-Gray 2013) that travel risk perceptions are positively associated with risk reduction behaviors. Therefore, recent research has highlighted the need to understand the potential mediating role of engagement in a risk reduction behavior in travel decision making. Accordingly, as highlighted in the proposed conceptual model, travel risk research should be moved forward by examining the role of perceived risk, perceived efficacy, and engagement in a risk reduction behavior in travel decision making.



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