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INTERNATIONAL LEISURE TOURISTS' INVOLVEMENT PROFILE

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Abstract: The involvement construct has received a great deal of attention in recent years. However, the majority of research on this topic has focused on internal tourists, recreational activities participants, or associated services and products. Using survey data collected from European leisure tourists at an international destination, this study examined the underlying dimensions of their involvement. Scale unidimensionality is first revealed by an exploratory factor analysis and validated by a confirmatory factor analysis. The data suggested that this is a three dimensional construct: pleasure/interest, risk probability, and risk importance. Construct validity, including discriminant, convergent and nomological validity, and reliability are also satisfactorily established. **Keywords:** international tourists, involvement, confirmatory factor analysis, scale development. © 2003 Elsevier Ltd. All rights reserved.

Résumé: Profil de la participation des touristes internationaux de loisirs. La construction théorique de la participation a eu beaucoup d'attention dans ces dernières années. Le plus grand nombre de recherches à ce sujet ont cependant surtout porté sur les touristes domestiques, la participation aux activités de loisirs ou les services et les produits associés. En utilisant des données d'enquête recueillies de voyageurs européens de loisirs à une destination. L'unidimensionale, cette étude a examiné les dimensions sous-jacentes de leur participation. L'unidimensionalité d'échelle est révélée d'abord par une analyse factorielle exploratoire et puis validée par une analyse factorielle confirmatoire. Les données suggèrent que cette participation est une construction à trois dimensions : plaisir ou intérêt, probabilité de la construction, y compris la validité discriminante, convergente et nomologique. **Mots** clés: touristes internationaux, participation, analyse factorielle confirmatoire, développement d'échelle. © 2003 Elsevier Ltd. All rights reserved.

INTRODUCTION

Involvement is a widely used concept in the consumer behavior literature and within the last decade has found increasing followers among leisure, recreation, and tourism researchers (Havitz and Dimanche 1999). The subject is regarded as one of the most important deter-

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minants of consumer behavior (Broderic and Mueller 1999) and a central point in explaining decision-making processes (Dimanche, Havitz and Howard 1993). It is considered to be the degree to which consumers engage in different aspects of the consumption process: product, advertising, information search, information processing, decision-making, and the act of purchasing (Broderic and Mueller 1999).

While many theoretical models for the conceptualization of involvement have evolved, researchers criticized the lack of agreement on what the term actually means (Havitz and Dimanche 1999; Rothschild 1984). Concerns with measurement have resulted in the development of several scales intended to operationalize the construct. Two of these have captured most researchers' interest. They are Zaichkowsky's (1985) "personal involvement inventory" (PII) and Laurent and Kapferer's (1985) "consumer involvement profile" (CIP). Both scales have been used and tested extensively (Havitz and Dimanche 1997). The former's PII has been supported in its unidimensional structure by many and evidence has been provided for a two-factor structure (Broderic and Mueller 1999; Mittal 1989). However, the latter's CIP has received much more attention due to its multidimensional structure (Broderic and Mueller 1999). This construct has been used and tested extensively (Jamrozy, Backman and Backman 1996). Most of the tests were conducted on tangible products such as beer (Mittal and Lee 1988), cameras, jeans (Mittal 1995), television sets, shampoo, mattresses (Laurent and Kapferer 1985), cars, clothing, consumer electronic equipment, audio recording (Rodgers and Schneider 1993), food items (Broderic and Mueller 1999), or shopping and makeup (Bloch 1993). Several researchers examined involvement in the context of recreation and leisure (Dimanche et al 1991; Jain and Srinivasan 1990), and in the context of tourism (Jamrozy et al 1996; Kim, Scott and Crompton 1997).

Even though involvement and its importance in tourists' decisionmaking processes are well articulated, the same related to international destinations has received little attention. Examinations of the construct, in tourism and recreation, were mostly conducted on North American tourists, recreational activities participants, or associated services and products (Havitz and Dimanche 1997). Previous research indicates that involvement scales at the activity, product, and destination levels are likely to result in a different number of dimensions. For example, the original version of the CIP was developed at the product level and resulted in five dimensions. However, when it was applied to leisure setting and activities, it most consistently yielded four dimensions. It is not clear how many dimensions the CIP scale may yield if it is applied to tourists at international destinations.

The purpose of this study is to examine the applicability of the CIP scale on international leisure tourists to better understand the concept of their involvement. Using a three-step process, this paper develops and validates this involvement scale based on Laurent and Kapferer's CIP scale. This analysis includes a conceptual discussion of involvement and of their CIP scale. It utilizes empirical data gathered from leisure

tourists who were vacationing in an outbound destination to test the applicability of the scale.

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Involvement has been examined from three main perspectives: product-centered, subject-centered, and response-centered orientations (Finn 1983). Although these orientations are important in understanding consumer behavior, a subject-centered perspective is used in this study to provide a framework for understanding the influence of the individual tourist's involvement on his/her decision-making and international leisure destination choice behavior (Celsi and Olson 1988).

Most hospitality and tourism products are purchased, consumed, and evaluated in the form of services such as vacation trips. Their production, consumption, and evaluation differ from those of tangible goods in four fundamental ways: being mostly intangible, heterogeneous, inseparable, and perishable (Zeithaml, Parasuraman and Berry 1990). Therefore, the purchase process of services and consumers' involvement is likely to differ from that of durable goods. For example, consumers, in reality, purchase and consume most services at locations other than where they live (Sirakaya, Mclellan and Uysal 1996). Their decision-making process used to purchase tourism services takes much longer than for many other products such as television sets (Gursoy 2001). In addition, most of the time, they do not get any tangible return for their investment, except maybe souvenirs and a receipt. They also deal with a high-level of perceived risk because of high personal investment of time, effort, and money (Teare 1992). Consumers are likely to plan and save money to purchase tourism services over a longer time period than many other product purchases (Mountinho 1987) due to the high level of perceived risk involved. Consequently, they are likely to be more involved in the decision-making, selection, and purchase processes of tourism product.

The initial research in involvement in consumer behavior can be traced back to the early work of Sherif and Cantril (1947) and the social judgment theory developed by Brunswik (1956) and Sherif and Hovland (1961). Since the early work of Sherif and Cantril (1947) and the development of the social judgment theory, involvement has been subjected to extensive definitional, conceptual, theoretical, and empirical examination (Rodgers and Schneider 1993). In general, it has been identified with interest, excitement, and enthusiasm for product class, activities, or information. It has also been related to personal values, ego-involvement, and importance and risk perceptions (Jamrozy et al 1996). Researchers have also identified "affective" and "cognitive" types of involvement (Park and Young 1986). Further, it has been observed that consumers assign both emotional and rational values to products (Zaichkowsky 1987), measuring the "hedonic" and "utilitarian" aspects of consumption (Babin, Darden and Griffin 1994).

However, the general view of involvement has been one of "personal relevance" (Zaichkowsky 1985). That is, consumers' level of involvement with an object, situation, or actions is determined by the degree

to which they perceive that concept to be personally relevant. This is represented by the perceived linkage between their needs, goals, and values, and their product knowledge. To the extent that product characteristics are associated with personal goals and values, consumers will experience strong feelings of personal relevance or involvement with the product (Celsi and Olson 1988).

Throughout the years many theoretical models for the conceptualization of involvement have evolved. They resulted in development of several different definitions (Havitz and Dimanche 1999; Rothschild 1984) and scales that are intended to operationalize the construct. However, as already noted, only two of them captured the interest of most researchers (Jamrozy et al 1996). Both Zaichkowsky's PII and Laurent and Kapferer's CIP have been used and tested extensively (Havitz and Dimanche 1997, 1999).

The former scale assumes that involvement is concerned primarily with the personal relevance to the consumer of a particular product, advertisement, or a situation (Rodgers and Schneider 1993). The PII construct has been supported in its unidimensional structure by many, but evidence has also been provided for a two factor structure (Broderic and Mueller 1999; Mittal 1989). Several researchers utilized PII in tourism and leisure studies and concluded that it is a useful tool in examining tourists' vacation behavior and their participation in leisure activities (Backman and Crompton 1989, 1991; Havitz and Crompton 1990).

However, CIP has received much more attention due to its multidimensional structure (Broderic and Mueller 1999; Havitz, Dimanche and Howard 1993). Laurent and Kapferer (1985) suggested five dimensions of involvement: the perceived importance of the product; the pleasure value of the product; the symbolic or sign value attributed by the consumer to the product, its purchase, or its consumption; the perceived importance of negative consequences in case of a poor choice; and the perceived importance of making such a choice. Several researchers have tested different involvement scales in recreation, leisure, and tourism contexts (Havitz and Dimanche 1990; Havitz et al 1993) and determined that involvement has a multidimensional structure as suggested by the original CIP scale. Dimanche et al (1991) translated this scale from French into English and tested it in the context of recreational and touristic activities.

However, their findings contrasted with Laurent and Kapferer's that CIP scale has five dimensions. Dimanche et al (1991) found that involvement consisted of four dimensions in the recreational and touristic context: the interest in, or perceived importance of the product/service, as well as the perceived pleasure value attributed to the product (importance/pleasure); the perceived sign value attributed by the consumer to the product (sign); the perceived importance of negative consequences in a case of a poor choice (risk consequences); and the perceived probability of making such a mistake (risk probability). After the study by Dimanche et al, several researchers in the field of leisure and tourism utilized the multidimensional CIP scale. For example, Park (1996) investigated the relationships among fitness participants' attitudinal loyalty profiles and involvement profiles utilizing CIP scale. Results indicated a strong relationship between attitudinal loyalty and involvement. Park concluded that utilization of involvement profiles is useful in determining consumers' short-term usage patterns. However, he suggested that the attitudinal loyalty concept is more useful for attracting long-term membership to fitness programs, arguing that high involvement is one of the preconditions for consumer loyalty, but not the only one.

Madrigal et al (1992) examined married couples' involvement with family vacations. They identified similar underlying dimensions of their involvement in family vacations to those reported by Dimanche et al (1991). However, they were able to identify only two strong factors: pleasure/importance and sign dimensions. Their study reported positive relationships between pleasure/importance dimension and gender education negative relationship role and and а between pleasure/importance and parental status. The relationship between sign dimension and parental status was negative, but that between age and sign dimension was positive.

Dimensions of Involvement

Although opinions about the dimensions of involvement are mixed, most researchers agree the concept has a multidimensional structure (Havitz, Dimanche and Howard 1993), while others argue that perceived interest/importance of the product or activity alone represent involvement (Mittal 1989, 1995). It is commonly agreed that interest/ importance is an important dimension; thus, every current conceptualization of involvement includes this dimension (Havitz and Dimanche 1999).

Opinions about the number of dimensions of involvement are also mixed. While Laurent and Kapferer (1985), developers of the CIP scale, argue that it has five dimensions—interest/importance; hedonic (pleasure); sign; risk probability; and risk importance—leisure and tourism researchers argue that involvement consists of four: importance/pleasure; sign; risk consequences; risk probability (Dimanche et al 1991; Madrigal et al 1992). The latter group consistently suggest that for recreation and touristic activities, interest/ importance, and hedonic (pleasure) dimensions of the CIP scale are present in a single scale (Dimanche et al 1991, 1993; Jamrozy et al 1996). Laurent and Kapferer argue that the interest/importance and hedonic (pleasure) dimensions are conceptually different.

Jamrozy et al (1996) examined the relationship between involvement and opinion leadership in tourism. They utilized both PII and CIP scales. Their findings indicated that both scales were strong predictors of opinion leadership in tourism. They also revealed that only four of the five dimensions of involvement, as measured by Laurent and Kapferer's CIP scale, were present. However, only importance/ pleasure and risk probability dimensions were significant. They suggested that the importance/pleasure dimension of either the CIP scale or the PII scale might be sufficient to predict opinion leadership. Several other studies support the idea that consumer involvement is unidimensional and can be assessed by measuring only the interest/importance dimension of the CIP scale (Mittall 1989, 1995). Others argue that involvement is a multidimensional construct and cannot be measured by only interest/importance dimension (Havitz and Dimanche 1990, 1997). Most of the recent studies in tourism and leisure have utilized involvement as a multidimensional scale. Havitz and Dimanche (1997) reported that six of the nine leisure involvement data sets published through 1990 used unidimensional scales. However, excluding comparison research, only nine of thirty-three studies published between 1991 and 1997 used unidimensional scales (Havitz and Dimanche 1997).

Sample and Data Collection

The study aimed to address theoretical and measurement issues raised by the contradictory findings of previous studies, by assessing Laurent and Kapferer's CIP scale on international leisure tourists. Their scale is assessed utilizing the data collected from international leisure tourists to Turkey. Respondents were asked to answer questions related to CIP scale and their knowledge of Turkey.

Tourists who were staying at selected hotels were interviewed using a structured survey during the summer of 2001. Respondents were screened regarding the purpose of their trip before being personally interviewed. Only international leisure tourists were surveyed for this study. All interviews were conducted in English, which was not the first language of some of the respondents. As suggested by Dimanche (1994), assumption of English fluency is a major limitation of current tourism research. In order to overcome this limitation, all interviews were conducted face-to-face with care that each question was thoroughly understood by each respondent.

A total of 460 tourists were interviewed. Most of them were English (57.6%) followed by Irish (14.7%), German (14.2%), Dutch (7.7%), and Scottish (2.3%). Only 3.6% were from other countries. Average age of respondents was 34.2 and the average annual income was 37,622. Most were female (62.2%). The largest portion was single (45.4%), the remainder married (41.3%), divorced (7.7%), separated (3.6%), and widowed (1.9%).

Measurement of Variables

The structured survey questionnaire used to collect data contained a modified version of the Laurent and Kapferer's CIP scale to fit the purpose of this study. Table 1 presents the questions used to measure international leisure tourists' involvement. As shown in this table, the scale consisted of 16 items, all measured on a 5-point Likert type scale with "totally agree" at the low end and "totally disagree" at the high end.

Tourists' knowledge was measured by a three-item scale—adopted from Park, Mothersbaugh and Feick (1994)—measuring consumers'

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Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
When I chose a vacation destination, it is not a big deal if I make a mistake. ^a	.434				.404
It is really annoying to purchase a vacation				.815	
that is not suitable. If, after I bought a vacation, my choice				.710	
proves to be poor, I would be really upset. Whenever one buys a vacation, one never really knows whether it is the one that should have been bought.		.494			
When I face a variety of vacation choices, I always feel a bit at loss to make my choice.		.599			
Choosing a vacation destination is rather		.693			
complicated. When one purchases a vacation, one is never certain of one's choice.		.594			
You can tell a lot about a person by the	.465	.475	499		
vacation destination he or she chooses. The vacation I buy gives a glimpse of the	.441	.435	616		
type of man/woman I am. The vacation you buy tells a little bit about you.	.491		587		
It gives me pleasure to purchase to purchase a vacation.	.669				
Buying a vacation is like buying a gift for myself.	.686				
A vacation is somewhat of a pleasure to me.	.746				
I attach great importance to a vacation.	.722				
One can say vacation destinations interests	.673				
me a lot.					
A vacation destination is a topic that leaves	.414				.526
me totally indifferent. ^a					
Eigenvalue	3.454	2.253	1.68	1.464	1.24
% of Total Variance	21.587	14.082	10.499	9.147	7.002
Cronbach's Alpha	81.15	68.21		59.22	70.4
The Kaiser-Meyer-Olkin measure of sampling adequacy The Bartlett's test of sphericity (significance level)					.724 .000

Table 1. Results of the EFA (N = 230)

Note: All items are measured on a five-point Likert scale with the word "totally diagree" at the low end and the word "totally agree" at the high end. ^a Reverse coded.

self-assessed knowledge. Park et al (1994) reported that the standardized Cronbach's Alpha for these items was 0.91. A seven-point Likert type totally agree/totally disagree scale is used for these items. Three statements that are proposed to measure tourists' familiarity are: "compared to average person, I am very familiar with a wide variety of vacation destinations"; "compared to my friends, I am very familiar with a wide variety of vacation destinations"; and "compared to people who travel a lot, I am very familiar with a wide variety of vacation destinations".

Study Methods

A three-step procedure was used in this study for assessment of CIP scale. First, underlying constructs measuring it were identified by using an exploratory factor analysis (EFA). Second, CIP scale attributes were examined by using Cronbach reliability. Third, underlying constructs measuring its attributes were validated by using a confirmatory factor analysis. For the purpose of this study and confirmation of results, the sample was randomly divided into two subsamples (N = 230 for each). Both were examined for outliers and no outliers were found.

To detect scale dimensionality, an exploratory factor analysis (EFA) with a principal component method was conducted for CIP using the first subsample. The appropriateness of factor analysis was determined by examining the Kaiser–Meyer–Olkin measure of sampling adequacy and the Bartlett's test of sphericity. A value of .60 or above from the Kaiser–Meyer–Olkin measure of sampling adequacy test indicates that the data is adequate for exploratory factor analysis (Tabachnick and Fidel 1989). A significant Bartlett's test of sphericity is also required. In order to make sure that each factor identified by EFA has only one dimension and each attribute loads only on one factor, attributes that had factor loadings of lower than .40 and attributes loading on more than one factor with a loading score of equal to or greater than .40 on each factor were eliminated from the analysis (Hattie 1985).

After identifying the dimensions, a Cronbach's Alpha reliability test was conducted for each measurement scale using the first subsample. Any item with a below .50 item-to-total correlation was eliminated (Chen and Hsu 2001; Zaichkowsky 1985). Further, a confirmatory factor analysis was performed by specifying the posited relationships of the observed variables to the underlying five dimensions, with these allowed to intercorrelate freely. The covariance matrix was used as the input data for the confirmatory factor analysis procedure available in LISREL 8 (Joreskog and Sorbom 1989), which was performed using the second subsample (N = 230).

Construct Identification and Validation

As already noted, the CIP scale includes 16 items. Both the Kaiser– Meyer–Olkin measure of sampling adequacy and the Bartlett's test of sphericity tests indicated that it was appropriate to perform a factor analysis (Table 1). The result of the principle component factor analysis indicated that there are five underlying dimensions (factors) (Table 1). In order to make sure that each factor identified by EFA had only one dimension and each attribute loaded only on one factor, attributes that had factor loadings of lower than .40 and attributes loading on more than one factor with a loading score of equal to or greater than .40 on each were eliminated from the analysis. This procedure resulted in elimination of five items and two factors.

Table 2 shows the items and the factors that remained after the elimination of those five items and two factors. As presented in this table, the EFA generated three unidimensional factors. The results were somewhat consistent with the previous involvement research in leisure and tourism. Like previous studies, the interest/importance and pleasure dimensions of the original CIP scale were combined under one factor, interest/pleasure. However, results of the EFA procedure indicated that sign dimension of the original CIP scale is not a unidimensional construct in measuring international leisure tourists' involvement, and it should be eliminated from the analysis. Using the Cronbach's Alpha reliability test, the reliability of the remaining factors measuring interest/pleasure, risk probability, and risk importance were determined to be 81.15, 68.21, and 59.22, respectively. Results of this test indicated that only the risk importance dimension has a reliability score below .60 (Alpha = 59.22). However, it was deemed close enough to be considered as a reliable measure.

Items	Pleasure/ Interest	Risk Probability	Risk Importance
It gives me pleasure to purchase to purchase a	.669		
vacation.			
Buying a vacation is like buying a gift for myself.	.686		
A vacation is somewhat of a pleasure to me.	.746		
I attach great importance to a vacation.	.722		
One can say vacation destinations interests me a lot.	.673		
Whenever one buys a vacation, one never		.494	
really knows whether it is the one that should		.131	
have been bought.			
When I face a variety of vacation choices, I		.599	
always feel a bit at loss to make my choice.		.555	
Choosing a vacation destination is rather		.693	
complicated.		.000	
When one purchases a vacation, one is never		.594	
certain of one's choice.			
It is really annoying to purchase a vacation			.815
that is not suitable.			1010
If, after I bought a vacation, my choice proves			.710
to be poor, I would be really upset.			
Eigenvalue	3.454	2.253	1.464
% of Total Variance	21.587	14.082	9.147
Cronbach's Alpha	81.15	68.21	59.22
The Bartlett's test of sphericity (significance	level)	.724
The Kaiser-Meyer-Olkin measure of sampling adequacy			.000

Table 2. Remaining Factors and Items Loadings (N = 230)

Note: Items with a factor loading of higher than .40 are shown.

Confirmatory Factor Analysis

A confirmatory measurement model that specifies the posited relations of the observed variables to the underlying constructs, with the construct allowed to intercorrelate freely was tested as recommended by Sethi and King (1994). The use of confirmatory factor analysis ensures the unidimensionality of the scales measuring each construct in the model. Items identified through EFA procedure were utilized in the factor analysis. However, before testing the overall model, the unidimensionality of each construct was assessed individually (Sethi and King 1994). Constructs with unacceptable fits were respecified by deleting the indicators that had not worked out as planned, to preserve the potential to have a unidimensional measurement scale (Anderson and Gerbing 1988). A measurement model for each pair of constructs was then estimated, combining them two by two (Joreskog 1993).

First, each construct's fit was measured. After making sure that the fit of each construct was acceptable, the fit of two constructs (a pair) was measured. All constructs were paired with each other. Assessing each construct individually and deleting unacceptable indicators resulted in elimination of one indicator from the "Risk Importance" construct. The items that remained after this step are presented in Table 3. All of the composite reliabilities were above .7 with the exception of the risk importance construct The composite reliability score of the risk importance construct was .61, which was below the .70 guideline. However, it was determined to be close enough to consider due to the fact that reliability scores that are between .60 and .70 represent the lower limit of acceptability (Hair, Anderson, Tatham and Black 1998).

The overall fit of this final involvement measurement model was the chi-square value with 32 degrees of freedom $(\chi^2_{(32)}) = 45.57$ (p = (0.057); the goodness - of - fit index = .96; the adjusted goodness - of - fit index = .94; the normed - fit index = .91; the non - normed - fit index = .96; the comparative - fit index = .97; the incremental - fit index = .97; and the parsimony goodness - of - fit index = 0.56; the parsimonious normed - fit index = .65; and the critical sample size (N) = 269.79. The fit statistics suggested that the fit of the model was acceptable. The χ^2 value was found to be nonsignificant suggesting an acceptable fit. In addition, values of the goodness-of-fit index, the adjusted goodness-of-fit index, the normed-fit index, the non-normedfit index, the comparative-fit index and the incremental-fit index range from zero to 1.00 with a value above .90 indicating good fit (Byrne 1989). The parsimony goodness-of-fit index and the parsimonious normal-fit index scores were also found to be acceptable. Further, the indicators of residuals, the root mean square, standardized the root mean square and the root mean square error of approximation were .051, .044 and .040, respectively. Additionally, convergent validity was established for all indicators of each construct. Details on the properties of the measurements are provided in Table 3, showing a threefactor measurement model of a tourist's involvement was established.

Constructs and Indicators	Completely Standardized Loadings	Indicator Reliability	Error Variance
Pleasure/Interest	0.70 ^a	0.79 [⊾]	
Buying a vacation is like buying a gift for myself.	0.59	0.33	0.67
A vacation is somewhat of a pleasure to me.	0.66	0.50	0.50
I attach great importance to a vacation.	0.88	0.70	0.30
One can say vacation destinations interests me a	0.67	0.40	0.60
lot.			
Risk Probability	0.70 ^a	0.76 ^b	
Whenever one buys a vacation, one never really	0.42	0.16	0.84
knows whether it is the one that should have			
been bought.			
When I face a variety of vacation choices, I always	0.71	0.35	0.65
feel a bit at loss to make my choice.			
Choosing a vacation destination is rather	0.96	0.58	0.42
complicated.			
When one purchases a vacation, one is never	0.71	0.37	0.63
certain of one's choice.			
Risk Importance	0.66 ^a	0.61 ^b	
It is really annoying to purchase a vacation that is	0.74	0.55	0.45
not suitable.			
If, after I bought a vacation, my choice proves to be poor, I would be really upset.	0.58	0.34	0.66

Table 3. Laurent and Kapferer's CIP Scale (N = 230)

^a Variance extracted estimate.

^b Composite reliability of each construct.

The three constructs were pleasure/interest, risk probability, and risk importance. Each of the three constructs was measured by multiple attributes/indicators.

Test of Reliability and Validity

In an overall measurement model, the adequacy of the individual items and the composites are assessed by measures of reliability and validity. Two types of reliability measures—composite reliability and the estimated percentage of variance extracted by each construct—were examined. The composite reliability, as calculated with LISREL estimates, is analogous to a coefficient alpha, which shows the internal consistency of the indicators assessing a given factor (Hatcher 1994) and is calculated by the formula provided by Fornell and Larcker (1981). A value higher than .70 is acceptable for a composite reliability. However et al (1998) argue that reliability scores that are between .60 and .70 are also acceptable because they represent the lower limit of acceptability. As shown in Table 3, the composite reliability scores of all constructs measuring tourists' involvement exceeded the acceptable levels. The variance extracted estimate measures the amount of vari-

ance that is captured by a factor. The desirable level of variance captured is 50% or higher (Fornell and Larcker 1981). Table 3 shows that the variance extracted estimate for each factor also exceeded the acceptable levels.

Three types of validity measures (discriminant validity, convergent validity and nomological validity) were examined. To ensure that the constructs are not measuring the same concept or ideas, the discriminant validity was assessed for each construct in the measurement model by examining the constructs in sets of two (Joreskog 1993). Two models were tested for every possible pair of estimated constructs. The first model was the constrained one where the correlation parameter was constrained between each pair of constructs to 1.00. The second was the unconstrained or free model, where the correlation parameter between two constructs was not manipulated (not fixed at 1.00) (Joreskog 1971). The χ^2 value was generated for both constrained and unconstrained models with the respective degrees of freedom. Afterwards, a χ^2 difference test was performed on the two models. A significantly lower χ^2 value for the unconstrained (free) model demonstrated that discriminant validity had been achieved (Anderson and Gerbing 1988). Table 4 indicates that all of the constructs possessed discriminant validity.

Convergent validity is the overlap between alternative measures that are intended to measure the same construct, but that have different sources of undesired variation (Judd, Smith and Kidder 1991). One method often used to estimate convergent validity for structural equation modeling studies is to examine the standardized confirmatory factor analysis parameters' estimated pattern coefficient. (Marsh and Grayson 1995). Convergent validity can be assessed from the measurement model by determining whether each indicator's estimated pattern coefficient on its posited underlying construct factor is significant (Anderson and Gerbing 1988). Statistically significant large factor loadings indicate convergent validity.

Table 5 presents the standardized parameter estimates for the proposed three-factor measurement model produced by LISREL. There are three lines of information for each observed indicator. The first line represents the estimate, the value in parenthesis on the second

Path	Correlation Value	χ² w/Corr. Fixed	df	χ² w/Corr. Free	df	Change in χ^2	Change in df	Sig.Level
1–2	-0.03	202.30	20	35.87	19	1	$166.43 \\ 40.94 \\ 42.63$	0.00
1–3	-0.12	52.50	9	11.56	8	1		0.00
2–3	0.12	56.29	9	13.66	8	1		0.00

Table 4. Results of Discriminant Validity Tests

Note: Corr = Correlation; df = Degrees of Freedom; 1 = Pleasure / Interest; 2 = Risk Probability; 3 = Risk Importance.

represents the standard error, and the third represents the t-value. An examination of the standardized parameter estimates in Table 5 reveals all estimates exhibit the correct sign and size and are consistent with the underlying theory. The table also presents that all of the estimated pattern coefficients on their posited underlying construct factors are significant at the 0.05 (each had a t-value > ± 1.96). Therefore, the convergent validity was achieved.

After making sure that the scale has convergent and discriminant validity, a confirmatory assessment of nomological validity of constructs is conducted (Anderson and Gerbing 1988). In assessing nomological validity, the causal relationships between the derived and other constructs or variables of interest are further examined to see if the

LAMDA X		Pleasure/ Interest	Risk Probability	Risk Importance
Buying a vacation is like buying a gift for myself.	Estimate SD t-value	0.59 (0.07) 8.30		
A vacation is somewhat of a pleasure to me.	Estimate SD	0.66 (0.06)		
I attach great importance to	t-value Estimate	10.90 0.88		
a vacation.	SD t-value	(0.07) 13.29		
One can say vacation destinations interests me a	Estimate SD	0.67 (0.07)		
lot.	t-value	9.56		
Whenever one buys a vacation, one never really	Estimate SD		0.42 (0.08)	
knows whether it is the one that should have been	t-value		5.41	
bought. When I face a variety of	Estimate		0.71	
vacation choices, I always feel a bit at loss to make	SD t-value		(0.09) 8.14	
my choice. Choosing a vacation	Estimate		0.96	
destination is rather complicated.	SD t-value		(0.09) 10.17	
When one purchases a vacation, one is never certain	Estimate SD		0.71 (0.09)	
of one's choice. It is really annoying to	t-value Estimate		8.30	.74
purchase a vacation that is not suitable	SD t-value			(0.28) 2.62
If, after I bought a vacation,	Estimate			0.58
my choice proves to be poor, I would be really upset.	SD t-value			(0.24) 2.58

Table 5. Parameter Estimates for the Proposed Measurement Model (N = 230)

derived constructs behave in the way stipulated by the underlying tenets guiding the tourists' involvement scale development (Chen and Hsu 2001). Nomological validity is determined by examining the causal relationship between the derived construct and the construct that measures tourists' knowledge of the vacation destination.

Generally, there is strong support for the relationship between involvement and knowledge (Havitz and Dimanche 1999). Kim et al (1997) suggest that as the level of involvement increases, a tourist is more likely to pay attention to any incoming information about the destination, because high involvement indicates (approximately) personal relevance and importance. People are more likely to pay more attention to incoming information about something that has personal relevance and high importance (Celsi and Olsen 1988; Foxall and Bhate 1993).

According to the elaboration likelihood model (Petty and Cacioppo 1983), consumers can follow two routes to persuasion. Central route processing occurs when involved consumers seek product related information intentionally. An involved consumer pays more attention to incoming information and thoroughly processes the incoming information (Petty, Cacioppo and Schumann 1983). This results in high product knowledge. This type of cognitive response to incoming information has been shown to mediate subsequent brand attitudes (Petty and Cacioppo 1983; Petty et al 1983).

Peripheral route processing occurs when uninvolved customers lack sufficient motivation to pay close attention to incoming information. Since uninvolved customers pay less attention and fail to process incoming information thoroughly, the level of knowledge they acquire through incidental learning tends to be lower than involved customers' knowledge. The literature suggests that involved consumers are more likely to have better product knowledge than uninvolved consumers.

Using this thesis, a structural model was constructed to further test the construct validity of the three-factor representing tourists' involvement. In the structural model, three dimensions of involvement were exogenous variables and the destination knowledge was an endogenous variable (Figure 1). To determine the causal relationship between involvement and knowledge constructs, three path coefficients were estimated. Fit indices provided by LISREL indicated that model had an acceptable fit (Table 6).

The structural equation modeling results revealed that all of the "three path" coefficients were significant. Results of the structural equation modeling are shown in Table 6. Results indicated that all three dimensions of involvement, interest/pleasure (r = .70), risk probability (r = .13), and risk importance (r = .14), have positive direct impact on tourists' destination knowledge. Three dimensions of involvement explained 38% of the variance in tourists' destination knowledge. Consistent with the information search and knowledge literature, results of the structural equation modeling revealed that all three dimensions of involvement had nomological validity.



^a Significant at 0.05 probability level.



CONCLUSION

The research reported in this paper applies the multidimensional consumer involvement profile (CIP) developed by Laurent and Kapferer (1985) to leisure tourists at international vacation destinations. Although this scale had been previously used in the recreation, leisure, and tourism context, the objective of this study was to test the CIP scale in an international tourism context with respect to reliability and construct validity.

The study results supported the multidimensional nature of tourists' involvement (Dimanche et al 1991; Park 1996). However, this did not reveal the exact factors discussed by Laurent and Kapferer in their

Variables	_	Coefficients	t statistics
Interest/Pleasure		0.70	6.79
Risk Probability		0.13	2.66
Risk Importance		0.14	2.41
Knowledge	R2 = .45		

Table 6. Structural Equation Modeling of Involvement and Knowledge

 $\chi^2 = 92.54$; df = 71; P = 0.44; the goodness - of - fit index = .95; the adjusted goodness - of - fit index = .92; the parsimony goodness - of - fit index = .64; the non - normed fit index = .96; the parsimonious normal - fit index = .69; the comparative - fit index = .97; the incremental - fit index = .97; standardized root mean square = .049; critical sample size = 250.02.

study with consumer goods. Whereas Laurent and Kapferer's CIP produced five dimensions, the present research produced three dimensions. The data also did not reveal the exact dimensions discussed by Dimanche et al (1991) and other recreation, leisure, and tourism researchers (Jamrozy et al 1996; Park 1996). Most have suggested involvement has four dimensions because in the recreation, leisure, and tourism context pleasure and importance dimensions are synonymous (Dimanche et al 1991, 1993; Jamrozy et al 1996).

Contrary to the foregoing, the findings of this study indicated that international leisure tourists' involvement is rather a three dimensional construct. The first dimension, pleasure/interest, was composed of a mix of four importance and pleasure items. This result was consistent with those reported in other studies in the leisure and tourism literatures (Dimanche et al 1991, 1993; Jamrozy et al 1996). The second dimension consisted of four items measuring risk probability. This result was also consistent with previous studies (Dimanche et al 1991, 1993; Jamrozy et al 1996). The third dimension, risk importance, consisted of two items. Again, this finding was consistent with earlier research.

Previous studies in leisure, recreation, and tourism context also identified a fourth or "sign" dimension. Results of the exploratory factor analysis indicated that the three sign items significantly loaded on factor 3, as presented in Table 1, held together well in a conceptual sense. However, the present data also suggested that the sign dimension identified by previous studies is not a unidimensional construct in the context of international leisure tourism. Results of the exploratory factor analysis indicated that the variables proposed to measure the sign dimension loaded on pleasure/interest and risk probability in addition to that of sign. Based on Hattie's (1985) heuristic for eliminating items with mixed loadings, these items were excluded from the analysis. This contrasted with the findings of some other studies (Dimanche et al 1991; Siegenthaler and Lam 1992). However, other studies reported the sign dimension of involvement as being relatively less important in terms of variance explained (Havitz and Dimanche 1997; Jamrozy et al 1996; Kim et al 1997). One reason that sign is not distinct might be the simplicity of items used to measure sign value, which fails to capture the possible multidimensional nature of sign (Havitz and Dimanche 1997). Previous studies indicate that both personal identity and social identity components are present in sign (Dimanche and Samdahl 1994).

In the international tourism context, there might be an overlap between interest/pleasure and sign dimensions of involvement. Several studies examined the relationship between personality (sign) and interest and they reported overlaps and shared dimension between them (Larson and Borgen 2002; Schneider, Ryan, Tracey and Rounds 1996). For example, researchers who studied personality and interest by examining Holland's (1997) "Big Six model of interest" and the "Big Five model of personality" reported a substantial overlap (Larson and Borgen 2002). Schneider et al (1996) also reported a shared dimension between personality and interest. The shared variance between pleasure/interest and sign might be explained by the overlap between interest and personality.

Findings of this study provide an incremental contribution to international leisure tourists' involvement scale development. Dimanche et al (1991) adopted Laurent and Kapferer's CIP scale and refined it to be utilized in recreation, leisure, and tourism, with many using the CIP scale version introduced by Dimanche et al. This study goes one step further by applying the CIP scale to international leisure tourists. Results presented here indicate that such involvement has a different factor structure than that for structure of consumers of tangible goods, and participants of leisure and recreational activities.

However, it would be foolhardy to claim that this paper has finalized the international leisure tourists' involvement scale discussion in a definite way. Rather, this study is considered as an initial step toward the programmatic and systematic research into the examination of international leisure tourists' involvement. Further investigation of the subject is needed to conceptualize the understanding of the three dimensions identified and their influences on international leisure tourists' choice behavior and decision-making processes. More research with other populations and destinations is required to confirm this factor structure of involvement in international tourism context.

The current study results have limitations and caution should be used in any generalization of the findings to other areas, populations, and activities. Specifically, data were collected from international tourists to Turkey and it is likely that they answered the survey questions based on their motivations to visit this destination, with the outcome being specific to this group. Therefore, involvement of tourists to other international destinations, countries, and geographic regions should be explored to see if the proposed measurement scale and the model hold. In addition, tourism motivations of leisure tourists may influence their level of involvement, which is likely to be different from those wanting to escape. Understanding the motivations of tourists.

Another limitation of the study was the interview language, since English was not the first language of some of the respondents. As suggested by Dimanche (1994), the assumption of English fluency is a major limitation, especially when latent constructs such as involvement are to be measured. For future studies, it is suggested that the interviews be conducted in the first language of respondents to eliminate this limitation. Further, this study examined only international leisure tourists' involvement. If the data collection and interviews were expanded to include international tourists who travel for other purposes (such as business, convention, and meeting) then there could be different levels of involvement. Examining purposes other than leisure may enhance the understanding of international tourists' involvement.

REFERENCES

Anderson, J., and D. Gerbing

1988 Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. Psychological 103:411–423.

Babin, B., W. Darden, and M. Griffin

1994 Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value. Journal of Consumer Research 20:644–656.

Backman, S., and J. Crompton

1989 Discriminating Between Continuers and Discontinuers of Two Public Leisure Services. Journal of Park and Recreation Administration 7(4):56–71.

1991 The Usefulness of Selected Variables for Predicting Activity Loyalty. Leisure Sciences 13:205–220.

Bloch, P.

1993 Involvement with Adornments as Leisure Behavior: An Exploratory Study. Journal of Leisure Research 25:245–262.

Broderic, A., and R. Mueller

1999 A Theoretical and Empirical Exegesis of the Consumer Involvement Construct: The Psychology of the Food Shopper. Journal of Marketing Theory and Practice 7(4):97–108.

Brunswik, E.

1956 Perception and the Representative Design of Experiments. Berkeley CA: University of California Press.

Byrne, N.

1989 A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models. New York: Springer-Verlag.

Celsi, R., and J. Olson

1988 The Role of Involvement in Attention and Comprehension Processes. Journal of Consumer Research 15:210–224.

Chen, J-S., and C.H-C. Hsu

2001 Developing and Validating a Riverboat Gaming Impact Scale. Annals of TourismResearch 28:459–476.

Dimanche, F.

1994 Cross-cultural Tourism Marketing Research: An Assessment and Recommendations for Future Studies. Journal of International Consumer Marketing 6(3/4):123–134.

Dimanche, F., M. Havitz, and D. Howard

1991 Testing the Involvement Profile Scale in the Context of Selected Recreational and Touristic Activities. Journal of Leisure Research 23(1):51–66.

1993 Segmenting Recreationists and Tourists Using Involvement Profiles. Journal of Travel and Tourism Marketing 1(4):33–52.

Dimanche, F., and D. Samdahl

1994 Leisure as Symbolic Consumption: A Conceptualization and Prospectus for Future Research. Leisure Sciences 16:119–129.

Finn, D.

1983 Low Involvement isn't Low Involving. In: Advances in Consumer Research 10:419-424.

Fornell, C., and D. Larcker

1981 Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research 18:39–50.

Foxall, G., and S. Bhate

1993 Cognitive Styles and Personal Involvement as Explicators of Innovative Purchasing of Healthy Food Brands. European. Journal of Marketing 27(2):5–16.

Gursoy, D.

2001 Development of Travelers' Information Search Behavior Model. Unpublished doctoral dissertation. Blacksburg VA: Virginia Polytechnic Institute and State University.

Hair, J., R. Anderson, R. Tatham, and W. Black

1998 Multivariate Data Analysis (5th ed.). Upper Saddle River NJ: Prentice Hall.

Hatcher, L.

1994 A Step-by-Step Approach to Using the SAS System for Factor Analysis and Structural Equation Modeling. Cary NC: SAS.

Hattie, J.

1985 Methodology Review: Assessing Unidimensionality of Tests and Terms. Applied Psychological Measurement 9(2):139–164.

Havitz, M., and J. Crompton

1990 The Influence of Persuasive Messages on Propensity to Purchase Selected Recreational Services from Public or from Commercial Suppliers. Journal of Leisure Research 22:71–88.

Havitz, M., and F. Dimanche

1990 Propositions for Guiding the Empirical Testing of the Involvement Construct in Recreational and Tourist context. Leisure Sciences 12:179–196.

1997 Leisure Involvement Revisited: Conceptual Conundrums and Measurement Advances. Journal of Leisure Research 29:245–278.

1999 Leisure Involvement Revisited: Drive Properties and Paradoxes. Journal of Leisure Research 31:122–149.

Havitz, M., F. Dimanche, and D. Howard

1993 A Two-sample Comparison of the Personal Involvement Inventory (PII) and Involvement Profile (IP) Scales Using Selected Recreation Activities. Journal of Applied Recreation Research 17:331–364.

Holland, J.

1997 Making Vocational Choices: A Theory of Vocational Personalities and Work Environments (3rd ed.). Odessa FL: Psychological Assessment Resources.

Jain, K., and N. Srinivasan

1990 An Empirical Assessment of Multiple Operationalizations of Involvement. Advances in Consumer Research 17:594–602.

Jamrozy, U., S. Backman, and K. Backman

1996 Involvement and Opinion Leadership in Tourism. Annals of Tourism Research 23:908–924.

Joreskog, K.

1971 Statistical Analysis of Sets of Congeneric Tests. Psychometrka 36:109–134.

1993 Testing Structural Equation Models. *In* Testing Structural Equation Models, K. Bollen and J. Long, eds., pp. 294–316. Newbury Park CA: Sage.

Joreskog, K., and D. Sorbom

1989 LISTREL7: User's Reference Guide (1st edition). Chicago: Scientific Software, Inc.

Judd, C., E. Smith, and L. Kidder

1991 Research Methods in Social Relations (6th ed.). Forth Worth TX: Harcourt Brace Jovanovich College Publishers.

Kim, S., D. Scott, and J. Crompton

1997 An Exploration of the Relationships among Social Psychological Involvement, Behavioral Involvement, Commitment and Future Intensions in the Context of Bird Watching. Journal of Leisure Research 29:320–341.

Larson, L., and F. Borgen

2002 Convergence of Vocational Interests and Personality: Examples in an Adolescent Gifted Sample. Journal of Vocational Behavior 60(1):91–112.

Laurent, G., and J. Kapferer

1985 Measuring Consumer Involvement Profiles. Journal of Marketing Research 22(February):41–53.

Madrigal, R., M. Havitz, and D. Howard

1992 Married Couples' Involvement with Family Vacations. Leisure Sciences 14:285–299.

Marsh, H., and D. Grayson

1995 Latent Variable Models of Multitrait-multimethod Data. *In* Structural Equation Modeling: Concepts, Issues and Applications, R. Hoyle, ed., pp. 177–198. Thousand Oak CA: Sage.

Mittal, B.

1989 A Theoretical Analysis of Two Recent Measures of Involvement. Advances in Consumer Research 16:697–702.

1995 A Comparative Analysis of Four Scales of Consumer Involvement. Psychology and Marketing 12:663–682.

Mittal, B., and M. Lee

1988 Separating Brand-choice Involvement from Product Involvement via Consumer Involvement Profiles. Advances in Consumer Research 15:43–49.

Mountinho, L. 1987 Consumer Behavior in Tourism Euro

1987 Consumer Behavior in Tourism. European Journal of Marketing 21(10):5–25.

Park, S.

1996 Relationship between Involvement and Attitudinal Loyalty Constructs in Adult Fitness Programs. Journal of Leisure Research 28:233–250.

Park, C., D. Mothersbaugh, and L. Feick

- 1994 Consumer Knowledge Assessment. Journal of Consumer Research 21:71–82.
- Park, C., and S. Young

1986 Consumer Response to Television Commercials: The Impact of Involvement and Background Music on Brand Attitude Formation. Journal of Marketing Research 23:17–24.

Petty, R., and J. Cacioppo

1983 Central and Peripheral Routes to Persuasion: Application to Advertising. *In* Advertising and Consumer Psychology, L. Percy and A. Woodside, eds. Lexington MA: Lexington Books.

Petty, R., J. Cacioppo, and D. Schumann

1983 Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. Journal of Consumer Research 10:135–146.

Rodgers, W., and K. Schneider

1993 An Empirical Evaluation of the Kapferer-Laurent Consumer Involvement Profile Scale. Psychology and Marketing 10:333–345.

Rothschild, M.

1984 Perspectives on Involvement: Current Problems and Future Directions. Advances in Consumer Research 11:216–217.

Schneider, P., J. Ryan, T. Tracey, and J. Rounds

1996 Examining the Relation between Holland's RIASEC Model and the Interpersonal Circle. Measurement and Evaluation in Counseling and Development 29:123–133.

Sethi, V., and W. King

1994 Development of Measures to Assess the Extent to which an Information Technology Application Provides Competitive Advantage. Management Science 40:1601–1624.

Sherif, M., and H. Cantril

1947 The Psychology of Ego Involvement. New York: Wiley.

Sherif, M., and C. Hovland

1961 Social Judgment. New Haven CT: Yale University Press.

Siegenthaler, K., and T. Lam

1992 Commitment and Ego-involvement in Recreational Tennis. Leisure Sciences 14:303–315.

Sirakaya, E., R. Mclellan, and M. Uysal

1996 Modeling Vacation Destination Decisions: A Behavioral Approach. Journal of Travel and Tourism Marketing 5(1/2):57–75.

Tabachnick, B., and F. Fidel

1989 Using Multivariate Statistics (2nd ed.). New York: Harper Collins Publishers.

Teare, R.

1990 An Exploration of the Consumer Decision Process for Hospitality Services. *In* Managing and Marketing Services in the 1990s, R. Teare, L. Moutinho and N. Morgan, eds., pp. 233–248. London: Cassell Educational.

Zaichkowsky, J.

1985 Measuring the Involvement Concept. Journal of Consumer Research 12:341–352.

1987 IU Emotional Aspect of Product Involvement. *In* Advances in Consumer Research, vol. 14, M. Wallendorf and P. Anderson, eds., pp. 32–35. Provo UT: Association for Consumer Research. Zeithaml, V., A. Parasuraman, and L. Berry

1990 Delivering Quality Service. New York: The Free Press.

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