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Kam Hung
School of Hotel and Tourism Management Hong Kong Polytechnic University

James F. Petrick
Department of Recreation, Park and Tourism Sciences Texas A&M University

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Kam Hung,
Assistant Professor
School of Hotel and Tourism Management
Hong Kong Polytechnic University

and

James F. Petrick,

Professor
Department of Recreation, Park and Tourism Sciences
Texas A&M University

ABSTRACT

Decision-making has been studied extensively in tourism literature. Different models and theories have been proposed to explain travel decision-making. Taking another approach, this study applies the Motivation-Opportunity-Ability (MOA) model in cruise tourism to study the influential factors of travel intentions. Both qualitative and quantitative methods were adopted. The study results indicate that the MOA model is an acceptable model for explaining travel intentions.

Keywords: *Self-congruity, functional congruity, travel constraints, self-efficacy, travel intentions.*

INTRODUCTION

Decision-making studies are multi-displininary in nature and have evolved from a wide range of fields including psychology (e.g., Harmon-Jones, 2000; Oyserman, Fryberg, & Yoder, 2007; Pablo, Petty, & Barden, 2007), sociology (e.g., Howard, 2000; Pierce et al, 2003, Lawler, Thye, & Yoon, 2000), marketing (e.g., Simonson et al, 2001; Cotte & Wood, 2004; Mandel, 2003), communication (e.g., Homer, 2006; Till & Baack, 2005; Katz, 1973), and so on. Although different theories or conceptual models (e.g., Theory of Planned Behavior by Ajzen, 1991; Goal Hierarchy of Motivation by Bettman, 1979; Elaboration Likelihood Model of Persuasion by Petty & Cacioppo, 1980; Brand Personality by Aaker, 1997) have been proposed for explaining consumers' decisions, no one unifying theory has been agreed upon by scholars to fully explain decision making (Sirakaya & Woodside, 2005). Simonson et al (2001, pp. 251) suggested that this might be because "consumer behavior is too complex to be meaningfully captured in a single model." Alternative approaches may enhance our understanding of decision making from different ways. The current study proposes an alternative model, situated in the Motivation-Opportunity-Ability (MOA) framework, for explaining travel intentions.

LITERATURE REVIEW

The MOA model was first proposed by MacInnis and Jaworski (1989) within the context of information processing. The model suggests that motivation, opportunity, and ability (MOA), are antecedents of consumer behavior(s). The MOA approach has been adopted by several scholars on a wide range of topics (e.g., Hung, Sirakaya-Turk & Ingram, 2010; Batra & Ray, 2006; Wiggins, 2004). A commonality found among these applications of the MOA model is that all participants in these studies were engaged in information processing or a decision-making process and their decisions are mainly influenced by three factors: their motivation, opportunity and ability. Similarly, travel propensity can be considered as the outcomes of information processing and to be subject to the influence of these three factors.

Motivation

Self-congruity is defined in marketing research as "the match between consumers' self-concept and the user's image of a given product, brand, store, etc" (Kressmann et al., 2006, pp. 955). The congruence between the perceived image of a product and self-image can lead to preference of the product and thus, result in purchasing behavior. In other words, people tend to behave congruent to their self-images (Mannetti, Pierro, & Livi, 2004). Although the self-congruity concept was first proposed and developed in social psychology, it has been suggested as useful in explaining various consumers' behaviors. Past research has suggested that self-congruity theory predicts behavioral intentions (Mannetti, Pierro, & Livi, 2004), product evaluation (Barone, Shimp, & Sprott, 1999), consumer satisfaction (Magin et al., 2003), brand loyalty (Kressmann et al., 2006), and brand preference (Aaker, 1999). Tourism is one of the new fields in which congruity theory has been applied. The studies of tourism and congruity suggested that self-congruity and/or functional congruity have positive influence on customer satisfaction (Chon, 1992), pre-trip visitation interest and purchase proclivity (Goh & Litvin, 2000; Litvin & Goh, 2002), and travel intentions (Kastenholz, 2004). In addition, past studies (Sirgy et al, 1991; Sirgy & Su, 2000) have further suggested that self-congruity has a positive impact on functional congruity, which means that the congruence between product image and self image can positively distort customers' evaluations of a product's functional congruity. Therefore, it is hypothesized that:

> *H1*: The congruity between self-images and affective destination images (i.e., self-congruity) influences people's travel intentions. The more congruent images are, the more likely people would like to travel to a destination.
>
> *H2*: The congruity between ideal functional images of destination attributes and cognitive destination images along the same attributes (i.e., functional congruity) influences people's travel intentions. The more congruent images are, the more likely people would like to travel to a destination.
>
> *H3*: Functional congruity is positively affected by self-congruity. People who have higher congruence between their self images and affective destination images are more likely to have higher functional congruity toward a destination.

Opportunity

Travel constraints are used as indicators for opportunity to travel in this study. Travel constraints can be defined as those factors that inhibit continued traveling, cause inability to travel, result in the inability to maintain or increase frequency of travel, and/or lead to negative impacts on the quality of the travel experience (modified from Nadirova & Jackson's (2000) definition of leisure constraints). The presence of travel constraints may lead to diminishing opportunities for gaining desirable travel experiences. Crawford, Jackson and Godbey (1991) categorized leisure constraints into three dimensions: intrapersonal, interpersonal, and structural constraints. These three dimensions of leisure constraints was subsequently proposed to be linked together in Crawford, Jackson and Godbey's (1991) hierarchical model, which suggests that different types of constraints influence people's decision making in a sequential order. Refinements to the hierarchical model of leisure constraints have been made with the emergence of the constraint negotiation concept proposed by Crawford, Jackson, and Godbey (1991). This concept suggests that constraints are negotiable rather than insurmountable, and nonparticipation is no longer interpreted as the sole outcome of constraints, rather, it is only one of many possible outcomes (Scott, 1991). Past studies have provided empirical evidence for this hypothesis (e.g., Kay and Jackson, 1991; Shaw, Bonen, and McCabe, 1991). These studies suggested that while constraints have an adverse impact on leisure participations, the activation of constraint negotiation may mediate this effect. Therefore, it is hypothesized that:

H4: Travel constraints negatively influence travel intentions. The higher the level of travel constraints a person experiences, the less likely the person would like to travel.

H5: The presence of travel constraints initiates adoption of constraint negotiation strategies. The more constrained a person is, the more likely the person will use negotiation strategies.

H6: Constraint negotiation positively influences travel intentions. The more constraint negotiation strategies a person adopts, the more likely the person would like to travel.

Ability

Ability is the last antecedent of the MOA model. A person must possess the appropriate abilities in the relevant domain of behavior, in order to be able to perform a given behavior. The ability to perform a behavior can be measured by self-efficacy, which refers to the perceived capability of ones' self to execute a behavior (Bandura, 1977). Although the role of self-efficacy in constraint negotiation has long been suggested (Jackson, Crawford, & Godbey, 1993), it was not empirically tested until recently (Loucks-Atkinson & Mannell, 2007). "Negotiation efficacy" has been used when applying self-efficacy in the context of constraint negotiation (Loucks-Atkinson & Mannell, 2007). It refers to the confidence in one's ability to use negotiation resources effectively (Hubbard & Mannell, 2001). Therefore, the specific hypothesis to be tested is:

H7: Self-efficacy moderates the relationship between travel constraints and constraint negotiation.

The final proposed conceptual framework is shown in Figure 1.

Figure 1
Congruity, Constraints, and Self-efficacy Model
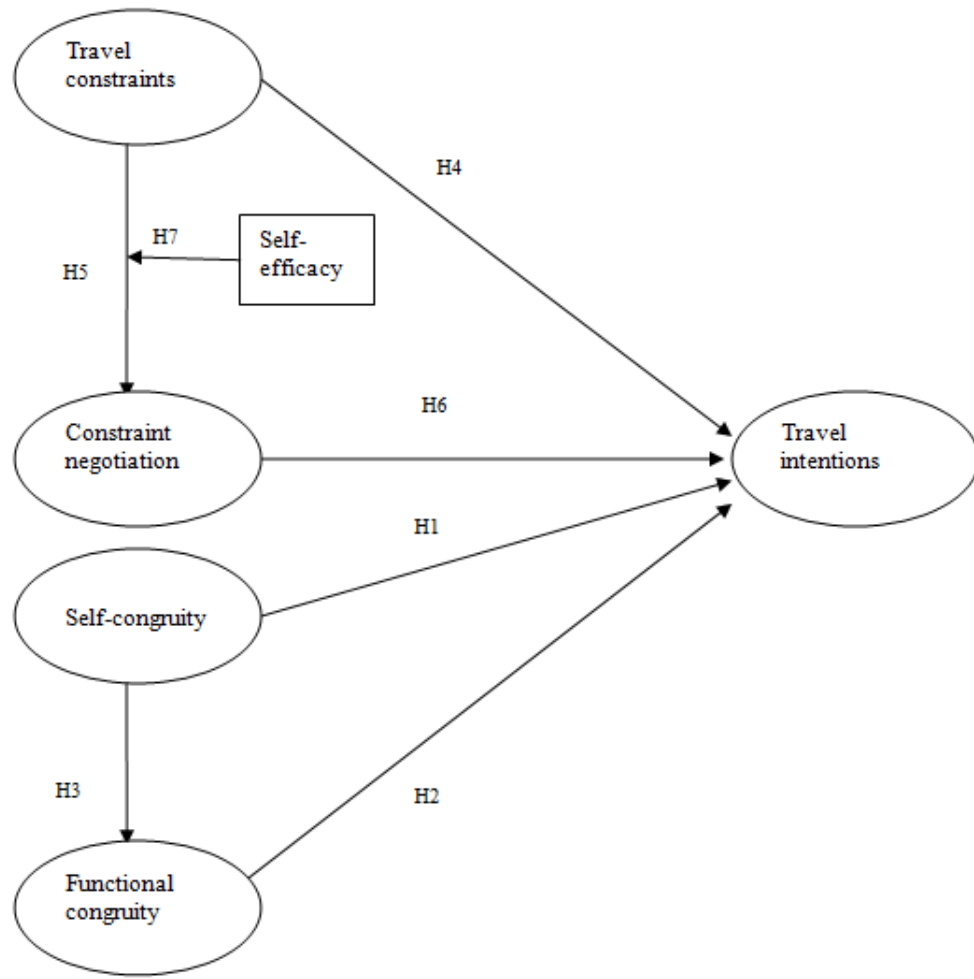
RESEARCH METHODS

The proposed model was tested in the context of cruise travel. The measurement scales were developed according to Churchill's (1979) recommended measurement scale development procedures including 53 semi-structured interviews with both cruisers and non-cruisers to generate measurement items for the constructs of interest, forming a panel of experts comprised of seven tourism researchers to refine measurement scales, and pilot test the questionnaire with 293 undergraduate students. An exploratory factor analysis (EFA) was performed on the data to determine the dimensions and reliability of the scales. An online panel was followed to collect data to test the proposed model and hypothesized relationships. Nine hundred and ninety responses were yielded in the current study.

FINDINGS AND DISCUSSIONS

Structural Equation Modeling (SEM) was performed with Analysis of MOment Structures (AMOS 7.0) to determine the overall fit of the proposed model with the data, including the causal relationships between major variables measured, and the influences of constructs of interest on behavioral intentions. Both RMSEA (.057) and CFI (.905) indicated that the proposed model had an acceptable fit to the pooled data. Therefore, the baseline model was established. It was also found that all constructs met the requirements of reliability (Table 1) and validity (Table 2). The tests of hypotheses one to six suggested that all hypotheses except one (Hypothesis 5) were supported by the data (Table 3). To test hypothesis seven, the baseline model was tested separately with high-efficacy and low-efficacy groups. The RMSEA (High efficacy group: 0.058; Low efficacy group: 0.059) suggested that the model had an acceptable fit to both efficacy groups and indicated similar factor structures across the two groups. An invariance test followed. The results suggested that the regression path(s) was not equivalent across high and low self-efficacy groups ($\Delta\chi^2$ = 12.6; Δdf = 6). Further investigation was conducted to reveal which regression path(s) in the proposed model was affected by self-efficacy. It was found that "Self-congruity→ Travel intention" was the only path being moderated by self-efficacy in the structural model. Therefore, the hypothesis 7 was rejected (Table 4).

Table 1
Reliability and Convergent Validity

	Cronbach's alpha	Factor loading	Mean	SD[a]
SELF-CONGRUITY	.938			
• Exciting—Gloomy		.724	4.732	1.127
• Pleasant—Unpleasant		.867	4.998	1.162
• Relaxing—Distressing		.821	4.865	1.150
• Enjoyable—Not enjoyable		.903	4.963	1.105
• Comforting—Uncomforting		.837	4.925	1.130
• Calming—Annoying		.816	4.994	1.092
• Fun—Boring		.812	4.904	1.180
FUNCTIONAL CONGRUITY	.904			
• Cruise ships provide excellent service.		.797	5.429	.775
• I'll have higher than average service if I go on a cruise		.736	5.323	.867
• Cruising means lots of eating options.		.697	5.479	.788
• Cruise ship staff will care for my needs.		.776	5.484	.766
• Cruising provides me an opportunity to eat good food.		.746	5.484	.766
• Cruising has a variety of activities available.		.682	5.543	.720
• Cruising provides me an opportunity to engage in activities different from those available at home.		.630	5.443	.823
• Cruising has a wide range of itineraries for everybody.		.672	5.391	.786
• Cruising has good entertainment.		.699	5.385	.799
TRAVEL CONSTRAINTS				
Intrapersonal:	.841			
• I worry about security on cruise ship.		.627	2.111	1.233
• I can't cruise because I have poor health.		.700	1.560	.964
• I don't cruise because I have claustrophobia.		.820	1.590	.986

• I have sea-sickness/motion-sickness.		.653	1.030	1.270
• I have a fear of the water/ocean.		.700	1.877	1.183
• I don't cruise because my spouse/partner has poor health.		.670	1.590	.986
Interpersonal constraints	.755			
• I might not like my dinner companions on a cruise.		.551	2.142	1.216
• I have no companion to go on a cruise with.		.744	1.929	1.339
• I might be lonely on a cruise.		.911	1.867	1.170
Structural constraints	.811			
• It's difficult for me to find time to cruise.		.818	2.391	1.349
• I don't cruise due to my work responsibilities.		.824	1.971	1.220
• I don't cruise because I have too many family obligations.		.675	2.193	1.282
Not an option	.881			
• There are many other travel alternatives that I'd like to do before cruising.		.718	2.627	1.296
• I am not interested in cruising.		.857	1.946	1.220
• My family/friends do not cruise.		.621	2.166	1.263
• Cruising never occur to me as a travel option.		.839	2.115	1.260
• Cruising is not my family's lifestyle.		.854	2.183	1.257
CONSTRAINT NEGOTIATION				
Improving finances & time management	.961			
• Save up money to cruise.		.834	2.988	1.277
• Budget my money for cruising.		.820	2.709	1.160
• Find a cruise that best fits within my budget.		.809	3.101	1.219
• Find a cruise that best fits my time limitations.		.817	3.055	1.263
• Set aside time for cruising.		.885	2.855	1.195
• Plan ahead for things so that I can cruise.		.941	2.855	1.263
• Be organized so that I can cruise.		.924	3.022	1.240
• Prioritise what I want to do, and make cruising a priority sometimes.		.902	2.911	1.219
Changing interpersonal relations	.872			
• Try to find people with similar interests to cruise with.		.878	2.538	1.230
• Find people to cruise with.		.788	2.586	1.214
• Organize cruising with my own group.		.844	2.424	1.227
TRAVEL INTENTIONS				
• I'll say positive things about cruising to other people.	.938	.871	3.940	1.080
• I intend to cruise in the next 3 years.		.790	3.612	1.407
• I'll recommend cruising to others.		.980	3.824	1.239
• I'll encourage friends and relatives to go on a cruise.		.943	3.803	1.258

a. SD refers to standard deviation.

Table 2
Discriminant Validity of Measurement Scales

	Intrapersonal constraints	Interpersonal constraints	Structural constraints	Not an option	Improving finances & time	Changing interpersonal relations	Functional congruity	Ideal self-congruity	Travel intention
					Correlations				
Intrapersonal constraints	1								
Interpersonal constraints	.610	1							
Structural constraints	.571	.485	1						
Not an option	.645	.568	.483	1					
Improving finances and time	-.125	-.177	-.170	-.499	1				
Changing Interpersonal relations	.088	.030	.005	-.221	.706	1			
Functional congruity	-.109	-.138	-.157	-.309	.280	.183	1		
Ideal self-congruity	-.148	-.042	.002	-.413	.384	.280	.302	1	
Travel intention	-.314	-.314	-.211	-.704	.606	.389	.339	.478	1

Table 3
Regression Paths of the MOA Model

Hypotheses	Regression paths	Standard path coefficient	Standard error	Critical ratio (t-value)	p	Support of hypotheses
H1	Self-congruity → Travel intention	.171	.029	6.035	p < .001	Supported
H2	Functional congruity → Travel intention	.078	.049	3.036	p < .05	Supported
H3	Self-congruity → Functional congruity	.307	.020	8.298	p < .001	Supported
H4	Constraints → Travel intention	-.491	.084	-10.942	p < .001	Supported
H5	Constraints → Negotiation	-.442	.075	-7.792	p < .001	Rejected
H6	Negotiation → Travel intention	.254	.039	9.128	p < .001	Supported

Table 4
Results of Invariance Testing on All Regression Paths

Model	$\Delta\chi^2$	Δdf	p
Travel constraints→ Constraint negotiation	0.3	1	invariant
Travel constraints→ Travel intention	0.1	1	invariant
Constraint negotiation→ Travel intention	1.2	1	invariant
Self-congruity→ Functional congruity	3.6	1	invariant
Self-congruity→ Travel intention	7.4	1	**
Functional congruity→ Travel intention	2.3	1	invariant

* p < .05, ** p < .01, *** p < .001

CONCLUSIONS

This study explored different factors which influence people's intentions to take a cruise vacation by using an alternative travel decision model constructed based on the MOA framework (MacInnis & Jaworski, 1989). The first two hypotheses tested the effects of two types of congruity on travel intentions. The study provides further evidence of the influences of both rational and hedonic factors on travel intention. Therefore, while cruises strive to provide excellent cruising products and services, they also need to fulfill the emotional needs of cruisers and enhance their self-images. Hypothesis 3 suggested that functional congruity was positively influenced by self-congruity. The data suggested that this was the case. This implies that people who encounter self-congruity are more likely to distort their functional congruity to a positive direction. Therefore, cruise managers should strive to increase cruisers' self-congruity via various means such as promotional campaign to align cruise vacation images with cruisers' self images. For instance, being a fun person has been reported by most respondents as their ideal self-image. A fun image of a cruise vacation delivered in the promotional campaign to could inevitably increase this market's self-congruity.

Hypothesis 4 investigated the negative influence that travel constraints have on travel intentions. This hypothesis was supported by the current study. The results of the study suggest that travel constraints are an important variable influencing travel intentions. It is recommended that cruise managers therefore try to alleviate people's travel constraints. For instance, to reduce people's intrapersonal constraints such as worries about security on the cruise ship, the cruise may reveal its safety record to potential travelers. A pre-boarding orientation may also be organized to deliver safety information as well as to instruct passengers on some safety tactics. To reduce people's interpersonal constraints such as lack of companionship, cruise management may organize a dating service to match those people who are looking for partners on the cruise ship. For structural constraints, most respondents were concerned with their limited time and family/work obligations. The cruise may advertise its facilities such as internet access and child care services which allow people to work or be worry-free while having a vacation.

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