

# **Drivers of travel insurance purchase: An integrated choice and latent variable model**

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# **Drivers of travel insurance purchase: An integrated choice and latent variable model**

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## **Abstract**

This article investigates individual insurance purchase decisions in a leisure travel context using an Integrated Choice and Latent Variable model. The determinants adopted in the model are a mix of socio-demographic covariates, travel behaviour and personality characteristics. In tourism research, the topic remains unexplored despite its relevance. In fact, risk perceptions affect all phases of a tourist experience and are diversified in terms of chance and consequences. In this sense, travel insurance functions as full or partial reimbursement to cover the consequences of negative events. Most importantly, the role of personality traits is crucial considering the relevance in modern marketing and communication practices. Survey data collected in Australia, Canada, the United Kingdom, and the United States of America are considered for analysis.

## **Keywords**

travel insurance - leisure trips - personality traits - latent variables - choice modelling

## 1. Introduction

Holiday purchases, like any other purchase, involve risk. When facing a potential undesired situation (whatever its likelihood or consequences), travellers tend to engage in different risk-reduction strategies in an attempt to reduce risks. Risk-reduction strategies include obtaining information from travel brochures, friends and family; buying travel insurance; and getting vaccinations (Mitchell & Vassos, 1997). Travel insurance purchase is the most important risk reduction method (Lo, Cheung & Law, 2002; Mitchell & Vassos, 1998) and is becoming even more important with the increasing number of people travelling internationally and independently (Leggat & Leggat, 2002a).

Despite the topicality of the matter in the modern tourism market, travel insurance purchase behaviour and its determinants have not been subject of extensive study in dedicated literature so far. The present paper aims at investigating individual travel insurance purchase behaviour and the impact of several determinants on insurance-related decisions is assessed. In particular, three sets of determinants are adopted as explanatory variables: individual socio-demographic characteristics, travel-related attributes and personality traits. The current study proposes a quantitative analysis based on survey data collected from international respondents. The modelling framework relies on an Integrated Choice and Latent Variable model (or Hybrid Choice model) which allows to investigate the role of latent constructs (in our specific case personality traits) on individual choice behaviour; moreover, the modelling approach specifically takes into consideration the causal relationship between individual socio-demographic variables and unobserved traits.

## 2. Data and modelling

### 2.1 Data and sample description

Survey data (N = 1349) collected in Australia, Canada, the United Kingdom, and the United States of America are used (Hajibaba et al., 2015). The sample is mainly made up of male respondents (54%) and the average age is 42.6 years. The distribution concerning the place of origin of participants is relatively equal among Australia, Canada and the USA participants while the UK respondents account for less than 20% of the sample. Almost half of respondents (45.4%) reported university level of education and 73% work full-time. The average yearly income is 49.690AUD. Of all respondents, 41.7% usually purchase a travel insurance. The proportion of travel insurance purchase varies in a substantive manner among the four nationalities: for Australia, Canada and the UK the proportion of insurance purchase is 51.8%, 50.3% and 53.0% respectively while for the USA respondents this proportion is just 12.8%. In terms of travel companionship, most of respondents reported that they usually travel with

partner (41.8%) or with family (28.6%). Travel planning is mostly done on one's own (41.1%); those who typically share the travel planning process do it with the help of family members (38.2%), a travel agent (21.9%) or friend (10.2%).

## 2.2 Methodology and model description

A discrete choice model (Train, 2003) on revealed preference (RP) data is applied. In particular, a logit model integrated with latent variables - Hybrid Choice model (Walker, 2001) – is adopted to analyse the influence of tourists' personality traits on insurance purchase behaviour. Discrete choice modelling has been commonly adopted by tourism scholars in the last years with the purpose of investigating individual behaviour and choices in contexts of discrete and mutually exclusive alternatives (Araña and León, 2008; Masiero et al., 2016; Hasan-Basri and Karim, 2016). Hybrid Choice modelling is a common methodology in several fields of study but only few examples can be found in tourism literature to date (Fleischer et al, 2012; Sarman et al, 2015).

In our specific case, the variable of interest identifies individuals who answered yes to the question: "Do you typically buy trip insurance when making travel reservation?" (yes = 1, no = 0). Socio-demographic characteristics (income, age, gender, nationality, working position, level of education) and trip-related attributes (travel company, number of outbound trips, share of long trips, travel planning behavior) are adopted as choice predictors. In addition we hypothesize that there are some non-observable characteristics of the respondents that could determine their behaviour. Such unobservable constructs can be measured through psychographic items, the level of which is supposed to be a manifestation of a higher or lower level of the latent variable itself. In our case, two personality traits, have been used as predictors of the insurance purchase behaviour choice: conscientiousness and neuroticism. In order to consider such latent constructs as choice predictors, it is necessary to jointly estimate individual choices and responses to the attitudinal questions. The overall model is estimated adopting the simulated maximum likelihood method (Train, 2009).

## 3. Preliminary results

The estimation process is being finalized and full results will be available for presentation at the conference.

## 4. Conclusions

This article assessed the relationship between individual personality traits and travel insurance purchase behaviour. In order to pursue research objectives a dataset from a sample of international respondents was used and a Hybrid Choice model was designed and estimated.

This study contributes to the literature stream dealing with travel risk perception, uncertainty evaluation and strategies aimed at reducing risk or the consequences of negative events and adopts a consolidate methodology that finds regular application in many study fields. The theoretical setting and empirical results presented in this article may give the community some hints for future discussions and possibly a cue for further research.

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