

Influence of attitudes on tourists' perception of terrorism

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Abstract

This research presents an Ordered Logit Model in which the dependent variable is represented by the individual evaluation that terrorist acts may cause deterrence from traveling to holiday destinations. The aim of this work is evaluating how attitudes and preferences in a tourism-related context influence tourists' visualization of a destination's dangerousness.

We include in the model a series of latent variables capturing constructs related to attitudes toward international travel.

The research is based on data collected from a sample of University students in Lugano (Switzerland). This included questions regarding individuals' perception terrorist acts in a tourism context, psychographics concerning travel attitudes and preferences, past travel experiences as well as personal traits.

Preliminary results show that attitudes represent an important factor explaining travel deterrence caused by fear of terrorist acts. In fact, attitudinal constructs affect directly individuals' perception of terrorist events and its impact on travel deterrence. Moreover, respondents' personal traits such as gender and continent of origin contribute to explain the formation of different attitudes and preferences.

Assessing how individuals shape their risk perception is extremely important from a tourism policy and marketing point of view because it is crucial to understand what makes them feel (or not) cautious or anxious in potentially risky situations. This is particularly important for those realities whose tourism sector has a strategic importance for destination's economy and social life but have to face the menace deriving from terrorism.

In order make visitors feel reassured and safe and minimize the effects that terrorism acts may have on destination's tourism sector, marketing and communication campaigns targeted at sensible consumers should appeal to their attitudes and preferences toward international travel.

Keywords

travel deterrence – young tourists – travel attitudes – latent variables

1. Introduction

Understanding the role that such terrorist acts have on travellers' decisions is of fundamental importance. Practitioners and, in particular, policy makers must act in order to limit the negative effects of such events and speed up the recovery phase (Sönmez et al 1999, Ritchie 2004) or implement measures necessary to make the visitors feel safe (Lovelock 2003). Terrorism has the potential to undermine the tourism sector in stricken destinations (Pizam & Fleischer 2002), the consequences may be long-lasting (Enders et al 1992) and spill-over effects to other destinations may occur even if these are not directly touched by the negative event (Drakos & Kutan 2003, Neumayer 2004). At the same time, analysing individuals' demand for leisure trips to destinations which may be deemed as "dangerous", implies accounting for travellers' attitudes and preferences related to tourism behaviour. The sudden possibility of encountering hazards during a trip may represent a factor leading to travel abandonment (or travel avoidance if this happens in the preparation phase), and this would depend on different factors such as individual propensity to travel, personal characteristics and personality traits, concreteness and perception of the hazard.

We propose a quantitative analysis based on survey data collected with university students. We estimate an ordered logit model adopting as dependent variable survey observations that can be considered as proxy to travel deterrence. The model is integrated with latent variables representing individual travel attitudes.

Preliminary results highlight that travel attitudes shown by respondents contribute to explain terrorism-induced travel deterrence. Moreover, results point out some relationships between individual characteristics and travel attitudes.

2. Literature review

Attitudes and other psychological traits (psychographics) represent a topic of research that captured interest of scholars from different fields of study and tourism certainly is one of these (Plog 1974; Plog 2002). The main purpose of studying tourists' psychology is to understand how travel behaviour can be analysed and modelled moving from a series of traits which are not the classical socio-demographic characteristics.

In tourism-related literature there are several examples of scholars analysing the interrelationship between travel attitudes and concepts related (in different manners) to life-threatening events. Pioneering work is that of Roehl & Fesenmaier (1992) who determined three different tourist segments with different risk perception (in general and related to the most recent trip) that can be associated to different travel attitudes. The hypothesis that personality

traits might influence risk perception in a travel context is discussed in Sonmez & Graefe (1998a) even if the authors do not include such aspect in their empirical analysis. Lepp & Gibson (2003) discuss on concepts as novelty seeking and familiarity and notice that (p.609) "...individuals differ in the degree to which they seek novelty and familiarity and this choice seems to be somewhat determined by underlying psychological qualities".

We found a noticeable amount of works referring to hazard-induced travel avoidance but we also noticed that few of these specifically address what are the determinants of such construct. For example, Sonmez & Graefe (1998b) explore travellers' intention to avoid risky destinations and notice that prior travel experience to a certain region tend to reduce travel avoidance for the same region. In the wake of September 11th 2001, Chen & Noriega (2003) run a study among faculty staff and students in an America university and determined a change in travel habits, especially for what concerns international travels. Law (2006) investigated tourists' likelihood of changing travel plans if certain risks occurred at destination and determined differences among visitors of different nationalities.

Although the theme of travel deterrence is rather popular in risk-related literature, we noticed that little attention is dedicated to the role of personality traits on influencing hazard-induced travel deterrence. With this work, we aim at enriching the ongoing discussion that relates tourists' psychological traits and travel decisions in situations of potential risk of terrorism. This study represents a step forward in the analysis of such topics in the sense that it addresses some issues that tourism literature has touched only marginally.

3. Data and modelling

3.1 Data and sample description

Data analysed in this study refers to a structured survey submitted to university students in Lugano, Switzerland. A total of 299 respondents participated to the study and 278 questionnaires were considered valid for analysis. The paper-and-pencil questionnaire was distributed during class hours and comprised several sections, each of which was focused on a particular aspect of interest (for example: number of past travel experiences, risk perception of life-threatening hazards, travel deterrence caused by potential hazards, personality traits). Only some of the collected variables are considered in this work.

Sample of respondents is made up of 56.8% males and 43.2% females, the greatest share is Italian (52.1%) and Swiss (34.2%), the remaining being mainly from other European countries (9.4%) and Asia (3.6%). As far as the current educational level, at the time of data collection 74.6% of respondents was at Bachelor level while the remaining was at Master level. On

average, respondents reported 3.4 intercontinental trips in their lifetime with almost 30% of sample having no intercontinental trips to record.

3.2 Methodology and model description

In this work, we implement an ordered logit model (Greene and Hensher 2010, Jonas et 2011, Inversini and Masiero 2014) including a set of independent variables (personal traits, number of past intercontinental travels) among which we included three latent variables, each expressing different attitudes of respondents towards travels and tourism. The model considers as dependent variable the following question “Would the risk of the terrorist acts deter you from traveling to a holiday destination?” which can be deemed as a proxy of travel deterrence. This covariate is measured on a 7-point Likert scale ranging from 1 (definitely no) to 7 (definitely yes) with point 4 (neither no nor yes) being the centre of the scale.

As far as the latent variables, we adopted the approach presented in Walker (2001), i.e. we built a latent variable model for each personality trait and these were directly integrated in the ordered logit model’s equations. Such a way of operating allows a simultaneous estimation of determinants of travel deterrence and components of personality traits.

The three personality traits that were determined by data analysis are referred as “social acceptance and safety” (SAS), “exploration and destination culture” (EDC) and “organization and comfort” (OC). These constructs are the result of a principal component analysis that was run starting from a long list of attitudinal and preference variables.

The overall model was estimated adopting the simulated maximum likelihood method (Train 2009).

4. Preliminary results

Preliminary results show that terrorism-induced travel deterrence is significantly influenced by all three attitudinal constructs. In particular, SAS and OC have a positive impact on travel deterrence meaning that increasing levels of these attitudes lead to a higher probability to avoid traveling to terrorism-menaced destinations. Of the opposite sign is the coefficient attached to the EDC latent variable: an increasing level of this latent construct implies a lower probability renouncing to travel to terrorism-menaced destinations.

As far as socio-demographics are concerned we observe that there are statistically significant differences between male and female individuals (with the latter expressing higher levels of travel deterrence) and education (Master students being less influenced by the terrorism threat on their decision to travel). On the contrary, no significant effect was determined for travel

experience (measured by number of intercontinental trips) and nationality (no difference between Europeans and non-Europeans).

Integrating LVs in the ordered logit model allows defining equations that explain LVs themselves. In particular, we expressed the three LVs as function of individuals' characteristics (gender, nationality, number of intercontinental trips and level of education) and what we observe is that these differ in explaining the three latent constructs. As far as SAS is concerned, the estimated coefficients for gender and number of trips are statistically significant: female respondents tend to report higher levels for such construct while the parameter associated to the number of trips is negative. For what concerns EDC all the specified parameters are statistically significant: in a tourism context female respondents are more prone to exploration than males and this is also true for Europeans rather than non-Europeans. Moreover, an increasing number of trips tend to positively influence the EDC latent construct and Master students reported higher levels of the same if compared to their Bachelor counterparts. Finally, we observe that for OC a significant difference between male and females exist while the education coefficient is weakly significant.

5. Conclusions

This work contributes to the ongoing research aiming at determining how constructs as attitudes and social acceptability influence travel behavior and does it in the context of travel deterrence induced by terrorism risk.

Based on data collected among young individuals, we built an ordered logit model integrated with latent variables to analyse the determinants of travel deterrence. Despite we cannot claim to be representative in terms of sample segmentation, our work represents a step forward in terms of understanding hazard-related tourist behaviour.

We propose an empirical examination of how constructs related to social acceptability of tourism decisions, preferences for tourism exploration as well as preferences toward organized and comfortable forms of traveling influence travel deterrence induced by the menace of terror acts.

Preliminary results show that the three attitudes we covered in this study impact differently on terrorism-induced travel deterrence. To these, we add the influence of socio-demographic characteristics as gender and education while no significant effect was determined for nationality and travel experience measured in terms of number of intercontinental trips.

For what concerns policy implications, it is important to stress that for certain destinations determining how individuals react to certain risks is extremely important and understanding the role of individuals' attitude toward traveling is crucial. As clearly pointed out by Plog (2002,

p.247): "...the psychology of an individual plays a more important role in determining interest in leisure travel than household income, the measure by which most travel suppliers today target their high prospects for marketing campaign. The two variables together can make advertising and promotion campaigns more effective and efficient." (and the same goes for other socio-demographic characteristics as well). An approach as the one we proposed may be helpful to anticipate the intentions of individuals when they consider the opportunity to travel to destinations deemed as dangerous or characterized by certain levels of riskiness for what concerns human- and natural-related hazards.

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