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ABSTRACT

An important task for the cruise industry is to convert potential cruisers to cruisers, which may be best accomplished by acknowledging the different features of a cruise that influence the decision making of cruisers and potential cruisers. Using a sample of cruisers and potential cruisers with similar demographics, the researchers found that cruisers and potential cruisers perceive six dimensions of onboard features, but attach different importance to some of the dimensions. The results support the theoretical prediction based on the motivational and knowledge differences between cruisers and potential cruisers.

INTRODUCTION

The cruise industry is young with strong market potential. To date, only 19.9% of Americans have cruised (CLIA: Cruise Line International Association 2008a). Therefore, one of the most important tasks for the cruise industry is to convert potential cruisers (i.e., people who have not cruised but may be interested in taking a cruise in the future) to cruisers (CLIA 2008a). This task may be best accomplished by acknowledging the features of a cruise that influence the decision making of cruisers and potential cruisers. Cruisers and potential cruisers may have different motivations (Gitelson and Crompton 1984) and product knowledge (Beattie 1982; Hutchinson and Eisenstein 2008). As a result, they may differ from each other in terms of the importance they attach to product attributes in cruise decision making. Understanding potential differences is particularly important in today's diversified cruise industry because consumers are considering an increased number of product attributes in their decision making (Dowling 2006). Therefore, the objective of this study is to examine the differences between cruisers and potential cruisers in terms of the importance attached to various onboard features in cruise decision making.

CRUISERS VS. POTENTIAL CRUISERS: DIFFERENCES IN PERCEIVED IMPORTANCE OF ONBOARD FEATURES

Motivation-based differences

From a motivational perspective, potential cruisers may be more novelty-seeking and place particular importance on a variety of onboard features than cruisers because the cruise is a brand new travel experience for them (Bettman, Luce, and Payne 1998). Support for this argument may be found in studies of first-time (i.e., potential) destination travelers. For example, Gitelson and Crompton (1984) reported that first-time travelers show a higher level of novelty and variety seeking than repeat travelers during trip planning. Lehto, O'Leary, and Morrison (2005) found that novice tourists tend to experience and sample a variety of activities and places, while experienced tourists tend to narrow down their place and activity choices. Consistent with these findings, other researchers (e.g. Lau and McKercher 2004; Oppermann 1997) found that compared to repeat travelers, first-time travelers are more active and explore the destination more extensively.

Knowledge-based differences

In addition to motivation, cruisers and potential cruisers may differ from each other in terms of knowledge about onboard features. Consumer knowledge has two components: familiarity and expertise (Hutchinson and Eisenstein 2008; Jacoby, Troutman, Kuss, and Mazursky 1986). Familiarity refers to *the number of product-related experiences that have been accumulated by the consumer*, while expertise refers to *the consumer's ability to perform product-related tasks successfully* (Jacoby et al. 1986). In general, increased familiarity leads to increased expertise (Alba and Hutchinson 1987). According to Attribute Knowledge Theory (e.g., Alba and Hutchinson 1987; Hutchinson and Eisenstein 2008), novice consumers, with very limited product-related experience, usually have little understanding of the attribute importance. As a result, they may give a similar weight to various attributes in the decision making (i.e., unweighted approach) (Park 1976). Experienced consumers, on the other hand, usually have ample knowledge about product attributes. Therefore, they are more likely to focus their attention on the most relevant and important attributes during the decision making (Brucks 1985; Johnson and Russo 1984; Kerstetter and Cho 2004). Further, experienced consumers with product expertise may rely on important attributes as heuristics and neglect less important features in their decision making (Chaiken, Liberman, and Eagly 1989; Gigerenzer and Goldstein 1996; Petty and Wegener 1998). In summary, cruisers are expected to be more knowledgeable about onboard features than potential cruisers because cruisers have used onboard features in the past. As a result, cruisers should be more likely to focus on important onboard features and neglect unimportant features than potential cruisers during the decision making process.

The motivational and knowledge differences may jointly result in the following in terms of the importance cruisers and potential cruisers attach to onboard features. With respect to unimportant or peripheral onboard features, potential cruisers may attach more importance than cruisers. This is because peripheral or onboard features may be valued by potential cruisers (due to their strong novelty and variety seeking motivations), but devalued by cruisers (due to their neglect and suppression of unimportant features). In terms of the importance attached to central onboard features, the differences between cruisers and potential cruisers may be minimal. Although those features may receive more importance from novelty-seeking potential cruisers, they are also over-emphasized by cruisers during the decision making. In other words, the

onboard features deemed unimportant or peripheral by cruisers should be given more importance by potential cruisers, while the features deemed important or central by cruisers should be rated similarly by potential cruisers. The hypotheses are summarized as follows:

H1. Cruisers and potential cruisers differ from each other in terms of the importance they attach to onboard features. Specifically:

- H1a.* Potential cruisers will attach a higher level of importance to unimportant onboard features than cruisers;
- H1b.* Potential cruisers and cruisers will attach a similar level of importance to important onboard features.

METHODOLOGY

Development of instruments

A list of onboard features of a cruise was developed in three steps. First, a pool of onboard features was generated based on 95 cruiser reviews on a major cruise review website. The 95 cruiser reviews were randomly selected from a total of 1,956 reviews for 20 different cruise ships. The 20 cruise ships were randomly selected from a total of 185 membership cruise ships in CLIA in 2008. Second, in-depth interviews were conducted with five cruisers and five potential cruisers in a college town in the Northeastern US. The interviews yielded no new onboard features. Third, the onboard feature pool was screened by three researchers to remove ambiguous and redundant items. A total of 28 onboard features was generated and included in a questionnaire (Table 2). Respondents (i.e., potential cruisers and cruisers) were asked to indicate how important the quality of each onboard feature is or will be to them when making a cruise vacation decision using a 7-point Likert scale (1=not at all important, 4=somewhat important, 7=very important). Questions regarding socio-demographic information were also included in the questionnaire.

Data collection

Data were collected online with the help of a sampling agency during one week in November 2009. Two questions were used to identify cruisers and potential cruisers: 1) number of cruises taken in the past; 2) interest in cruising in the future. Respondents who have cruised in the past were identified as cruisers, while respondents who have not cruised but interested in cruising were identified as potential cruisers. According to the information obtained from the online reviews and interviews, gender, age, and income are very likely to affect consumers' perception of the importance of onboard features. To rule out these confounding variables in the comparison, a nationwide random stratified sampling (Babbie 2008) was employed to ensure that both cruisers and potential cruisers have a similar profile in terms of these three variables with the 2008 national representative sample of prime cruisers (i.e., age \geq 25, annual household income \geq \$40,000) (see CLIA 2008b).

Data analysis

The data were analyzed using two steps. In the first step an exploratory factor analysis (EFA, principle component method with varimax rotation) was used to explore the underlying dimensions of onboard features. In cases where different dimensions of onboard features existed with a good level of reliability, an index was created for each dimension by averaging its onboard features (Hair, Black, Babin, Anderson, and Tatham 2006). In the second step, Multivariate Analysis of Variance (MANOVA) was used to test the overall difference between

cruisers and potential cruisers in terms of perceived importance of onboard features. When the MANOVA results were statistically significant, subsequent Analysis of Variance (ANOVA) was used to document the dimension that differed between the two groups. SPSS 17.0 was used to perform the data analysis.

RESULTS

Sample characteristics

A total of 216 cruisers and 153 potential cruisers responded to the on-line questionnaire. Table 1 reported the socio-demographic characteristics of the sample. Respondents reside in 45 different states, report an average age of 50, and most are white and married. Approximately 60% of the respondents are female, have obtained a college or higher degree, and report an annual household income of \$75,000 or higher. The demographics of the respondents are similar to those of “cruisers” as reported by CLIA (2008b). Results of Chi-square analysis and independent sample nonparametric tests showed that there were no significant differences between cruisers and potential cruisers in terms of their demographics ($p > .10$).

Table 1: Respondents’ Socio-Demographic Characteristics

	PC	CR	NR		PC	CR	NR
Gender	%	%	%	Annual household income	%	%	%
Female	59.3	58.8	50	\$40,000 - \$49,999	11.3	6.9	10
Male	40.7	41.2	50	\$50,000 - \$59,999	12.0	9.8	9
				\$60,000 - \$74,999	19.3	18.1	15
Age				\$75,000 - \$99,999	19.3	22.1	20
25-29	4.7	3.4	6	\$100,000 - \$199,999	35.3	38.2	39
30-39	14.7	16.2	21	≥ \$200,000	2.7	4.9	11
40-49	36.7	28.9	27				
50-59	22.7	26.0	24	Education			
60-74	17.3	20.6	19	High school or less	20.0	20.1	
≥ 75	4.0	4.9	4	Technical degree	10.7	10.3	31
<i>Mean age</i>	49.5	50.9	50	Associate degree	21.3	17.2	
				4-year degree	34.0	30.4	
Marital status				Masters degree	10.0	17.6	69
Married	70.0	75.0	86	Doctoral degree	4.0	4.4	
Divorced/separated	10.7	8.8					
Single	13.3	9.8	14	Employment			
Others	6.0	6.4		Full-time	43.3	45.6	62
				Non-full-time	56.7	54.4	38

Note: PC=Potential cruisers in this study; CR=Cruisers in this study; NR=Cruisers in CLIA survey

Exploratory factor analysis

Prior to interpreting the results of the EFA, the appropriateness of data for the EFA was examined. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .87, which exceeded the recommended threshold value (.50) (Hair et al. 2006). In addition, the Bartlett’s Test of Sphericity was highly significant ($p < .001$), indicating that the inter-correlations of onboard features are sufficient for factor analysis. Therefore, the data was deemed appropriate for EFA. Results of the EFA showed an extraction of six dimensions, with a total explained variance of 64.8% (Table 2). Based on the onboard features that loaded on each dimension, the six

dimensions were labeled: 1) core features (restaurants, cabin, food, and room service, crew services, and communication from the director); 2) recreation and sport features (sport platform, wall climbing, mini golf, ball facilities, and running/walking track, swimming pools/whirlpools/hot tubs); 3) entertainment features (games/contests/tournaments, social gathering/parties, night clubs, casino, shows/performance, and bars/lounges); 4) fitness and health features (spa, fitness center/training, and beauty salon); 5) children features (babysitting services and children's center and programs); and 6) supplementary features (library, educational classes, internet café/computer rooms, business/conference center, laundry). The Cronbach alphas for the six dimensions ranged from .79 to .93, indicating a good level of reliability (Robinson, Shaver, and Wrightman 1991). Therefore, an index was created for each dimension by averaging its onboard features (Hair et al. 2006).

Table 2. Factor Loadings in EFA

Onboard Features	D1	D2	D3	D4	D5	D6
Food	.824					
Restaurants	.758					
Crew services	.731					
Cabin	.659					
Communication from the director	.603					
Room service	.471					
Sport platform		.772				
Wall climbing		.722				
Ball facilities		.669				
Miniture golf		.632				
Running/walking track		.630				
Swimming pools/whirlpools/hot tubs		.452				
Night clubs			.766			
Social gathering/parties			.740			
Casino			.710			
Games/contests/tournaments			.697			
Bars/lounges			.665			
Shows/performance			.588			
Spa				.720		
Beauty salon				.637		
Fitness center/training				.569		
Babysitting services					.852	
Children's center and programs					.835	
Library						.817
Educational classes						.705
Internet café/computer rooms						.703
Business/conference center						.700
Laundry						.622
<i>Cronbach alpha</i>	.791	.846	.838	.836	.933	.825

Note: D1= core features; D2= recreation and sport features; D3= entertainment features;
D4= fitness and health features; D5= children features; D6= supplementary features.

Differences between cruisers and potential cruisers

Results of MANOVA (Table 3) indicated that there was significant overall difference between cruisers and potential cruisers in terms of the importance attached to onboard features ($p < .05$). Subsequent ANOVAs (Table 4) indicated that potential cruisers attached more importance than cruisers to “recreation and sport features” ($M_{\text{potential}}=3.70$ vs. $M_{\text{cruiser}}=3.32$, $p < .01$); “supplementary features” ($M_{\text{potential}}=3.76$ vs. $M_{\text{cruiser}}=3.28$, $p < .01$); and “fitness and health features” ($M_{\text{potential}}=4.14$ vs. $M_{\text{cruiser}}=3.71$, $p < .05$). No significant group differences were observed for “entertainment features” ($M_{\text{potential}}=4.48$ vs. $M_{\text{cruiser}}=4.34$); “core features” ($M_{\text{potential}}=5.79$ vs. $M_{\text{cruiser}}=5.80$); or “children features” ($M_{\text{potential}}=2.59$ vs. $M_{\text{cruiser}}=2.35$).

Table 3. Results of MANOVA

	Effect	Value	F	Hypothesis df	Error df	<i>p</i> -value
Intercept	Pillai's Trace	.978	2703.282	6.0	362.0	.000
	Wilks' Lambda	.022	2703.282	6.0	362.0	.000
	Hotelling's Trace	44.806	2703.282	6.0	362.0	.000
	Roy's Largest Root	44.806	2703.282	6.0	362.0	.000
Type	Pillai's Trace	.037	2.344	6.0	362.0	.031
	Wilks' Lambda	.963	2.344	6.0	362.0	.031
	Hotelling's Trace	.039	2.344	6.0	362.0	.031
	Roy's Largest Root	.039	2.344	6.0	362.0	.031

Table 4. Results of ANOVA

		SS	<i>df</i>	MS	<i>F</i>	<i>p</i> -value
Recreation and sport features	Between Groups	12.760	1	12.760	7.113	.008
	Within Groups	658.351	367	1.794		
	Total	671.111	368			
Entertainment features	Between Groups	1.913	1	1.913	1.089	.297
	Within Groups	648.534	369	1.758		
	Total	650.447	370			
Supplementary features	Between Groups	20.161	1	20.161	11.054	.001
	Within Groups	669.368	367	1.824		
	Total	689.529	368			
Fitness and health features	Between Groups	16.751	1	16.751	6.374	.012
	Within Groups	969.827	369	2.628		
	Total	986.579	370			
Core features	Between Groups	.011	1	.011	.014	.907
	Within Groups	280.397	367	.764		
	Total	280.407	368			

Children features	Between Groups	4.771	1	4.771	1.120	.291
	Within Groups	1563.052	367	4.259		
	Total	1567.822	368			

DISCUSSION AND MARKETING IMPLICATION

Our hypotheses were generally supported by the results. Potential cruisers attach more importance than cruisers to “recreation and sport features,” “fitness and health features,” and “supplementary features.” All these features were considered to be unimportant or less than “somewhat important” by cruisers (i.e., $M < 4.0$). With respect to the features deemed somewhat important or important by cruisers (i.e., $M > 4.0$), however, potential cruisers’ importance ratings were similar to those of cruisers. Thus, this differential pattern provides support for the theoretical prediction based on the motivational and knowledge differences between cruisers and potential cruisers. On one hand, potential cruisers are strongly motivated by novelty and curious about various onboard features (Gitelson and Crompton 1984; Lau and McKercher 2004). As a result, they pay particular attention to each onboard feature during the decision (i.e., motivation-based; Bagozzi and Dholakia 1999). Alternatively, cruisers who have ample knowledge about onboard features may tend to over-emphasize important features and deemphasize unimportant features (i.e., knowledge-based; Gigerenzer and Goldstein 1996). Consequently, the cruisers and potential cruisers only differ from each other in terms of the importance they attach to relatively unimportant onboard features. The importance attached to “children features” by the two groups, however, was different from our prediction. Despite being an unimportant dimension, “children features” did not receive significantly different importance ratings from cruisers and potential cruisers. A possible explanation is that consumers’ concern with the “children features” was mostly determined by whether they cruise with children, but not their novelty seeking motivation or product-related knowledge.

The results of this study do make several contributions to the tourism literature. First, we examined the differences between cruisers and potential cruisers. Although somewhat similar, the comparison of cruisers potential cruisers is different from that of first-time and repeat destination visitors addressed in previous studies. Potential cruisers represent a group of consumers who are new to the product category (i.e., cruise), while first-time destination travelers have had experiences with the product category (i.e., destination). Second, previous studies mostly use a motivational framework to explain the differences between first-time/novice and repeat/experienced tourists. The results of this study suggest that those differences could be better understood by accounting for the knowledge-based differences between the two groups. In addition, the validity of the findings of this study was improved by ruling out several potential confounds (i.e., socio-demographic variables) in the research design (Shadish, Cook, and Campbell 2002), which have often been neglected in similar studies

This study also has implications for cruise marketers. First, cruisers and potential cruisers perceive several dimensions of onboard features. Therefore, cruise marketers should organize various onboard features into meaningful dimensions (e.g., sport and health) when promoting their products because the messages with a structure congruent to consumers’ mental representation will be more persuasive through improved information processing (Lee and Aaker 2004; Waenke, Bohner, and Jurkowitsch 1997). Second, cruisers and potential cruisers differ from each other in terms of the importance attached to onboard features. According to our results, potential cruisers attach more importance to “recreation and sport features,” “fitness and health features,” and “supplementary features” than cruisers during the decision making process.

Therefore, cruise marketers should pay more attention to these three aspects when targeting potential cruisers.

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