Personality and Tourists' Internet Behaviour

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Abstract

This study aimed at relating tourists' Internet behaviours and the Big Five Factors (BFF) of personality to identify personality items that better predict tourists' Internet behaviours. Survey data from 288 domestic tourists to Busan, South Korea, was used to empirically examine the relationship between the BFF and Internet behaviours. Results indicate that Internet travel information sources vary with the BFF with the exception of extraversion, and the Internet channels used for travel information search also varied with the BFF with the exception of conscientiousness. The Internet is more widely used as a source of travel information but less for travel purchases. The results also suggest that the responses to some BFF items can substantially improve the predictability of tourists' Internet behaviours. Implications for the use of the BFF in designing travel information systems are addressed.

Keywords: Big Five Factors; personality; Internet behaviour

1 Introduction

The Internet is an influential source of travel information (Fesenmaier, Xiang, Pan & Law, 2010) as well as a facilitator of travel purchase decisions (Beldona, Morrison & O'Leary, 2005). Despite the Internet's role as a facilitator for travel information searches, it has overloaded potential tourists with information (Pan & Fesenmaier, 2006b), raising the potential necessity of a filtering or recommendation system (Fesenamier, Werthner & Wöber, 2006). Research efforts dedicated to the factors influencing tourists' Internet behaviour have identified travel motivation (Goossens, 2000), prior knowledge (Gursoy & McCleary, 2004), family life cycle and social economics (Fodness & Murray, 1999), gender (Okazaki & Hirose, 2009), education (Heung, 2003), income (Luo, Feng & Cai, 2004), cultural background (Gursoy & Umbreit, 2004), lifestyle (Schul & Crompton, 1983), and other socio-demographics (Gitelson & Crompton, 1983). From an information-system-design perspective, identifying predictors of tourists' Internet behaviour can be interpreted as a quest for the right questions to ask to provide a reasonable expectation of system users' behaviour.

Literature suggests that personality, among other individual factors, could be a plausible predictor of tourists' Internet behaviours. Since personality tends to be enduring throughout one's course of life (Costa & McCrae, 1988), it can be assumed to be a better predictor of human behaviour than other personal factors like demographics (e.g., age, income) that might change over time. Within the information-search context, personality has been applied to explain students' information searching (Heinstrom, 2005), the use of word-of-mouth (Mowen, Park & Zabla, 2007), and the preference for information type (Tidwell & Sias, 2005) with a significant relationship being observed in each case. Despite these findings confirming the influence of personality on information-search behaviour, few have examined its influence in tourism settings, where the Internet is believed to be an influential information source. Furthermore, studies that have incorporated personality to explain tourists' information behaviour have tended to focus on few specific elements of personality such as risk perception (e.g., Quintal, Lee and Soutar, 2010) instead of utilizing universal personal traits like the Big Five Factors (BFF).

This research gap comes as a surprise given the fact that personality is relatively stable and hence offers great potential for predicting tourists' behaviour. This study aimed at reducing the literature gap by exploring the relationship between personality traits and tourists' behaviour towards the Internet. This study focuses attention on applying a universal personality trait (i.e. the BFF) and addresses the following research questions: Do personality traits influence the type of travel information sought from the Internet and tourists' on-line purchases? Are there differences in the use of Internet channels by individuals with different personality traits? And, Can items used to measure personality be used to predict tourists' Internet behaviours? The study results would provide useful insights on better ways to design travel information systems for different personalities.

2   Literature Review

Fesenmaier *et al*. (2006) argue that demographic variables alone are not sufficient to understand tourists' information search behaviours. Thus, they advocate for the use of personal factors such as personality and perceptions towards the Internet. Surprisingly, studies that relate personality and travel-information seeking are scant with a few exceptions like Kah, Vogt, and MacKay (2008) and Gretzel, Mitsche, Hwang, and Fesenmaier (2004). This research gap is alarming given the contribution of psychological factors to travel information searching (Schul & Crompton, 1983). Personality refers to the distinctive and enduring patterns of thought, emotion, and behaviour that characterize each individual's adaptation to the situations of his or her life. The trait perspective propounded by Allport (1937), in particular, has been widely applied in consumer research. According to this perspective, one's personality can be identified and categorized based on one's psychological traits. The wide adoption of the trait perspective seems to emanate from its ease in use, as it employs self reports, and its 'scientific' approach, as its results are easily subjected to systematic analysis.

The Big Five Factor (BFF) model (McCrae and Costa, 1999), among other models based on trait perspective, has been widely applied in diverse disciplines because of its universality (Bandura, 1999) and high reliability across culture (McCrae & Costa, 1999). As the name of model implies, the BFF model categorizes personality traits into five dimensions that include openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability (McCrae & Costa, 1999). Openness to experience represents one's tendency to appreciate art, emotion, unusual ideas, and variety of experience, while conscientiousness is related to self-discipline, one's way of acting, and achievement. Extraversion is individuals' tendency to seek stimulation, and agreeableness represents one's tendency to be cooperative with others. Emotional stability (i.e., neuroticism) depicts the likeliness to experience negative emotions (John & Srivastava, 1999).

The Internet, with its speedy access, wider range of information, interactive nature, and flexibility (Kim, Lehto & Morrison, 2007), has changed the way potential tourists seek travel-related information. The manner in which tourists seek travel information from the Internet has been noted to vary with a diverse set of factors including attitudes towards Internet (Okazaki & Hirose, 2009), gender (Kim et al., 2007; Okazaki and Hirose, 2009), prior experience and involvement with travel products (Kim et al., 2007), age and income (Heung, 2003), country of origin (Heung, 2003), and the stage of decision making (Lee, Soutar & Daly, 2007). The understanding of these determinants is crucial as these are keys to attracting and retaining potential tourists to a specific online platform that might mature viewers into actual buyers of tourism products.

The type of information sought from the Internet is one among the descriptors of information search behaviour and one of the key considerations in designing a travel-decision aid system (Pan & Fesenmaier, 2006b). Travel information sought from the Internet includes destinations, activities, attractions, accommodations, and other travel elements (Pan & Fesenmaier, 2006a). Searches for different travel elements from the Internet have been noted to vary depending upon personality traits (Kah et al., 2008), gender (Kim et al., 2007), and frequency of Internet use (Kah et al., 2008). Kah *et al.* (2008) noted significant differences among innovators, early adopters, and late adopters with respect to the type of travel information searched. Although their study is informative in relating personality and travel information sought, the technology-adoption category does not reflect the universal personality type in the sense that it is limited to individuals' tendency to adopt technology. McElroy, Hendrickson, Townsend and Demarie (2007) argue for the use of the BFF in information studies as these are less mutable compared to other personal variables.

The Internet is a composite online information platform that is composed of websites managed by different organizations/entities, online communities, blogs, and portal websites. The use of these different Internet channels can be argued to relate to the personal factors. With the conventional travel-information channels, potential tourists have been noted to use the different sources depending on travel orientation (Gitelson & Crompton, 1983), country of origin and travel experience (Gursoy & Umbreit, 2004), and information needs (Wong & Liu, in press). Within the electronic platform,

studies relating the BFF with the use of different Internet channels appear to be lacking. Since the BFF are considered to be global and universal predictors of most human behaviours, the adoption of the five factors in explaining the differential use of Internet channels is argued for in this study. A recent study by Yoo and Gretzel (in press) is one among the few to relate the BFF and online travel information. They noted personality traits to be related to perceived barriers to content creation, motivation to engage, and the specific creation behaviour of travel blogers.

The unique characteristic of tourism consumption that entails a spatial separation between the origin of the tourist and the point of consumption experience necessitates a facilitating transaction method such as the Internet for linking suppliers and potential tourists. With the aim of understanding the personal factors that influence online travel-products purchases, studies have noted the frequency of Internet use and experience (Kah et al., 2008), innovativeness (Kah et al., 2008; Card, Chen & Cole, 2003), and perception towards the Internet (Bigne, Sanz, Ruiz & Aldas, 2010) to be influencing factors. Despite the fact that most human behaviours can be traced back to the enduring BFF, few studies have related the BFF with tourists' Internet purchase behavior. Specific personality traits like innovativeness and perceptions of the Internet can be logically linked with some of the five factors of personality like openness to experience. This study adopts this logic in testing the relationship of the five factors of personality to the Internet purchase of travel products.

3 Methods

A self-administered survey questionnaire for domestic tourists was distributed in Busan, the second biggest metropolitan city in Korea, during the period from 15th August to 26th August, 2010. Two research assistants distributed the questionnaire to conveniently selected tourists in three locations where the chances of finding a tourist were higher. In order to minimize possible bias, the research assistants were asked to distribute the questionnaire to all age and gender groups. As a result, a total of 306 questionnaires were returned of which 288 cases remained in the final data set after a cleaning process. The survey questions captured tourists' Internet-behaviour, personality, and demographic characteristics. The Internet-behaviour section had three main questions related to Internet-purchase behaviour, type of information sought and the Internet channels used in seeking travel information. For the Internet-purchase question, respondents were asked to indicate if they had purchased any on-line tourism products in the past 12 months and, if so, the type of purchased items was identified. In order to identify the type of tourism information sought from the Internet in the last 12 months, respondents were asked to check the frequency of search for different types of tourism information (refer to Table 2 for items) on a 5-point Likert-type scale from 1 ('not at all') to 5 ('for all trips'). The survey participants were also asked to indicate the Internet channels they usually used to search for travel information (refer to Table 2 for the Internet channels presented). The personality section utilized 44 Big Five Inventory items (John, Donahue, and Kentle, 1991; John & Srivastav, 1999) that were framed in a 5-point Likert-type scale (strongly disagree to strongly agree). The last section captured respondents' demographic characteristics such as gender, age, marital status, and education level. A

series of Chi-square tests and t-tests was performed to examine relationships between personality and Internet behaviour. For the purpose of identifying personality items to better predict tourists' Internet behaviour, a series of cross-tab analyses was applied. Somer's D value and correct percent were interpreted to suggest personality items with reasonable predictability for respective Internet behaviours.

4 Results

4.1 Sample Profile

Female respondents (54.2%) were slightly overrepresented in the sample. A substantial percentage of the respondents (74.3%) were at or below 39 years old while those 40 years old or over were 25.7% of the sample. In terms of education level, only 8.3% of the respondents had an education level of less than high school graduation.

Table 1. Frequency analysis of Internet behaviour (n=288)

Types of information sought	%	Internet channels used*	%
Destination	94.1	Travel agents' website	56.9
Air fare/schedule	75.0	Supplier website	39.2
Rent car	50.7	(Hotel, airport, rent car)	
Accommodation	83.7	Search engine	64.6
Special events and festivals	62.8	DMO website	12.2
Package tour	64.9	Portal websites	46.9
Attractions	84.0	Magazine and newspaper website	15.6
Itinerary	69.4	KNTO website	11.1
Restaurants and food outlets	76.4	Online community	16.0
Shopping	64.6	Mini-homepage/Facebook	20.5
Map	68.4	Blog	46.5
Internet purchase of travel products	38.9		
(last 12 months)*			
Accommodation	53.6		
Airline ticket	37.5		
Package tour	46.4		
Rental car	13.4		
Attraction-admission ticket	16.1		
Other	4.5	* Multiple response was allowed	

Respondents' Internet use for travel-information search and purchase are presented in Table 1. The three most common types of travel information sought from the Internet appear to be destination information followed by attractions and accommodation. Search engines and travel agents' websites among the Internet channels used in travel-information searching are the dominant ones while the national level DMO's website appears to be the least-used channel. Travel blogs and portal websites appear to be another important platform for accessing travel information. Social media such as mini-homepages and Facebook are still not prevalent as a source of travel information. Those who have purchased travel products within the last 12 months through the Internet comprised 38.9% of the respondents. Accommodation, package tour, and airline tickets were the most commonly purchased travel products from the Internet.

4.2 Big five personality traits and tourists' Internet behaviour

In order to examine the relationships between the Big Five personality traits and tourists' Internet behaviour, each respondent was grouped into either 'low' or 'high' group based on each of the five personality traits. The mean score for each personality trait was computed, and cases with a 2.99 or less mean score on the scale of 1 to 5 were classified as the low group; otherwise they were placed in the high group. This approach was chosen to clearly contract the possible differences in Internet behaviours by personality level. In testing the differences in the type of information sought from the Internet by the BFF traits, an independent t-test was performed, and the results are shown in Table 2. The results indicate that the frequency of travel-information search differs significantly by an individual's personality traits with the exception of the extraversion trait. In general, the frequency of information search on different types of travel information increases as individuals' openness to experience and neuroticism trait score increases, while the opposite direction is applicable to the conscientiousness and agreeableness traits. Among the travel information sought from the Internet, destination and package tour were observed not to be significantly related to any of the BFF. The relatively high frequency of destination-information search across different personality traits implies that destination information is a universal type of information sought in travel information searches.

Table 2. Personality and type of information sought from the Internet

Information sought	Openness			Conscientiousness			Extraversion		
	Low	High	t value	Low	High	t value	Low	High	t value
Destination	3.95	4.08	-1.16	3.95	4.05	-.65	3.89	4.09	-1.42
Air fare/schedule	3.14	3.46	-2.29**	3.29	3.36	-.36	3.31	3.37	-.41
Rental car	2.59	2.75	-1.15	2.92	2.66	1.26	2.64	2.71	-.46
Accommodation	3.37	3.72	-2.63***	3.84	3.57	1.74*	3.46	3.66	-1.37
Events	2.64	3.03	-2.98***	3.26	2.85	2.26**	2.82	2.93	-.77
Package tour	3.14	3.19	-.33	3.13	3.18	-.21	3.19	3.16	.20
Attractions	3.27	3.55	-2.37**	3.26	3.49	-1.34	3.47	3.45	.14
Itinerary	2.73	3.21	-3.84***	3.26	3.02	1.36	3.06	3.06	.00
Restaurants	2.93	3.48	-4.36***	3.50	3.27	1.28	3.17	3.34	-1.24
Shopping	2.76	3.19	-3.03***	3.16	3.03	.65	3.08	3.03	.30
Map	2.78	3.22	-3.13***	3.50	3.01	2.51**	2.94	3.12	-1.11

Information sought	Agreeableness			Neuroticism					
	Low	High	t value	Low	High	t value			
Destination	3.92	4.05	-.67	4.04	4.04	-.03	*p<.1		
Air fare/schedule	3.79	3.31	1.92*	3.19	3.82	-4.04***	**p<.05		
Rental car	3.46	2.63	3.33***	2.54	3.15	-3.87***	***p<.01		
Accommodation	3.83	3.59	1.08	3.51	3.89	-2.91***			
Events	3.29	2.87	1.88*	2.80	3.22	-2.99***	- Frequency of		
Package tour	3.50	3.14	1.40	3.11	3.56	-1.53	information search		
Attractions	3.71	3.44	1.33	3.43	3.53	-.78	was measured on a 5-		
Itinerary	3.46	3.02	2.05**	2.97	3.32	-2.36**	point scale from 1		
Restaurants	3.54	3.28	1.19	3.23	3.51	-1.98*	'not at all' to 5 'for		
Shopping	3.75	2.98	3.20***	2.92	3.42	-3.33***	all trips.'		
Map	3.33	3.05	.99	3.02	3.22	-1.28			

The relationship between BFF traits and the Internet channels used was tested by using Chi-square tests. The relationships are presented in Table 3 with openness to

experience and neuroticism both demonstrating relationships with the usage of four Internet channels. Respondents with higher scores for openness to experience are more likely to use search engines, DMO websites, and travel blogs, while those who are lower in openness to experience are more likely to use portal websites. Those high in the neuroticism trait are more likely to use travel agents' websites and mini-homepages while those with low scores in neuroticism are more likely to search for travel information through search engines and portal websites. The agreeableness trait relates to the usage of three Internet channels including travel agents' websites, search engines, and the KNTO website. Those low in agreeableness tend to use travel agents' websites and the KNTO website, but they employed less frequently search engines. Those individuals with a high extraversion trait are more likely to use newspaper and magazine websites in their searches than are their counterparts. The conscientiousness trait is less useful in segregating the difference in the use of Internet channels. The use of suppliers' websites (airlines/hotels/rental cars) and online communities did not present any statistical difference among the BFF. The results of the Chi-square tests for Internet-purchase behaviour and the type of purchased items indicate no significant relationships.

Table 3. Personality traits and the Internet channel used

Internet Channel	Openness			Conscientiousness			Extraversion		
	Low	High	χ^2	Low	High	χ^2	Low	High	χ^2
Travel agents' Website	58.5	56.2	.14	60.5	56.4	.23	55.6	57.4	.08
Airline/hotel Website	38.3	39.7	.05	34.2	40.0	.46	34.7	40.7	.82
Search Engine	55.3	69.1	5.24**	71.1	63.6	.80	56.9	67.1	2.45
DMO Website	7.4	14.4	2.90*	7.9	12.8	.74	12.5	12.0	.01
Portal Website	56.4	42.3	5.07**	36.8	48.4	1.77	47.2	46.8	.01
Newspaper/Magazine Web	18.1	14.4	.64	13.2	16.0	.20	8.3	18.1	3.87**
KNTO Website	10.6	11.3	.03	7.9	11.6	.46	11.1	11.1	.00
Online Community	13.8	17.0	.48	10.5	16.8	.97	12.5	17.1	.86
Mini Home/Facebook	14.9	23.2	2.68	18.4	20.8	.12	22.2	19.9	.18
Blog	38.3	50.5	3.80*	44.7	46.8	.06	45.8	46.8	.02

Internet Channel	Agreeableness			Neuroticism					
	Low	High	χ^2	Low	High	χ^2			
Travel agents' Website	83.3	54.5	7.44***	54.0	65.8	3.10*	*p<.1		
Airline/hotel Website	54.2	37.9	2.45	40.0	37.0	.21	**p<.05		
Search Engine	41.7	66.7	6.01**	68.4	53.4	5.32**	***p<.01		
DMO Website	12.5	12.1	.00	11.6	13.7	.22			
Portal Website	45.8	47.0	.01	52.6	30.1	11.00***			
Newspaper/Magazine Web	20.8	15.2	.54	15.3	16.4	.05			
KNTO Website	25.0	9.8	5.11**	10.2	13.7	.66			
Online Community	12.5	16.3	.24	15.8	16.4	.02			
Mini Home/Facebook	29.2	19.7	1.21	17.7	28.8	4.12**			
Blog	41.7	47.0	.25	43.7	54.8	2.69			

4.3 Predictability of personality items for Internet Behaviours

With the aim of assisting system designers in developing tailor-made travel information systems through the Internet, the 44 Big Five Inventory items were related to different travel information behaviours. In order to simplify the data and better represent behaviour, cases with midpoint answers (i.e., a score of 3 on the

scale) for personality items and frequency of information search were excluded from further analyses. This was deemed necessary since the midpoint answers fit into neither the disagree nor the agree sides. Consequently, the resulting data after simplification were categorical in nature having yes/no or agree/disagree responses. The simplified data pertaining to personality and information behaviour were then subjected to a series of cross-tab analyses.

For each cross-tab analysis, Somer's D value, an asymmetric PRE (proportional reduction in errors) measure, and correct percent were used to evaluate the predictability of each personality item for Internet behaviours. Since the significance of Somer's D value means that the errors in predicting Internet behaviours can be significantly reduced by knowing individuals' responses to personality items, only those personality items with significant Somer's D scores were considered for the calculation of correct percentages. The results reported in Table 5 represent items with the highest correct percent for each of Internet behaviours.

Table 4. Significant personality items for tourists' Internet behaviours

Internet Sought		Internet Channel Used		Internet Purchasing	
Destination	PI41 (−, 75.1)	Online travel agency	PI26 (−, 57.9)	Internet purchase	PI05 (−, 55.4)
Airfare and schedule	PI30 (+, 68.1)	Airline/hotel/rental car	PI12 (+, 63.4)	Hotel	PI24 (−, 64.7)
Rental car	PI39 (+, 67.1)	Search engine	PI04 (−, 68.3)	Air ticket	PI02 (+, 68.7)
Accommodation	PI04 (−, 76.4)	DMO website	PI20 (+, 49.3)	Package tour	PI15 (+, 66.2)
Special event	PI29 (+, 66.7)	Portal website	PI19 (−, 65.7)	Rental car	PI41 (−, 33.7)
Package tour	PI42 (+, 62.3)	Newspaper/mag. website	PI32 (−, 74.6)	Attraction admission	PI08 (+, 69.1)
Destination attraction	PI41 (−, 73.0)	KNTO Website	PI09 (−, 55.6)		
Event calendar	PI30 (+, 65.6)	Online community	PI44 (+, 57.3)		
Restaurant	PI10 (+, 65.8)	Mini homepage/Facebook	PI33 (−, 76.0)		
Shopping	PI30 (+, 73.5)	Blog	PI35 (−, 59.7)		
Map	PI05 (+, 65.9)				

- (+/-, correct %): '+' indicates dominance of concordant cells in a 2x2 table. '−'indicates dominance of discordant cells.
Correct percent = (sum of frequencies in concordant or discordant cells)/total frequency
- Note: BFI items (O: openness, C: Conscientiousness, E: extraversion, A: agreeableness, N: neuroticism)
PI01: talkative (E)	PI02: fault finder (A)	PI03: thorough (C)	PI04: depressed (N)
PI05: new ideas/original (O)	PI06: reserved (E)	PI07:unselfish (A)	PI08: careless (C)
PI09: relaxed (N)	PI10: curious (O)	PI11:full of energy (E)	PI12: quarrelsome (A)
PI13: reliable (C)	PI14: tense (N)	PI15: thinker (O)	PI16: enthusiastic (E)
PI17: forgiving (A)	PI18: disorganized (C)	PI19: worrier (N)	PI20: imaginative (O)
PI21: quiet (E)	PI22: trusting (A)	PI23: lazy (C)	PI24: emotionally stable (N)
PI25: inventive (O)	PI26: assertive (E)	PI27: aloof (A)	PI28: persevere (C)
PI29: moody (N)	PI30: artistic (O)	PI31: shy (E)	PI32: kind (A)
PI33: efficient (C)	PI34: calm (N)	PI35: likes routine (O)	PI36: outgoing (E)
PI37: rude (A)	PI38: follows plans (C)	PI39: nervous (N)	PI40: reflective (O)
PI41: less artistic (O)	PI42: cooperative (A)	PI43: easily distracted (C)	PI44: sophisticated (O)

The positive or negative symbol associated with the correct percent depicts the direction of relationship of the two variables in each analysis. The positive symbol represents the dominance of concordant cells ('no/no' and 'yes/yes') in a 2x2 table, while the negative symbol indicates the dominance of discordant cells ('yes/no' and 'no/yes'). For example, the value of (-, 76.4) for 'PI04-accommodation information search' means that the summated frequency in discordant cells in the 2x2 table of PI04 and accommodation information search accounts for 76.4% of the total

frequency of those who answered both questions. The results shown in Table 4 suggest that the predictability of tourists' Internet behaviours can be substantially improved by knowing their response to a specific personality item. In terms of the type of information searched for through the Internet, the yes or no response to 'I value artistic, aesthetic experiences' can lead to 65.6% to 73.5% predictability for airfare and schedule, event calendar, and shopping information search. Personality item 33 (i.e., efficient) is noted to be associated with the usage of social media such as mini-homepages and Facebook. That is to say, individuals' use of social media in searching for travel information can be predicted with a correct percent of 76% if the individuals' yes or no response to the 'I do things efficiently' item is ascertained first. By the same token, a yes or no response to 'I am ingenious, a deep thinker' can lead to a 66.2% correct prediction of individuals' purchase experience of package tours through the Internet.

5   Discussion

The results of this study demonstrate the utility of the BFF in explaining tourist information search on the Internet. Among the BFF of personality, openness to experience and neuroticism appear to be relevant in explaining the type of travel information sought and the channels used. Furthermore, the study results affirmed the utility of the BFF items in designing a tourist-information system by demonstrating that the response to specific BFF items can substantially improve the predictability of tourists' Internet behaviours. From a theoretical point of view, this study extends the usability of personality traits to understand tourists' information-search behaviour. The results are in line with previous research (e.g. Heinstrom, 2005; Tuten & Bosnjak, 2001) that argues for the usability and universality of the BFF in explaining information behaviour. Taking into account the fact that personality traits are relatively stable throughout one's course of life (Costa & McCrae, 1988) and immutable across culture (McCrae & Costa, 1999), this study advocates the use of personality traits to understand tourists' information behaviours.

The results suggest that those individuals with a high openness to experience trait and neuroticism trait are, in general, more likely to search travel information from the Internet. It is also logical to assume that the characteristic of openness to experience will influence more diverse information searching. The positive influence of neuroticism on diverse travel-information searching can be interpreted based on the nature of the trait. Individuals' tendency to worry and to be nervous might compel them to seek more travel information to minimize negative emotions while planning their trip. The results indicate the wide use of the Internet for travel information searches but not for travel-related purchase. This finding reflects Kah *et al*.'s (2008) and Qi, Leung, Law and Buhalis's (2010) that indicate an unbalanced gap between Internet search and purchase of travel related products with the former outweighing the latter. One possible explanation of the low conversion of travel information search to travel Internet purchase is the risk perception on the Internet purchase held by the potential tourists (Qi et al., 2010).

From a marketing perspective, these findings can be capitalized upon through the inclusion of message characteristics targeting open-to-experience and neurotic

individuals, such as catch phrases in their electronic platforms that might appeal to them. Moreover, the differential use of the different Internet channels by the various BBF suggests system designers should place unique information contents and graphics individually in the different channels to attract and satisfy the discrete personalities that are likely to visit the respective channels. For instance, those higher in agreeableness and neuroticism are more likely to use travel agents' websites, thus implying the designers of such sites should include specific information types, like rent-a-car information, that is likely to be sought by individuals having more traits for these two personality factors. With respect to the type of information sought from the Internet, openness to experience and neuroticism appear to be better predictors where 4 and 3 items for openness to experience and neuroticism respectively reflect 10 of the information types. For Internet channel used, some unshared items from all of the five factors of the BFF are likely to be used in predicting the preferred channels. However, for Internet purchases, only 6 items from amongst all the BFF appear to be likely candidates for the prediction of the different travel elements sought from the Internet. Specifically, BFF items that capture the artistic and aesthetic trait (item 30) and its less-artistic opposite (item 41) are likely to predict the type of travel information sought from the Internet.

Finding reinforces the importance of openness to experience in predicting the search for travel information on the Internet. The practical utility of the BFF items in travel-information-system design to simplify tourist information searches will require the use of the specific BFF items that predict Internet use. For instance, the use of the two openness BFF items (items 30 and 41) together with item 5 (originality) can be used as a filter question to direct information seekers to the appropriate types of information. To appeal to the different personalities that visit the various Internet channels and those who are likely to purchase specific travel components through the Internet, messages accompanying the websites can be designed to appeal to the likely personalities that will visit these channels for information. National tourism-organization websites like that operated by the KNTO can use messages that appeal to neurotics as this category of personality appears to prefer such websites. Such a process reflects Internet information personalization (Fesenmaier et al., 2006)

Despite the current study's revealing the influence of the five personality factors in online travel-information searches, a number of limitations prevent the generalization of the findings. Since the sample was solely drawn from Korea (an Asian country), application of the results to non-oriental nations should be taken with caution as cultural background is noted to influence travel-information search behaviour (Gursoy & Umbreit, 2004). The reliance on attitudinal questions in capturing behavior might not provide an accurate description of actual information search behaviours. This study focused attention in the use of the Internet in a trip planning stage and did not cover other stages of tourism consumption such as on-trip and after trip stage. Future research that extends this study to other countries and designed to observe actual tourist information behaviours in different consumption stages would provide a more comprehensive understanding of the relationship between personality and tourist' information behaviours.

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