

University of Massachusetts Amherst
ScholarWorks@UMass Amherst

Travel and Tourism Research Association:
Advancing Tourism Research Globally

2010 ttra International Conference

Developing a Measurement Scale for Cruising Motivations

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

Follow this and additional works at: <https://scholarworks.umass.edu/ttra>

Hung, Kam and Petrick, James F, "Developing a Measurement Scale for Cruising Motivations" (2016). *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 14.

<https://scholarworks.umass.edu/ttra/2010/Oral/14>

This is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Travel and Tourism Research Association: Advancing Tourism Research Globally by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

Developing a Measurement Scale for Cruising Motivations

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

and

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

ABSTRACT

Although motivation has been extensively studied in the tourism literature, the discussion of motivation has not been expanded to cruise tourism. Following Churchill's (1979) recommended measurement scale development procedures, this study seeks to develop a measurement scale for cruising motivation. The final scale was deemed to be both reliable and valid. It is suggested that this study will serve as a stepping stone to further investigations on cruising motivations.

Keywords: *cruising motivations, measurement scale development.*

INTRODUCTION

The history of cruising can be traced back to as early as 17th century when Samuel Cunard traveled across the Atlantic with 63 passengers on a 1,154-ton steamship in 1840 (Gulliksen 2008). Early cruises were mainly provided for the function of transportation from point A to point B. However, cruise ships role of transportation diminished as a result of the emergence of airline services in the 1950s (Gulliksen 2008). Since then, seeking alternative revenue with the use of cruise services for the leisure traveler has become a lucrative business strategy for many cruise lines.

Today, taking a cruise vacation is a common option among many different travel alternatives and is a booming business. According to the Business Research and Economic Advisors (BREA, 2008), 9.2 million people embarked on cruise ships in U.S. ports in 2007, which comprised a 73% share of global embarkations and contributed \$18.7 billion to the U.S. economy. The popularity of cruise vacations is likely to continue given the vast number of Americans (51 million) who have indicated an interest in taking a cruise vacation within the next three years (CLIA 2008a). However, a recent cruise market profile study conducted by the CLIA (2008b) reflected that customers' needs and profiles are not static; rather, they are changing all the time. Therefore, understanding what today's customers want from their cruise vacation or why they take cruises is an essential step toward tailoring cruise services to meet cruisers' expectations. This study was conducted to better understand people's motives for cruising and to develop a cruise motivation measurement scale.

LITERATURE REVIEW

Motivation is an important determinant in the decision-making process as it affects both the direction and intensity of behaviors (Bettman 1979), and has arguably been one of the most

researched topics in a variety of fields (i.e., psychology, sociology, consumer behavior, and tourism). Various motivation theories have been developed such as drive reduction theory (Hull 1943; 1952), hierarchy of needs (Maslow 1943; 1954), expectancy-value theories (Lewin 1938), and goal directed behavior (Bettman 1979).

Various motivation theories or concepts have been proposed to explain tourist behavior. For instance, MacCannell (1973; 1999) suggested that tourists travel to other destinations to seek authentic opportunities when their usual environments lack such an experience. Plog (1974; 2001) allocated tourists in an allocentric-psychocentric continuum in which tourists were categorized according to their personalities toward novelty-seeking and implied that personality is one of the basic sources of travel motivation. Pearce and Caltabiano (1983) applied Maslow's hierarchy of needs to the study of tourist travel motivations, and suggested that experienced travelers are more likely to go on trips to fulfill higher level of needs (i.e., self actualization) than novice travelers. Pearce (1988) further elaborated this concept into the Leisure Career model in which tourists move upward to satisfy higher levels of needs in their travel career. Although many motivation theories have been proposed in past research, scholars have not perceived these approaches as competitive entities; rather, that they all contribute to the understanding of tourist behaviors in different ways. Thus, it is unlikely that scholars will agree on one unifying motivational theory in explaining tourist behavior.

In his early work, Dann (1977) suggested that people travel for two basic reasons: 1) to escape from boredom of usual residence, and 2) to gain status recognition from others. Crompton (1979) also identified nine socio-psychological motivations leading to a travel decision: escape from a perceived mundane environment, exploration and evaluation of self, relaxation, prestige, regression, enhancement of kinship relationship, facilitation of social interaction, novelty, and education.

Although travel motivation has been extensively studied in the tourism literature, the discussion of motivation has not been expanded to cruise tourism. Understanding the underlying motives to cruising is an important step to finding out why people cruise and what they are looking for from their trips. Therefore, this study was conducted to understand motivation to cruising and to develop a measurement scale for cruising motivation.

METHOD AND RESULTS

The current study adopted Churchill's (1979) recommended procedures to develop a measurement scale for motivations to cruising. Semi-structured interviews with a small sample (32) were first conducted to derive measurement items. Convenience sampling was used to select subjects for the study. Participants included cruise passengers embarking and debarking at Port Everglades in Fort Lauderdale, Florida. To understand cruising motivations, cruisers were asked what motivated them to cruise. A total of 63 cruise motivation items were generated from both interviews and past literature and were submitted for a review by a panel of experts which consisted of seven faculty who research tourism. The panel judged the redundancy, applicability, and representativeness of the measurement items in a cruising context. After review, 25 motivation items, related to six different motivations were retained. To further purify the measurement, a pilot test was conducted with 293 undergraduate students. An exploratory factor analysis (EFA) with a varimax rotation was performed on the data to determine the dimensions of the scale. Five motivation dimensions were identified. The Cronbach's Alpha for each dimension was greater than .7 and all item-to-total correlations were above .5.

An online panel survey was subsequently implemented with 564 cruisers and 333 non-cruisers to further validate the motivation scale. Structural Equation Modeling (SEM) was performed with Analysis of Moment Structures (AMOS 7.0) to determine the reliability and validity of the resultant motivation scale. Since the composite reliability of all dimensions of motivation were found to be larger than .70, the scale was deemed to be reliable (Table 1).

Table 1
Reliability of Motivation Measurement Scale

	Composite reliability	Cronbach's alpha
Self-esteem & social recognition	.874	.915
Escape/relaxation	.808	.829
Learning/Discovery & Thrill	.831	.840
Bonding	.856	.890
Socialization	.801	.840

To establish convergent validity, the magnitude of factor loadings should be greater than .60 (Bagozzi and Yi 1988). Since the CFA outputs suggested that all factor loadings were greater than .60 and were statistically significant ($p < .001$), the convergent validity of the scale was also deemed to be established. Discriminant validity of factors can be established when the square root of the average variance extracted for each of the factors is greater than the correlations among the constructs (Fornell and Larcker 1981). It was found that the measurement scale met the requirement of discriminant validity in the current study (Table 2).

Table 2
Discriminant Validity of Measurement Scale

	Self-esteem/ Social rec.	Escape/ Relaxation	Learning/ Discovery & Thrill	Bonding	Social
Self-esteem/ Social recognition	.708				
Escape/ Relaxation	.447	.718			
Learning/ Discovery & thrill	.385	.673	.745		
Bonding	.306	.538	.463	.865	
Socialization	.547	.400	.546	.279	.820

The bold diagonal elements are the square root of the variance shared between the constructs and their measures. Off diagonal elements are the correlations between constructs.

Although the above procedures demonstrated that the measurement scale developed for motivation to cruising had satisfying reliability and validity, the somewhat poor model fit indices (RMSEA = .115, NFI = .833, CFI = .844, GFI = .795, AGFI = .735) revealed potential problems associated with the structural motivation model. Modifications are often conducted to enhance the performance of a measurement scale or model being investigated (Netemeyer, Bearden, and Sharma 2003). To identify problematic measurement items and miss-fitting parameters in the original model, the use of modification indices (e.g., Byrne 1998; Maruyama 1998) and EFA (e.g., Lai 2007; Li 2006) have been recommended. Therefore, both modification indices and EFA were used as a reference for respecification in the current study. As a result, a four-dimensional structure for cruising motivation was derived. The scale was checked once again for its reliability and validity and the results suggested that the scale was both reliable and valid. Table 3 displays the resultant final measurement scale for motivation to cruising.

Table 3
Performance of Final Motivation Measurement Scale

	Factor ^a loading	S.E. ^b	Mean	S.D. ^c	C.R. ^d	p
Self-esteem & social recognition:						
• To do something that impresses others.	.721	.039	2.13	1.231	18.501	***
• To help me feel like a better person.	.827	.033	2.82	1.274	15.735	***
• To increase my feelings of self-worth.	.824	.031	2.47	1.233	15.868	***
• To derive a feeling of accomplishment.	.833	.031	2.90	1.248	15.476	***
• To photograph an exotic place to show friends.	.622	.052	3.01	1.290	19.625	---
Escape/relaxation:						
• So that I can be free to do whatever I want.	.786	.036	3.46	1.198	15.109	***
• To escape.	.806	.035	3.72	1.187	14.177	***
• To give my mind a rest.	.779	.033	3.63	1.141	15.396	---
Learning/Discovery & Thrill:						
• To gain knowledge.	.726	.035	3.75	1.061	15.361	***
• To enjoy activities that provide a thrill.	.706	.036	3.62	1.075	16.014	---
• To experience other cultures.	.763	.034	3.85	1.059	13.903	***
Bonding:						
• Because my friends/family want to cruise.	.868	.045	3.45	1.187	7.753	***
• To interact with friends/family.	.924	.045	3.57	1.149	4.285	---

^a. Items with factor loading lower than .5 were excluded from final scale.

^b. S.E. refers to standard error.

^c. S.D. refers to standard deviation.

^d. C.R. refers to critical ratio or t-value.

*** p < .001

DISCUSSIONS AND CONCLUSIONS

This study developed a measurement scale for motivations to cruising by following the rigorous procedures recommended by Churchill (1979). The final scale was deemed to be both reliable and valid. Given the increasing popularity of cruise tourism and scarcity of research in

this topic, the establishment of motivation scale in the cruising context is believed to be a timely contribution to the literature.

Several implications can be drawn from the current study. First, "Escape/Relaxation" was found to be the strongest motivation in both the interviews and survey. This suggests that people associate cruise tourism with freedom, escaping and relaxation and that these are primary reasons which motivate them to cruise. Therefore, when promoting cruise vacations to the public, promotional campaigns should demonstrate people enjoying their freedom, escaping from their mundane life, and/or resting on a cruise. Cruise tourism may be able to differentiate itself from other types of tourism by building an escaping or relaxing vacation image in order to convey cruising services to specific markets. However, marketers should also evaluate beforehand if this market segment is substantial enough to be profitable (Kotler, Bowen, and Makens 1998).

Second, different motivations to cruising were identified in the current study. This suggests that although travelers are motivated by the escaping and relaxing aspects of cruise tourism, they may also expect to receive other benefits from their cruise vacation (even though these perceived benefits may not be the primary reasons for them to go on a cruise). Therefore, focusing only on providing escaping and relaxing services is unlikely to fully satisfy customers. Rather, cruise ships should also strive to fulfill cruisers' desires for "Learning/Discovery & thrill," "Self-esteem/Social recognition" and "Bonding" when they are on board.

Finally, this study has developed a valid and reliable measurement scale for motivation to cruising. It can be regarded as a stepping stone to further investigations in this topic. However, further testing of the scale with other samples such as cruisers in the Asia Pacific region would be useful to refining the measurement scale and increasing the scale's generalizeability.

REFERENCES

- Bagozzi, R. P. and Y. Yi (1988). "On the evaluation of structural equation models." *Journal of the Academy of Marketing Science*, 16 (1): 74-94.
- Bettman, J. R. (1979). *An Information Processing Theory of Consumer Choice*. Reading, MA: Addison-Wesley Publishing Company.
- Business Research & Economic Advisors (BREA) (2008). *Executive Summary: The Contribution of the North American Cruise Industry to the U.S. Economy in 2007*. Retrieved February 14, 2009, from World Wide Web: <http://www.cruising.org/press/research/index.cfm>.
- Byrne, B. M. (1998). *Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.
- Churchill, G. A. (1979). "A paradigm for developing better measures of marketing constructs." *Journal of Marketing Research*, XVI (February): 64-73.
- Cruise Line International Association (CLIA) (2008a). *2008 CLIA Cruise Market Overview: Statistical Cruise Industry Data through 2007*. Retrieved February 14, 2009, from World Wide Web: <http://www.cruising.org/press/research/index.cfm>.
- Cruise Line International Association (CLIA) (2008b). *2008 Cruise Market Profile Study*. Retrieved February 14, 2009, from World Wide Web: <http://www.cruising.org/press/research/index.cfm>.
- Crompton, J. L. (1979). "Motivations for pleasure vacation." *Annals of Tourism Research*, 6 (4): 408-424.

- Dann, G. M. S. (1977). "Anomie, ego-enhancement and tourism." *Annals of Tourism Research*, 4: 184-194.
- Fornell, C. and D. F. Larcker (1981). "Evaluating structural equation models with unobservable variables and measurement error." *Journal of Marketing Research*, 18: 39-50.
- Gulliksen, V. (2008). "The cruise industry." *Society*, 45: 342-344.
- Hull, C. L. (1943). *Principles of Behavior*. New York, NY: Appleton-Century Crofts.
- Hull, C. L. (1952). *A Behavior System*. New Haven: Yale University Press.
- Kotler, P., J. Bowen, and J. Makens (1998). *Marketing for hospitality and tourism* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Lai, P. H. (2007). *Conserving the Rural Landscape of the Texas Hill Country: A Place Identity-Based Approach*. Unpublished dissertation. Texas A&M University, College Station.
- Lewin, K. (1938). *The Conceptual Representation and the Measurement of Psychological Forces*. Durham, NC: Duke University Press.
- Li, X. (2006). *Examining the Antecedents and Structure of Customer Loyalty in a Tourism Context*. Unpublished dissertation. Texas A&M University, College Station.
- MacCannell, D. (1973). "Staged authenticity: arrangements of social space in tourist settings." *American Journal of Sociology*, 79: 589-603.
- MacCannell, D. (1999). Staged authenticity. In *The Tourist: A New Theory of the Leisure Class*. (3rd ed.). Berkeley: University of California Press, pp. 91-107
- Maruyama, G. M. (1998). *Basics of Structural Equation Modeling*. Thousand Oaks, CA: SAGE Publication, Inc.
- Maslow, A. H. (1943). "A theory of human motivation." *Psychological Review*, 50: 370-396.
- Maslow, A. H. (1954). *Motivation and Personality*. New York: Harper and Row.
- Netemeyer, R. G., W. O. Bearden, and S. Sharma (2003). *Scaling Procedures: Issues and Applications*. Thousand Oaks, CA: Sage Publications, Inc.
- Pearce, P. L. (1988). *The Ulysses Factor: Evaluating Visitors in Tourist Settings*. New York: Springer-Verlag.
- Pearce, P. L., and M. L. Caltabiano (1983). "Inferring travel motivation from travellers' experiences." *Journal of Travel Research*, 22 (2): 16-20.
- Plog, S. C. (1974). "Why destination areas rise and fall in popularity." *Cornell Hotel and Restaurant Quarterly*, 14 (4): 55-58.
- Plog, S. (2001). "Why destination areas rise and fall in popularity." *Cornell Hotel and Restaurant Administration Quarterly*, 42 (3): 13-24.