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EVIDENCE THAT TRAVEL PRODUCT KNOWLEDGE INCLUDES FAMILIARITY WITH TRAVEL PRODUCTS AND DESTINATIONS

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ABSTRACT

Prior product knowledge has been defined either in terms of what people perceive they know about a product or in terms of what knowledge the individual has stored in memory. Product knowledge is intricately linked to involvement. A consumer's level of involvement and knowledge clearly influence many purchasing decisions. The knowledge deficit regarding these factors is that no studies can be found that evaluate online travel planning in the leisure sector with regards to consumers' travel knowledge. A valid question to ask for instance is what constitutes travel product knowledge? Qualitative research discovered that respondents used the terms 'travel products' and 'travel destinations' interchangeably when referring to their knowledge of travel. To examine travel knowledge more closely, a survey was designed including six questions about travel knowledge with some questions referring to 'products' and others to 'destinations'. Confirmatory factor analysis of the construct travel product knowledge was used to assess the underlying variable that is reflected when respondents refer to knowledge of travel products and destinations.

JEL: M31, D10, D81, D83

KEYWORDS: Decision Process, Factor Analysis, Leisure Travel, Product Knowledge, Travel Products

INTRODUCTION

Consumer knowledge is a key construct in understanding how consumers behave (Brucks, 1985; Duncan & Olchavsky, 1982; Johnson & Russo, 1984; Park, Mothersbaugh, & Feick, 1994; Rao & Munroe, 1998). Travel knowledge was deemed an important variable in explaining online leisure travel booking behavior (Conyette, 2010; Conyette, 2011). Moreover, the travel sector which has unique characteristics of its own, warrants continued examination by researchers since the sector forms a significant part of the economy. According to the World Travel and Tourism Council (WTTC), travel and tourism represents US$7.0 trillion (2013 figures) in economic value, provides 266 million jobs and accounts for US$754 billion in investment. Furthermore, travel and tourism's contribution equates to 9.5% GDP of the world's total economy, 1 in 11 of the world's total jobs, and 4.4% of total investment (WTTC, 2013). Typical studies on product knowledge revolve around comparisons of expert versus novice consumers, how they vary in their information search behavior, their differing priorities and attitudes to advertisements (Chuang, Tsai, Cheng, & Sun, 2009; Hadar, Sood, & Fox, 2013; Myungwoo, Jing, & Lee, 2012). The role of memory in knowledge acquisition, a means-end chain in forming personal relevance, and the interconnections of involvement are other concepts frequently discussed in further research papers (Long-Yi & Chun-Shuo, 2006; Clarkson, Janiszewski, & Cinelli, 2013).

Despite these investigations, very few studies examine online travel planning in the leisure sector and none can be found with regards to consumers' travel product knowledge in particular. In this paper, the author uses factor analysis of the construct travel knowledge to establish that respondents equate knowledge about travel products with knowledge about destinations. This appears to be a unique contribution to the field of

travel research. The next section of this paper describes some relevant literature, followed by a discussion of the data and methodology used in the study. The results are presented and the paper closes with concluding remarks.

LITERATURE REVIEW

Clarkson, Janiszewski, & Cinelli (2013) found that novice consumers usually have no prior consumption experience in a product category and consequently have little knowledge about the array or range of experiences available within a domain. Expert consumers on the other hand should already have fairly broad consumption knowledge and therefore should prefer to enhance their depth of consumption knowledge in a product category. Researchers conducted several experiments to demonstrate that consumers try novel consumption experiences to build their experiential consumption knowledge, knowledge they believe will enhance their appreciation of future consumption experiences. Novice consumers selected consumption experiences that provided valuable breadth consumption knowledge whereas expert consumers chose consumption experiences that provided depth consumption knowledge.

Jensen (2012) conducted an Internet survey based on a questionnaire about travel purchases. Travel experience was shown to be the main predictor of online travel shopping (search and purchase). Travel experience acts directly through its influence on the traveler's perceived risk of online purchasing and indirectly through its influence on a traveler's orientation toward personalizing the travel product. Data analysis shows that more experienced travelers need less information before buying their vacation. Furthermore, the high-experienced traveler is more interested in personalizing the travel product, perceives less risk in doing so, and they are more likely to be a frequent traveler.

Prior product knowledge has been defined either in terms of what people perceive they know about a product (subjective knowledge) or in terms of what knowledge the individual has stored in memory (objective knowledge) (Brucks, 1985; Rao and Munroe 1988). Past studies reveal that knowledgeable consumers are more likely to search for new information before making a decision (Duncan & Olchavsky, 1982; Johnson & Russo, 1984; Punj & Stalein, 1983). Less knowledgeable consumers are more likely to rely on attributes such as brand name, price (Park & Lessig, 1981) or opinions of others (Brucks, 1985; Furse, Punj and Stewart, 1984).

Consumers can combine the three types of product knowledge to form a simple associative network called a means-end chain (Guttman, 1982). A means-end chain typically links consumers' knowledge about product attributes with their knowledge about consequences and values. The means-end chain model proposes that the meaning of a product attribute is given by its perceived consequences (Mehrotra & Palmer, 1985). Means-end chains help marketers understand consumers' feelings of personal relevance for a product because they clearly show how consumers' product knowledge is related to their knowledge about self (Walker & Olson, 1991). The type of means-end knowledge activated in the situation determines the level of product involvement a consumer experiences during decision-making. Consumers will feel more involved with the product if they believe product attributes are strongly linked to important end goals or values. Consumers who experience little or no involvement with the product believe the product attributes are not associated with any relevant consequences.

Involvement refers to consumers' perceptions of importance or personal relevance for an object, event, or activity (Krugman, 1965). Involvement is a motivational state that energizes and directs consumers' cognitive and affective processes and behaviors as they make decisions (Cohen, 1982). Involvement has also been referred to as an internal state variable that indicates the amount of arousal, interest, or drive invoked by a particular stimulus or situation (Andrews, Durvasula, and Akhter, 1990). Consumers who perceive that a product has personally relevant consequences are said to be involved with a product and have a personal relationship with it. Cognitively, involvement includes the means and knowledge about

important consequences produced by using the product. People may express stronger affective responses such as emotions and strong feelings if product involvement is high. Highly involved consumers constantly collect information about a product of interest (Bei & Widdows, 1999).

A person's level of involvement is influenced by two sources of self-relevance: intrinsic and situational. Intrinsic self-relevance is based on consumers' means-end knowledge stored in memory (Block, 1982). As consumers use a product or observe others using it they learn that certain product attributes have consequences that help achieve important goals and values. Because this means-end knowledge is stored in memory, it is a potential intrinsic source of involvement. If this involvement is activated in a decision situation, the consumer would experience feelings of personal relevance or involvement with the product. Aspects of the immediate physical and social environment that activate important consequences and values, determine situational relevance thus making products and brands seem self-relevant.

A key to good marketing management comes from understanding a consumer-product relationship and when marketers understand this relationship they will be able to segment the market accordingly. Different marketing strategies are necessary to address the unique types of product knowledge, intrinsic self-relevance, and involvement of consumers in different market segments. A consumer's level of involvement and knowledge clearly influence all purchasing decisions. The knowledge deficit regarding these factors is that none of the studies on these topics evaluate online travel planning in the leisure sector. Neither do they assess the construct of travel product knowledge to determine whether people equate knowledge about travel products with knowledge about destinations.

DATA AND METHODOLOGY

A larger study in 2008 by this writer whose purpose was to discover the factors influencing online leisure travel planning decisions, used qualitative research with focus groups, personal interviews, and case studies. One of the factors that impacted online leisure travel decisions was a person's knowledge of travel. The larger study revealed that respondents used the terms 'travel products' (hotels, airlines, cruises, tours, etc.) and 'travel destinations' interchangeably when referring to their knowledge of travel (Conyette, 2010). To confirm whether this is the impression consumers have of travel knowledge, data was collected in 2008 using an online questionnaire to test the construct of travel product knowledge and determine if respondents were referring to the same thing. A total of 1300 online surveys were submitted by consumers through various businesses listed in the acknowledgements below.

One hundred and two surveys were deleted, since responses were not complete, leaving 1198 completed surveys for data analysis. The survey was pre-tested after 250 surveys were collected. A common approach for data reduction is the factor analysis method that seeks to determine the underlying unobservable (latent) variables that are reflected in the observed (manifest) variables. This author uses the term *factor analysis* generically to encompass both principal components and principal factors analysis. In designing a survey questionnaire to examine the factors influencing online travel purchasing behavior, questions about travel knowledge referred to 'products' and then also to 'destinations'. Principal components analysis of six Likert scale questions from the questionnaire using the data gathered from the respondents was performed with SPSS.

For a product class knowledge scale, three items from Park, Mothersbaugh & Feick (1994) were used on a 7-point Likert scale ranging from very familiar to very unfamiliar. Some items were merged due to the low number of responses in that category. Merging categories is sometimes done to more evenly distribute data so that it reflects a meaningful distinction between categories in practical terms. Categories in the other variables were unchanged. Thus, the first two 'knowledge' questions - How much do you feel you know about travel products? And compared to your friends and acquaintances? used five categories 1= very familiar, 2=familiar, 3=a little familiar, 4=neutral, 5=a little unfamiliar. The third knowledge question

(comparing to a travel agent) kept all seven categories, 1= very familiar, 2=familiar, 3=a little familiar, 4=neutral, 5=a little unfamiliar, 6=unfamiliar, 7=very unfamiliar.

RESULTS

The six travel knowledge questions from the survey are shown in Table 2 below. Table 1 and Figure 1 also show components resulting from the analysis. In Table 1, Principal Components Analysis reveals the presence of one component with an eigenvalue exceeding 1, explaining 72% of the variance. The eigenvalue of a factor represents the amount of total variance explained by that factor. The Kaiser criterion recommends keeping for further investigation only factors with an eigenvalue of 1.0 or more. This was further supported by the results of Parallel Analysis, which showed only one component with an eigenvalue exceeding the corresponding criterion value for a randomly generated data matrix of the same size (6 variables x 1198 respondents).

Table 1: Total Variance Explained

	Initial Eigenvalues	
Total	% of Variance	Cumulative %
4.320	71.995	71.995
0.637	10.617	82.612
0.468	7.792	90.404
0.272	4.534	94.938
0.175	2.921	97.859
0.128	2.141	100.000

This table shows Extraction Method: Principal Component Analysis. The presence of one component is clear with an eigenvalue exceeding 1, explaining 72% of the variance. All other components explain a total of 28% variance in items. The Kaiser criterion recommends keeping for further investigation only factors with an eigenvalue of 1.0 or more.

An inspection of the scree plot shows a clear break after the first component; this dominance is seen in Figure 1. The well accepted Catell's scree test recommends retaining all factors above the elbow since they explain most of the variance in the dataset.

Figure 1: Scree Plot
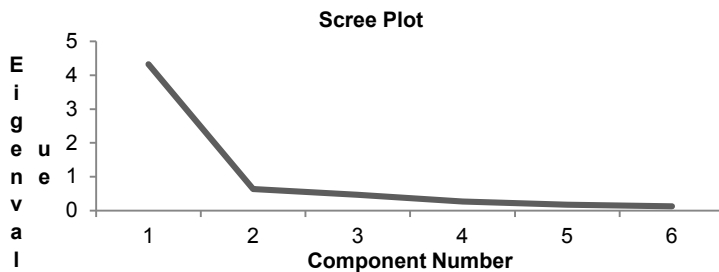
This figure shows one dominant component and a clear break after the first component. Catell's scree test recommends retaining all factors above the elbow since they explain most of the variance in the dataset.

Table 2 below shows that the six items all relate to one component, knowledge of travel. Since one component is extracted the solution cannot be rotated. The close range of loading values from 0.803 to 0.873 shows that respondents answered all six questions in a similar fashion so that for example, where they indicated 'very familiar' with one question they responded to other questions in a comparable way. Overall these results support the uni-dimensionality of the data.

Table 2: Component Matrix[a]

	Component
	1
Compared to your friends and acquaintances, how much do you feel you know about travel destinations?	0.873
Compared to a travel agent, how much do you feel you know about travel products?	0.865
Compared to a travel agent, how much do you feel you know about travel destinations?	0.863
Compared to your friends and acquaintances, how much do you feel you know about travel products?	0.846
How much do you feel you know about travel destinations?	0.839
How much do you feel you know about travel products?	0.803

This table shows Extraction Method: Principal Component Analysis, with 1 component extracted. A Rotated Component Matrix[a] indicates that only one component was extracted. The close range of loading values from 0.803 to 0.873 shows that respondents answered all six questions in a similar way. Overall these results support the uni-dimensionality of the data.

In Table 3, an examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggests that the sample was factorable (KMO = 0.824) above the recommended value of 0.60. Bartlett's test of sphericity was significant (C^2 = 5648.306, p < 0.001). Both of these statistical measures generated by SPSS address the strength of inter-correlations among items and show that factor analysis is appropriate given the data. Principal Component Analysis requires that the probability associated with Bartlett's Test be less than the level of significance and the probability is less than 0.001 which satisfies this requirement.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.824**
Bartlett's Test of Sphericity	Approx. Chi-Square	5,648.306
	df	15
	Sig.	0.000

This table displays Kaiser-Meyer-Olkin 0.824 above the recommended value of 0.60. Bartlett's test of sphericity was significant (C^2 = 5648.306, p < 0.001). These statistical measures address the strength of inter-correlations among items and show that factor analysis is appropriate given the data.

Analysis indicates that respondents were not confused with the six questions asking their knowledge of travel products and destinations. They showed consistent responses demonstrating they equate knowledge about travel products with knowledge about destinations. Factor analysis of the construct product knowledge confirmed this assertion as can be seen in the total variance and scree plot above. The factor knowledge of travel is the same as knowledge about travel products and about destinations. Factor analysis is appropriate for the data and reveals useful insights into the construct of travel knowledge.

CONCLUSION

There are no known studies that have evaluated online travel planning in the leisure sector with regards to consumers' travel knowledge. The goal of this paper is to initiate this discussion since travel knowledge was deemed an important variable in explaining online leisure travel booking behavior (Conyette, 2010; Conyette 2011). Since respondents during qualitative research used the terms 'travel products' and 'travel destinations' interchangeably when referring to their knowledge of travel, it was thought to check this through confirmatory factor analysis. An online survey was used to gather data required for assessing the construct of travel knowledge. Factor analysis suggests that respondents are referring to the same thing when they describe their familiarity with travel; it is the same as knowledge about travel products and destinations. This research makes a contribution to the body of knowledge by offering some understanding of what constitutes travel product knowledge.

Relevant limitations in this study are that survey respondents expressed their intention to search travel online but these do not necessarily reflect enduring behavioral patterns of subjects. The survey instrument was administered on the Internet. Subjects were referred to the website which included the survey and appropriate instructions. Every respondent saw the same questionnaire and had the same instructions to guide them. Although the survey was pretested it is difficult to determine if participants fully understood the questions asked. In addition, consumers without much Internet experience most likely did not complete the survey. Future research will examine how consumers use mobile devices and wearable tech devices in travel and therefore product knowledge will include familiarity with such devices and how they assist travelers.

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ACKNOWLEDGEMENTS

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