

## **Examining the Relationship between Tourists' Personal Value Systems and Novelty-familiarity Preferences**

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### **Abstract**

*Value research has great potentials in understanding tourist motivation and behavior. Although it was unlikely that the market for any particular product could be segmented on the basis of value systems alone, marketers could gain a better understanding of consumers by incorporating values into their research with such traditional variables as demographics and preferences. The current study examined the relationship between tourists' value systems depicted by Kahle's List of Values (LOV) and tourists' travel novelty dimensions revealed by the International Tourist Role (ITR) Scale. The study revealed five value systems of U.S. outbound leisure travelers in the sample. It further demonstrated that a causal relationship between values, attitudes and behaviors of consumers also existed in a tourism context.*

### **1. Introduction**

Personal values are important variables in tourist destination decision making [1] [2]. Research on personal values can provide a clear indication of tourists' motivation and needs, and thus provide a useful base for developing tourism marketing strategies [3]. Values are one of the most abstract forms of knowledge [4]. Rokeach explained that values were more useful than attitudes in understanding behavior because all attitudes were value expressive [5]. Rokeach argued that often individual values functioned in conjunction with one or more but not all other values, forming a value system, defined as "a rank-ordering of values along a continuum of importance" (p. 161) [5]. When one value is actually activated along with others in a given situation, the behavioral outcome will be a result of the relative importance of all the competing values that the situation has activated [6]. In his study of Cohen's international tourist typology [7], Mo suggested that tourists' preferences for novelty combined with tourists' personal values would provide more valuable information for professionals, particularly in the international travel market [8]. He contended that it would be useful to explore which personal values influenced the attitudes and behaviors of each of Cohen's tourist roles, and whether a hierarchy of personal values--attitudes--behaviors, as depicted in a study by Homer and Kahle [9], existed in a tourism context. The purpose of this study was twofold: 1) to explore the factor structure (value systems) of tourists' personal value using an extended version of Kahle's List of Values (LOV)[10]; and 2) to examine the relationship between tourists' value systems depicted by LOV and tourists' travel novelty dimensions revealed by the International Tourist Role (ITR) Scale [11][12].

### **2. List of Values**

Among many value measurement instruments, Rokeach's Value Survey (RVS) [6], the Value and Life Styles

(VALS) system [13], and the List of Values (LOV) [10] are perhaps the three widely academically cited and empirically applied value scales [14]. The Rokeach Value Survey (RVS) is considered the most widely known and used instrument for measuring values. It consists of eighteen instrumental values (modes of conducts) and eighteen terminal values (end-states of existence) arranged in alphabetical orders. Each value is presented along with a brief definition in parentheses. Respondents rank the two sets of values in order of importance to them as guiding principles in their lives. Several studies using the RVS have found that the rating might in fact be a better approach [15][16][17].

Considered as the only commercially available psychographic segmentation system to gain widespread acceptance [18], the original VALS typology comprises four comprehensive groups that are subdivided into nine lifestyles, each intended to describe a unique way of life defined by its distinctive array of values, drives, beliefs, needs, dreams, and special points of view [13]. Holman stated that VALS' strength was at speculating about behavior of large-scale market and pointing out future trends [19]. VALS has been applied to tourism research [20]. SRI International later developed a new VALS 2 Segmentation System, which dropped values and lifestyles as the basis for its psychographic segmentation scheme, yet indicated that values approach to consumer research would gain more strength if combined with other approaches [21].

In an effort to overcome some limitations of RVS and VALS, the List of Values, or LOV for short, was developed and tested in a national sample by researchers from the University of Michigan [10] [22]. Based on a theoretical ground of Feather's [23], Maslow's [24], and Rokeach's [6] work on values, the LOV consists of nine values: self-respect, a sense of accomplishment, being well-respected, security, warm relationships with others, a sense of belonging, fun and enjoyment in life, self-fulfillment, and excitement [25]. The administration approach has changed from the initial having respondents identifying the two most important LOV values [10] to ranking all the nine values [25], and to rating each of the LOV values on a 10-point scale in terms of its importance and influence on respondents' daily life [9]. Research using LOV has supported Rokeach's theory of value systems to show that it is more effective to group consumers by value systems rather than single, top values as used in ranking system [10][9][26][27].

Studies have been conducted to compare and contrast LOV with the RVS and the VALS [25][28]. Both LOV and the RVS involve some social desirability bias, but have convergent, discriminant, and concurrent validity for consumer research [25]. LOV, however, detects more items that influence people in their daily life, is simpler to administer and easier to complete quickly, which can be a significant advantage in large surveys. VALS and LOV also share several similarities, such as identifying similar categories (e.g., achievers and belongers in VALS as compared to sense of accomplishment and sense of belonging in LOV) and identifying an inner-outer distinction [28]. The advantages of LOV over VALS are also obvious. One advantage is that LOV is simpler to administer. Another example is that using LOV one obtains the demographic predictions separately, which implies that a researcher can more readily identify the source of influence. It is also easier to preserve the exact phrase from a value survey in an advertisement with LOV than with VALS, thus limiting the potential for mistaken communication as research passes through the marketing system [28].

Homer and Kahle argued that although the notion that values might directly influence behaviors was not new, values' indirect influence on behaviors through attitudinal mediators should also be empirically tested [9]. They believed that there was an influence flow from abstract values to midrange attitudes to specific behavior, called the value→attitude→behavior hierarchy. They pointed out that there was a lack of causal analysis of the relationship between values and attitudinal or behavioral outcomes primarily due to a function of research design and statistical limitations rather than a function of researchers' theoretical beliefs. They also noted that most past value researchers had been interested in only the effects of single values and neglecting the complex nature of value structures, or what Rokeach referred as value systems, and thus might have missed the picture of the overall value structure at a higher level [6]. In their study of how 831 food shoppers' value systems

(derived from LOV) related to their nutrition attitudes and nutrition shopping behaviors, Homer and Kahle first found three underlying dimensions of LOV [9]. Then, using structural equation modeling they further found that the revealed three value systems of foodstore shoppers were actually associated more strongly with nutrition attitudes than with shopping behaviors supporting the hypothesized mediating role of attitudes [9]. Although obtained in the context of natural foodstores, the study results clearly implied that similar relationship among values, attitudes and behaviors might very well exist in other situations including travel contexts.

Muller was perhaps the first to use LOV in a tourism context [29]. Among a group of 429 U.S. residents planning a pleasure trip to Toronto, he managed to identify three actionable segments based on their ratings on 16 city-attractiveness attributes. A discriminant analysis also indicated that the three segments were distinguishable by differences in personal values measured by LOV. Those who attached more importance to city attributes like safety and security valued "security," "a sense of belonging" and "being well respected", and thus was labeled by Muller as belonging to the Security and Reassurance segment (Segment 1). Those who wanted fun, excitement, sensory and stimulation but not local contact were dubbed as members of the Sheer Fun segment (Segment 2). The members of the smallest segment in Muller's study sample put high priority on "self-respect," "warm relationships with others," "a sense of accomplishment" and "self-fulfillment" and this is the group who wanted to get involved with the local people. "This group probably finds intellectual and psychic stimulation in the uniqueness of the travel destination, in its local people, customs, language, physical environment, culture" [29]. The segment (Segment 3), named the Self-enrichment visitors by Muller, was least concerned about the values of security, belonging, being well respected, fun and enjoyment in life and excitement. The results of Muller's study suggested that (U.S.) visitors to Canada could be distinguished by their personal values and LOV was applicable in international tourism situation.

Reflecting the views on value structures in some previous studies (e.g., [6][30]), Kamakura and Novak emphasized that the value system was more reliable and would have greater interpretability than a single value, offering a more complete understanding of the motivational forces driving an individual's beliefs, attitudes, and behavior [26]. Based on a large national probability sample, they revealed three dimensions of LOV, labeled as hedonism, empathy and achievement. Four value-based segments were also identified. The results indicated that when segments were identified based on value systems rather than a single value, consumers underlying motivations were easier to understand via the relative importance given to each value domain. Kamakura and Novak also cautioned, however, that no market could be segmented on the basis of consumers' value systems alone. Although values were "among the most central determinants of consumer behavior," they were also "fairly remote from each particular decision made by the consumer." Many other more immediate influences, such as product attributes, product benefits, consumer preferences, price, sales, and promotion must also be taken into account [26].

Lamenting that Pitts and Woodside's [3] and Muller's [29] studies used single values rather than value systems as predicting variables, Madrigal and Kahle examined whether higher order value variables (tourists' personal value systems) could be extracted from LOV in a tourism context and used as a base for segmenting tourists and predicting vacation activities [27]. Using a convenient sample of 394 English-speaking tourists visiting Scandinavia, they extracted four value domains named external ("sense of belonging," "being well respected" and "security"), enjoyment/excitement ("fun and enjoyment in life" and "excitement"), achievement ("sense of accomplishment" and "self-fulfillment") and egocentrism ("self-respect" and "warm relationship with others"). Four clusters were obtained based on the value factor scores and four components (culture, outdoor, sports and roots) were also obtained through a principal component analysis of tourists' ratings on the importance of 18 activities. The results of the study indicated that the tourists' personal value systems were better predictors of activity preference than demographic information. Madrigal and Kahle suggested that tourism destination marketers should consider visitors' personal values when segmenting markets and planning communication

strategies [27]. To better understand consumers, values should be used in addition to (not in place of) other demographic and attitudinal data, which could be enhanced by incorporating values [31]. As situational factors change from context to context, the use of LOV may help reveal the latent variable(s) more meaningful and stable to each specific context [10][9][26][27].

Although value research has great potentials in understanding tourist motivation and behavior, researchers cautioned that it was unlikely that the market for any particular product could be segmented on the basis of value systems alone and other more immediate influences such as consumer preferences must also be taken into account [26]. In addition to knowledge of how values interact with situations, more information on the links between values and behavior is needed [25]. Along with the study of travel novelty preference, for example, whether tourists shift their emphasis on same value systems from travel situation to travel situation may be more clearly revealed. The result will in turn contribute to further understanding of the relationship between values, attitudes and behaviors of consumers in tourism contexts.

### **3. Three Tourists' Travel Novelty Dimensions Revealed by the International Tourist Role (ITR) Scale**

For over a decade, Cohen's [32] typology was widely cited in the tourism literature. The conceptual typology had also been empirically tested [33][34][35]. The most recent empirical testing was conducted by Mo, Howard and Havitz, who developed a 20-item attitudinal scale to measure Cohen's tourist role typology using a purposive, non-tourist sample [11]. They argued that Cohen's conceptualization was actually based on three novelty-familiarity dimensions: 1) the Destination-Oriented Dimension (DOD); 2) the Travel Service Dimension (TSD); and 3) the Social Contact Dimension (SCD) [11]. The DOD dimension reflected the degree to which tourist choice was motivated by the desire for new and different travel experiences in terms of culture, people, language, and tourist establishments at a macro or destination level. The TSD dimension of the novelty could be understood by examining the extent to which the tourists preferred to use institutionalized services when traveling in a foreign country. The SCD dimension of Cohen's typology was the extent and variety international tourists differed from their social contacts with the locals. The ITR Scale developed by Mo, Howard and Havitz [11] was later validated and revised by Jiang [36] using a real tourist sample. The revised 16-item ITR is a more parsimonious instrument that provides equally adequate, if not more precise, measures for each of the three novelty dimensions derived from Cohen's international tourist role typology [12].

### **4. Method**

A purposive sample was drawn from a population of outbound adult U.S. international leisure travelers, who were about to embark on one of 11 international and U.S. airlines (Air Canada, Alaska Airlines, American Airlines, British Airways, Canadian Regional, Continental Airlines, Delta Airlines, Horizon Airlines, Northwest Airlines, Scandinavian Airlines Systems, and United Airlines) at either the Seattle-Tacoma International Airport or the Portland International Airport. The data collection took place in a period of two weeks in December 1994. The study used a survey questionnaire that consisted of four major sections: 1) the reworded and recoded version of International Tourist Role (ITR) Scale [12]; 2) the extended version of LOV; 3) past international leisure travel experience; and 4) demographic and trip information. In the present study, LOV's nine values and their brief explanations were listed separately and were measured on a nine-point Likert scale ranging from "important to me" (1) to "most important to me" (9). Approximately 3,000 adult passengers were intercepted at the boarding gate areas as they were waiting to board their respective flights. Only those who had taken at least one foreign leisure trip within the past three years and were currently traveling for

vacation of pleasure to a foreign destination were considered eligible for the study. This screening question eliminated about 90% of those approached. To avoid rushed or incomplete questionnaires, respondent selection at the boarding gate waiting area of a specific flight ceased 30 minutes prior to the departure time of that flight. Completed questionnaires were collected on the spot. The sample of 303 adult travelers returned 276 usable responses to the self-administered questionnaire (91% of the total qualified potential respondents). Data were analyzed using SPSS and LISREL 8. Descriptive statistics analysis, correlation analysis, exploratory factor analysis, and confirmatory factor analysis (using LISREL 8) were performed.

## **5. Results**

### **Sample Characteristics**

An analysis of the socio-demographics of the sample revealed that women comprised 54% of the respondents. The respondents' ages ranged from 18 to 80 with a mean age of 43 years. A majority (58%) of the subjects were married while 24% were single and 18% were separated, divorced or widowed. More than half (57%) of the respondents had completed college/university and 34% had completed graduate school. Over half of the respondents held either managerial (7%) or professional (44%) positions. Ten percent (10%) of the respondents were retired and eight percent (8%) were students. Sixty percent (60%) of the respondents reported an annual family gross taxable income exceeding \$50,000, with another 24% were in the \$30,000 to \$49,999 bracket and only 13% fell into the \$10,000 to \$29,999 bracket or below. Over half of the respondents reported one (24%) or two (39%) immediate family members (including self and spouse), 11% reported three and 14% reported four. About 12% of the respondents had five or more immediate family members.

### **The Value Systems of the Sample**

To reveal the value systems of tourists in the sample using LOV, two major stages of analysis were carried out. First, LOV was applied to the sample to explore LOV's factor structure. Second, the outcome of the exploratory factor analyses were subjected to confirmatory factor analysis. Before these two steps were performed, a validity check of the nine explanations attached to the nine values of the original LOV was carried out. Table 1 presents the Pearson product-moment correlation coefficients, the coefficients of determination and probabilities for each item. The correlation coefficients of the original nine values of the LOV and their explanations turned out to be lower than expected. Four out of nine explanations accounted for over half of the variance in the respective value they were expected to explain. Three other pairs had a coefficient of determination above .30, while another three value explanations explained 20% or less of the variance in their respective values (Table 1).

**Table 1. Correlation between LOV values and their explanations**

No.	Items	N	r	r <sup>2</sup>	p
1	Security	276	.623	.39	.000
14	To be safe and protected from misfortune and attack				
2	Excitement	276	.449	.20	.000
11	To lead an exciting, stimulating life				
3	Self-respect	273	.597	.36	.000
15	To be proud of yourself and confident with who you are				
4	Self-fulfillment	275	.557	.31	.000
17	To find peace of mind and to make the best use of your talents				
5	Sense of belonging	274	.411	.17	.000
18	To be accepted and needed by your family, friends or community				
6	Being well-respected	276	.445	.20	.000
13	To be admired by others and to receive recognition				
7	Fun and enjoyment in life	274	.707	.50	.000
10	To lead a pleasurable, happy life				
8	Sense of accomplishment	275	.756	.57	.000
12	To succeed at what you wanted to do				
9	Warm relationships with others	275	.721	.52	.000
16	To have close companionships and intimate friendships				

This analysis indicated that even though the words were carefully chosen, the connotations of the explanations were still different from the original values. On the other hand, the fact they were listed side by side as individual items instead of pairing together with the original nine values of the LOV could help depict the factor structure of the original LOV in a sense that they might help pinpoint different aspects of the same constructs (value systems). A comparison of the respondents' two sets of scores (Table 2) found that the mean scores of six of the nine pairs of value/value explanations were significantly different. The percentage of respondents who rated Items 2, 5 and 6 as most important were 9.1%, 11.6% and 20.7% respectively as compared to 20.3%, 24.3% and 5.1% of respondents who rated Items 11, 18 and 13 respectively as most important. The scale reliabilities of LOV and its nine explanations were .896 and .867 respectively.

**Table 2. Comparison of percentage of highest rating (9 = most important) and means between nine values and their paired explanations**

No.	Items	N	%	M	SD
1	Security	276	20.7 <sup>a</sup>	6.38	2.28
14	To be safe and protected from misfortune and attack	276	23.2 <sup>a</sup>	6.35	2.35
2	Excitement	276	9.1	5.95***	2.01
11	To lead an exciting, stimulating life	276	20.3	6.65	2.09
3	Self-respect	276	42.4 <sup>a</sup>	7.53	2.10
15	To be proud of yourself and confident with who you are	276	37.3 <sup>a</sup>	7.51	1.92
4	Self-fulfillment	276	27.9	7.22*	2.03
17	To find peace of mind and to make the best use of your talents	276	37.3 <sup>a</sup>	7.50	1.84
5	Sense of belonging	276	11.6	5.97****	2.10
18	To be accepted and needed by your family, friends or community	274	24.3 <sup>a</sup>	6.69	2.17
6	Being well-respected	276	20.7	6.63****	2.09
13	To be admired by others and to receive recognition	276	5.1	4.96	2.31
7	Fun and enjoyment in life	276	24.3	7.05**	2.00
10	To lead a pleasurable, happy life	276	33.3 <sup>a</sup>	7.35	1.95
8	Sense of accomplishment	276	29.3	7.47	1.77
12	To succeed at what you wanted to do	275	32.6 <sup>a</sup>	7.43	1.93
9	Warm relationships with others	276	33.3 <sup>a</sup>	7.32**	1.95
16	To have close companionships and intimate friendships	276	27.9 <sup>a</sup>	7.04	2.05

Note. The 18-item LOV was rated on a 9-point Likert scale (1 = important; 9 = most important) and percentage listed in the table represents only those who rated a 9 on the designated item;

<sup>a</sup> the percentage also represents the mode of all ratings; t-test (two-tailed) of means of values and their paired explanations:  
\* significant at .05; \*\* significant at .01; \*\*\* significant at .005; \*\*\*\* significant at .001.

### The Exploratory Factor Analysis of LOV

To reveal the factor structure of LOV, the sample was first subjected to a principal component analysis with no rotation using the original LOV (9 values) and its nine brief explanations separately. Unexpectedly, both sets obtained only one common factor representing 56% and 50% of the total variance respectively. This research represented the first time that the nine brief explanations of the nine values of LOV were not paired with and listed as the explanations of LOV but as separate items. This expanded 18-item LOV scale was expected to have some effect on the factor structure of the original 9-item LOV. To test this assumption, the sample was submitted to another principal component analysis using all 18 items (nine values and their nine brief explanations combined). With 18 variables, the number of factors is expected to be somewhere between six and three based on the indicator-factor ratio of 3:1 or 5:1 [37][38]. Interestingly, while a visual analysis of the scree test indicated a 2-factor solution, four factors had an eigenvalue greater than one. A further analysis of the eigenvalues indicated that in addition to the 2-factor solution, another substantive break for eigenvalues existed between the sixth and the seventh factors. This analysis was consistent with the  $\chi^2$  tests of fit provided by the maximum likelihood exploratory factor analyses (Table 3).

**Table 3. Comparison of  $\chi^2$  test of fit provided by Maximum Likelihood factor analysis for five factor solutions (N = 269)**

MODELS	$\chi^2$	df	$\chi^2/df$	p
2-factor solution	721.27	118	6.11	.000
3-factor solution	419.31	88	4.76	.000
4-factor solution	280.82	74	3.76	.000
5-factor solution	163.04	61	2.67	.000
6-factor solution	154.15	60	2.57	.000

A final step suggested by Tabachnick and Fidell in determining the number of factors is to simply "perform several factor analyses, each time specifying a different number of factors, ... and examining the residual correlation matrix" [38]. Two, three, four, five and six maximum likelihood factors were thus extracted separately for further analysis. The solutions were rotated obliquely because the value factors were expected to be correlated. Gorsuch stated that "all the exploratory common factor procedures merge toward principal component analysis as the communalities approach 1.0" and as a result solutions provided by these procedures tended to be identical. Maximum likelihood exploratory factor analysis was used because it best produces the population values and also provides the chi-square significance test for number of factors to extract [39]. Although Table 3 shows that all solutions should be rejected, it did provide information on which solution seemed to be a better model than no model at all. The 6-factor solution had the smallest chi-square and  $\chi^2/df$  ratio. Yet, it contained two specific factors that each had only two items loaded on them, which did not seem to have adequate coverage of a domain or reliability. The suggested minimum number of items having meaningful loadings on a factor, according to some proposed rules of thumb, varied between three and five for the factor to be adequate for interpretation [40][37][38]. The 5-factor solution was determined to be a better solution because it had not only the smallest  $\chi^2/df$  ratio but also the fewest variable cross loadings among the solutions. Item 13 (in the order listed in Questionnaire Format A), "to be admired by others and to receive recognition," had factor loadings smaller than the previously determined significant level of .326 in all the four solutions. An inter-item consistency test indicated that Item 13 (based on its largest factor loading) had a low squared multiple correlation (SMC) of .154 within the group and elimination of the item could increase the group alpha from .849 to .881. This item was thus eliminated from further analysis. In a separate 5-factor exploratory factor analysis without Item 13, the total variance represented by the five factors increased about three percent. The pattern matrix of the 5-factor solution for the expanded 17-item LOV is shown in Table 4. Compared with the other three solutions, the factors in the 5-factor solution could be easily interpreted. The 17 items of the expanded LOV and item-to-total correlation (within the group that loaded on the same factor) are listed in Table 5. Except for Item 13, which had a low item-to-total reliability of .328 and an SMC of .135 and was deleted, the remaining 17 items had item-to-total correlations above .50. Among the five factors, the smallest group alpha was .776. The scale reliability for the 17-item LOV was .938 with Item 13 versus .935 without Item 13.



**Table 4. Pattern matrix of the 5-factor solution for the 17-item LOV (N=269)**

Item	Factor					Communality
	1	2	3	4	5	
5	.422	.265	.224	-.050	-.067	.444
9	.932	.011	-.028	-.048	.175	.999
16	.543	.023	-.075	.305	.101	.605
3	.056	.842	.034	.066	.003	.833
4	.070	.783	-.054	.057	.139	.832
6	-.017	.455	.206	.060	.187	.506
8	.101	.430	-.028	.358	.230	.757
1	-.003	.253	.834	-.151	-.002	.836
14	.025	-.127	.703	.165	.082	.581
18	.272	-.013	.358	.383	-.109	.548
15	.043	.208	.107	.536	.189	.709
17	.126	.212	.047	.616	.036	.706
12	-.048	.261	.093	.343	.358	.623
2	.042	.069	.002	-.117	.767	.615
7	.029	.024	.090	.041	.741	.670
10	.293	-.077	.251	.078	.537	.722
11	.017	.039	-.104	.085	.775	.683
Eigenvalues	5.872	3.325	1.216	.655	.603	
% of total variance	34.5%	19.6%	7.2%	3.9%	3.5%	68.7%
Cumulative	34.5%	54.1%	61.3%	65.1%	68.7	

The 5-factor solution produced value systems similar to those of some previous studies on values in tourism settings [9][26][27] [41][42]. The factor structure of the extended LOV was especially close to that of the travel needs ladder proposed by Pearce. Three observed variables that loaded on Factor 1, included two original values, one of which was also paired with its explanation. The explanation for "sense of belonging" did not load on this factor. Nevertheless, the three items clearly indicated that the factor was about relationships or connection with others. "Warm relationship with others" had a dominant salient loading of .93. "Sense of belonging" could be described as the external partner of "warm relationships with others" [43]. "To have close companionships and intimate friendships," which was similar to Rokeach's [6] "true friendship (close companionship)," was used to explain "warm relationship with others" [4]. This factor was named "connectedness," which corresponded with Pearce's "relationship needs." Factor 2 contained four values from the original 9-items LOV, namely "self-respect," "self-fulfillment," "being well-respected" and "sense of accomplishment." "Self-fulfillment" and "sense of accomplishment" were expected to cluster together as the two values were both achievement-oriented [4]. This result was also consistent with Madrigal and Kahle's [27] findings. In a national study, Kahle and Timmer found that people who ranked "being well-respected" as their most important value were also likely to endorse "self-respect," but the relationship did not occur reciprocally [4]. The two values, however, showed a relatively strong positive correlation ( $r = .62$ ,  $p < .001$ ) in the sample. Among many possible explanations, this might be partially due to the difference between ranking only the first two important values and rating the importance of all of the nine values. When people were allowed to select all the values they cherished, the correlations between values survived instead of being eliminated entirely. Similarly, the previous ranking-only value study found that "self-respect" and "sense of accomplishment," were also likely to be linked one way (from the former to the latter). These two values were also found to be strongly correlated ( $r = .702$ ,  $p < .001$ ) in the sample. Self-respect and self-fulfillment, among all 18 value items, had the largest correlation coefficient (.829).

**Table 5. The 17 items of LOV and their item-to-total correlation grouped under the 5-factor solution**

Factor	Item	Item-Total Correlation
Factor 1 (Connectedness) 3 items Group $\alpha = .793$	5. Sense of belonging	.524
	9. Warm relationship with others	.757
	16. To have close companionships and intimate friendships	.640
Factor 2 (Self-fulfillment) 4 items Group $\alpha = .889$	3. Self-respect	.828
	4. Self-fulfillment	.814
	6. Being well-respected	.657
	8. Sense of accomplishment	.743
Factor 3 (Security) 3 items Group $\alpha = .776$	1. Security	.642
	14. To be safe and protected from misfortune and attack	.653
	18. To be accepted and needed by your family, friends or community	.543
Factor 4 (Self-concept) 5 items Group $\alpha = .874$	8. Sense of accomplishment	.769
	12. To succeed at what you wanted to do	.697
	15. To be proud of yourself and confident with who you are	.758
	17. To find peace of mind and to make the best use of your talents	.768
	18. To be accepted and needed by your family, friends or community	.554
Factor 5 (Hedonism) 5 items Group $\alpha = .881$	2. Excitement	.653
	7. Fun and enjoyment in life	.771
	10. To lead a pleasurable, happy life	.729
	11. To lead an exciting, stimulating life	.759
	12. To succeed at what you wanted to do	.663

Note. Each of three items (8, 12 and 18) cross loaded on two factors. They were listed twice, each time with their appropriate item-to-group-total reliabilities.

This factor was named "fulfillment," which corresponded with Pearce's "fulfillment needs." The three items loaded on Factor 3 included "security" and its paired explanation, "to be safe and protected from misfortune and attack," joined by "to be accepted and needed by your family, friends or community," which did not load on Factor 1 together with its paired value "sense of belonging." However, although it did not focus on the same physical and financial dimensions of security as the other two items, to be accepted and needed by family, friends or community could be seen as a very basic element of security on social, psychological and emotional dimensions. Factor 3 was named "security," which reflected Pearce's "safety/security needs." Factor 4 contained five items, out of which Item 8 cross loaded on Factor 2, and Item 18 cross loaded on Factor 3. Nevertheless, all item-to-total reliability coefficients were above .50 and the group alpha was .87. Items 15 and 17 shared the second largest percentage (37.3%) of the respondents, who rated these two items as being most important to them. Factor 4 was named "self-concept" because all the five items that loaded on this factor dealt with what Kahle called the self-concept that summarized strategies for future behavior. "When we formulate our attitudes we give definition to ourselves and how it is that we differ from other people" [43]. It is interesting to note that although Factor 4 contained mainly the relative explanations originally created to accompany and explain the values that loaded on Factor 2, the two factors were only moderately correlated ( $r = .333$ ). In his Travel Needs Ladder, Pearce described similar characteristics as "self-

esteem/development needs" and divided them into other directed and self-directed. Other-directed needs included needs for status, respect, recognition and achievement. Self-directed needs included needs for self-development, growth, curiosity/mental stimulation, mastery, control competence, self-efficacy and need to repeat intrinsically satisfying behaviors [43]. Two original LOV values--"excitement" and "fun and enjoyment in life"--and their respective explanations, along with another value explanation--"to succeed at what you wanted to do," loaded on Factor 5. Items 2, 7 and 11 all had high loadings of above .70, which indicated that this factor was about fun, enjoyment and excitement. About as many respondents (33%) who rated "to lead a pleasurable, happy life" as most important rated "to succeed at what you wanted to do" as most important. Although Item 12 had a moderate correlation ( $r = .42$ ,  $p < .001$ ) with "excitement," its correlation with "fun and enjoyment in life," "to lead a pleasurable, happy life," and "to lead an exciting, stimulating life" were stronger ( $r = .56$ ,  $.62$  and  $.63$  respectively,  $p < .001$ ). These results indicated that many would perhaps not perceive their life as being fun, exciting and happy without being successful at what they wanted to do. This factor was named "hedonism."

### **The Confirmatory Factor Analysis of LOV**

In the second stage, the 5-factor solution for the 17-item LOV, along with two-, three-, four- and six-factor solutions, were subject to a series of confirmatory factor analyses using LISREL 8 for model fit. Table 12 lists the results of the confirmatory factor analyses. Chi-squares indicated that all solutions be rejected. As the sample size was sufficiently large, however, the purpose was really to test "how much better the model fits as compared to no model at all" [44]. The 6-factor solution contained two specific factors that each had only two items loaded on them, which did not seem to have adequate coverage of the domain and reliability. Proposed rules of thumb for the minimum number of items having meaningful loadings on a factor varied between three and five for the factor to be adequate for interpretation [40][37]. The 5-factor solution had the smallest chi-square, the second smallest  $\chi^2/df$  ratio and the largest GFI, AGFI and NFI among initial five solutions. These results were consistent with the exploratory stage of analysis suggesting that the 5-factor solution was appropriate. GFI, AGFI and NFI, however, were not yet at desirable levels. LISREL's modification indices indicated that further improvement of the model was possible. According to the largest modification index, opening the path from Factor 1, "connectedness," to Item 10, "to lead a pleasurable, happy life," could reduce the chi-square by nearly 55 with a loss of one degree of freedom and increase all three goodness-of-fit indices. Item 10 had a strong positive correlation ( $r = .71$ ,  $p < .001$ ) with Item 9, "warm relationship with others." Item 10 also had a loading of nearly .30 on Factor 1. An inter-item reliability analysis indicated that the item-to-total reliability coefficients of all three indicators of Factor 1 increased when Item 10 loaded on the same factor and the group alpha increased from .79 to .83. Obviously, to many respondents, leading a pleasurable, happy life was a goal and direct outcome of keeping warm relationship with others. This restraint was thus relaxed and GFI, AGFI and NFI were also improved in Model 5.2. The largest modification index for Model 5.2 suggested the errors between Items 8 and 12 be correlated. Item 12, originally created to explain Item 8. Both items, which were strongly correlated ( $r = .76$ ,  $p < .001$ ), loaded on "self-concept." Each item also cross loaded on a different factor. Although correlating errors has been cautioned against by many researchers, this case seemed to be well justified. The result was a drop of 23.08 ( $df = 1$ ) in chi-square and a gain in all other three goodness-of-fit indices. In the same manner, the errors of another pair of value-explanation, Items 7 and 10, which were strongly correlated ( $r = .70$ ,  $p < .001$ ), were also allowed to correlate as suggested in Model 5.3 as the largest meaningful modification index. This resulted in a significant drop of chi-square (13.38) and a loss of one degree of freedom and increase in GFI, AGFI and NFI. As suggested by the modification index of Model 5.4, the model could be further revised, for example, by opening the path from Item 5, "sense of belonging," to Factor 3, "security." It seemed to make sense on initial examination, as Item 18, the value explanation that was paired with Item 5, loaded on Factor 3. The two items, however, were only moderately correlated ( $r = .41$ ,  $p <$

.001). Cronbach's alpha indicated that although the SMC of the three indicator would increase slightly when the parameter was relaxed, only 28% of Item 5's own variability could be explained by the other three indicators. Among many cautions given by experts on structural equation modeling, Gorsuch warned that chi-square could be addictive [39] and Jöreskog and Sörbom emphasized that a constraint should not be relaxed unless it could be interpreted substantively [44]. The path from Factor 3 to Item 5 was not freed. Comparing Model 5.4 with Model 5.1, chi-square decreased significantly for loss of only three degrees of freedom and all three other goodness-of-fit statistics improved. Although GFI did not reach suggested acceptable level of .90 in Model 5.4, AGFI was above the acceptable level of .80 and NFI (.89) was very close to the acceptable level of .90. The model was obviously a better fit than the others. Model 5.4 is illustrated in Figure 1.

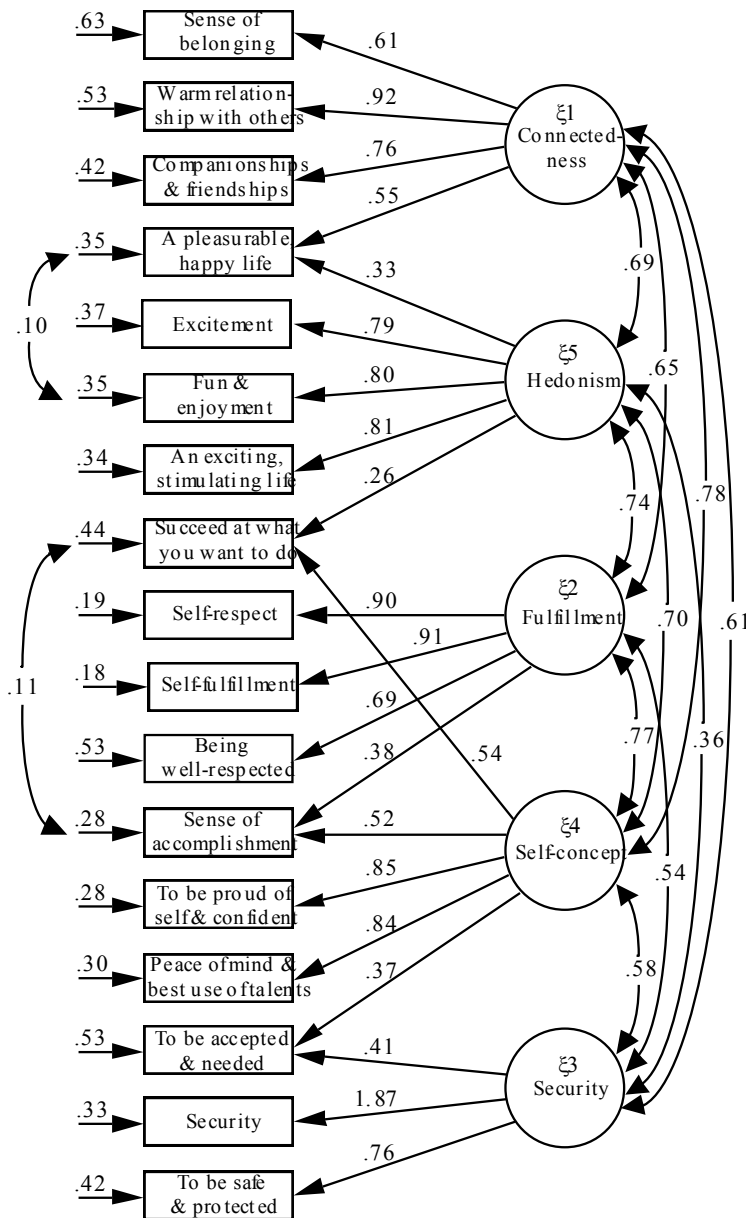


Figure 1. Model 5.4 – The value systems in a tourism context revealed by the 17-item LOV (LISREL estimates). **Note.** Elements for LX, PH and TD matrices are all significant,  $t \geq 4.9$ ,  $\alpha = .001$ , two-tailed,  $df = 103$ .

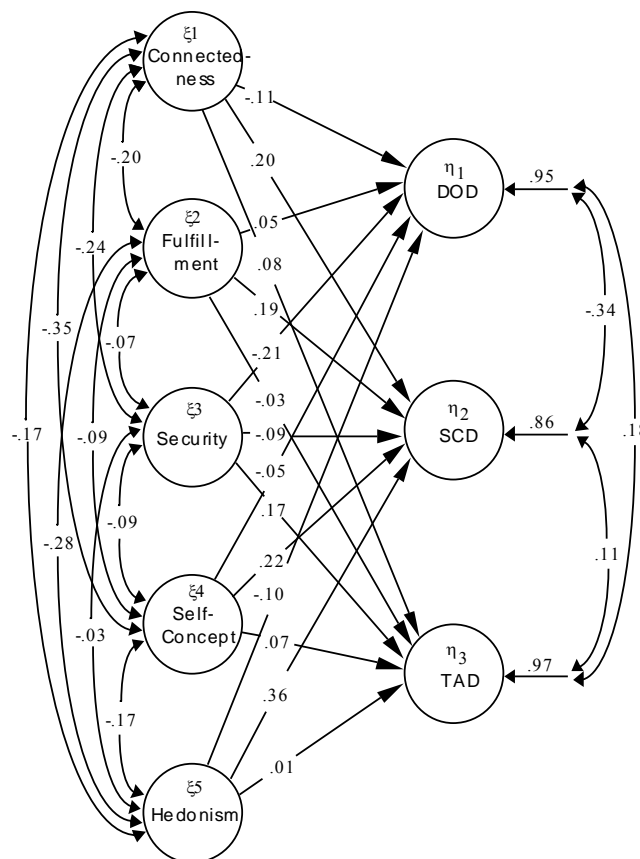
The Relationship Between Personal Value Systems and Novelty-Familiarity Preferences

Personal values have previously been used for predicting tourist behaviors [27][45]. One of the objectives of this study was to examine the relationship between tourists' personal values revealed by the LOV and novelty-seeking preferences depicted by the ITR scale. The correlations among the factors of the two scales were shown in Table 6.

**Table 6. Correlation matrix of three ITR factors and five LOV factors (N = 263)**

Factor	ITR 1	ITR 2	ITR 3	LOV 1	LOV 2	LOV 3	LOV 4	LOV 5
ITR 1 (DOD)	1.00							
ITR 2 (SCD)	-.33***	1.00						
ITR 3 (TAD)	.14*	.09	1.00					
LOV 1 (Connectedness)	-.04	.04	.02	1.00				
LOV 2 (Fulfillment)	.12	.03	-.06	-.20***	1.00			
LOV 3 (Security)	-.18**	-.18**	.15*	-.24***	-.07	1.00		
LOV 4 (Self-concept)	.03	.08	.03	-.35***	-.09	-.10	1.00	
LOV 5 (Hedonism)	-.08	.24**	-.02	-.17**	-.28**	-.03	-.17***	1.00

Note. \*p < .05; \*\*p < .01; \*\*\*p < .001



**Figure 2. Path diagram for effects of personal values on travel novelty-seeking preferences (LISREL estimates). Note.** In GA matrix,  $\gamma_{13}$ ,  $\gamma_{21}$ ,  $\gamma_{22}$ ,  $\gamma_{24}$ , and  $\gamma_{25}$  are significant at .01 (two-tailed);  $\gamma_{33}$  is significant at .05 (two-tailed). In PH matrix,  $\phi_{21}$ ,  $\phi_{31}$ ,  $\phi_{41}$ ,  $\phi_{51}$ ,  $\phi_{52}$ ,  $\phi_{53}$ , and  $\phi_{54}$  are significant at .01 (two-tailed). In PS matrix,  $\psi_{21}$  and  $\psi_{31}$  are significant at .01 (two-tailed);  $\psi_{32}$  is significant at .05 (two-tailed). DOD: Destination-Oriented Dimension; SCD: Socio-Cultural Dimension; TAD: Travel Arrangement Dimension. The analysis of the relationship between the three familiarity-novelty dimensions of the ITR scale and the five value systems obtained by using the extended LOV scale was carried out through a path analysis using LISREL. As expected, a causal relationship was found between the sample's personal value systems and travel

novelty-familiarity preferences. The relationship is illustrated in Figure 2. The model was a saturated model because the errors of the three endogenous variables were allowed to be correlated.

**Table 7. Path analysis of LOV factors on ITR factors**

Novelty-Familiarity	LOV Factor	Beta	SE	t-value
Destination-Oriented Dimension (R <sup>2</sup> = .055)	Connectedness	-.11	.08	-1.47
	Fulfillment	.05	.07	0.68
	Security	-.21**	.07	-3.20
	Self-Concept	-.05	.07	-0.63
	Hedonism	-.10	.07	-1.39
Social Contact Dimension (R <sup>2</sup> = .140)	Connectedness	.20**	.07	2.65
	Fulfillment	.19**	.07	2.79
	Security	-.09	.06	-1.43
	Self-Concept	.22**	.07	3.12
	Hedonism	.36**	.07	5.41
Travel Arrangement Dimension (R <sup>2</sup> = .030)	Connectedness	.08	.08	1.05
	Fulfillment	-.03	.07	-0.37
	Security	.17*	.07	2.55
	Self-Concept	.07	.07	0.95
	Hedonism	.01	.07	0.10

Note. \*Significant at .05 (two-tailed); \*\*Significant at .01 (two-tailed).

Table 7 shows that "security" was the sole predictor of the Destination-Oriented Dimension and the Travel Arrangement Dimension. Those who valued "security" generally did not put high priority on familiarity and less on novelty as far as food, lodging, transportation mode, travel arrangement and travel destinations were concerned. Instead, they were more likely to seek familiar travel infrastructure, pre-plan their trips and use the services provided by travel professionals. Those who preferred to take an international leisure trip with no pre-planned or definite timetables and routes, with no arrangements through travel agencies, and would not mind patronizing unfamiliar lodging, transportation and local restaurants, did not regard "security" as much of a relevant concern. This value system was not found to be a significant predictor of SCD for the sample even though it was significantly correlated with SCD. Novelty or familiarity preference on the SCD, however, could be predicted from all the other four value systems. Together, "connectedness," "fulfillment," "self-concept" and "hedonism" explained 14% of the variance of SCD. The linkage between such values as "warm relationship with others" and preferences for close contact with the people of the destination was well justified and expected. For those who put emphasis on "connectedness," to contact and befriend the locals of the destination was perceived as part of their trip purpose and a way to achieve self-actualization. One other possible explanation for this result was that the survey was conducted during the winter vacation season, when a higher percentage of travelers visiting friends and relatives (VFR) was reasonably expected than during other holiday seasons. Although the respondents were instructed to give their international leisure travel preferences in general, the possibility that many of the VFR travelers had planned their trips in advance, used travel services for convenience and time economy, and most likely would stay with the local friends or relatives they visited for the entire or most part of their visit might have affected their responses to the question. This assumption was supported by the sample's responses to the questions regarding the purpose of their last and present international leisure trips and the type of accommodation utilized. While "visiting friends and relatives" was a main purpose for the last trip of 33.7% of the respondents, 51.8% said it was their main purpose for the present trip. "Visiting friends and relatives" and "associating with local people" as two separate purposes of trip were also found to be significantly positively correlated. While the total number

of respondents whose accommodations were chosen by a travel agent remained roughly the same (15% for last trip and 16% for present trip), the number of respondents who were to stay with relatives or friends increased from 25% for the last trip to nearly 36% for the present trip. Warm relationships, close companionships and intimate friendships with others were obviously perceived as not only a symbol but an integral content of "self-concept" and "self-fulfillment." The fact that the two factors included the items, "being well-respected" and "to be accepted and needed by your family, friends or community" also indicated that there was a linkage between the two value systems and novelty-seeking preferences on the Socio-Cultural Dimension. "Hedonism" was even a stronger predictor of SCD. While other factors were held constant, "hedonism" could explain 36% of the variability in the Socio-Cultural Dimension of the sample. In other words, international travelers who put emphasis on such values as "excitement" and "fun and enjoyment in life" would most likely "prefer to seek the excitement of complete novelty by engaging in direct contact with a variety of new and different people."

## **6. Discussions and Conclusion**

The first purpose of this study was to explore the higher order value structure (personal value systems) of international tourists using LOV. For the first time, the nine explanations were used as separate value items along with the nine original LOV values. This unique listing of extended 18-item LOV certainly affected the factor structure of the original 9-item LOV, as separately both the nine values and the nine explanations obtained only one general factor, which was inconsistent with the findings of some previous studies [9][27]. Inconsistencies were also reflected in correlation between pairs of values and their respective explanations (Table 1) and comparisons of rating between pairs (Table 2). Item 18, "to be accepted and needed by your family, friends or community," for example, only explained 17% of the variance in Item 5, "sense of belonging," while mean score for Item 13, "to be admired by others and to receive recognition," was 4.96 compared to 6.63 for the value (being well-respected) it was supposed to explain. The inconsistency of four pairs of value-explanation (i.e., Items 5 and 18, 3 and 15, 4 and 17, 6 and 13) was further evident in the results of factor analysis as the values and their explanations did not load on the same factors as they were expected to. Item 13 had factor loadings lower than the predetermined critical level, and was thus dropped from the LOV. While the effect generated when the values and the value explanations were combined must be further tested, a meaningful 5-factor solution was extracted from the extended (17-item) LOV in the present study with enriched measurement for each dimension as it was suggested that generally a factor should contain at least three to five indicators for adequate coverage [37][38].

Several alternative models were examined and compared "to determine the model with the best fit, rather than attempt to assess a single model's fit in some absolute sense" [46]. Although the chi-square value indicated that the final model also needed to be rejected, it was clear that among all ten models compared, Model 5.4 provided the best fit. Bollen and Long emphasized that "The test statistics and fit indices are very beneficial, but they are no replacement for sound judgment and substantive expertise" [46]. None of the five value domains revealed in the present study was new. Homer and Kahle reported three value systems in their natural food store study [9]. Their first factor primarily corresponded with the "fulfillment" dimension of the extended LOV in the present study except the item, "excitement," which loaded on the "hedonism" dimension of LOV in the present study. The other two factors of their study contained indicators that did not load on the same factors in the present study. Kamakura and Novak identified three dimensions (hedonism, empathy and achievement) of LOV using a values map [26]. The first to study the value systems of LOV in a tourism context, Madrigal and Kahle revealed four value systems (i.e., external, enjoyment/excitement, achievement and egocentrism), two of which, "enjoyment/excitement" and "achievement," corresponded with "hedonism" and "fulfillment" in the present

study [27]. Although using the same 9-value LOV, the previous three studies all obtained value systems with different structures. Homer and Kahle suggested that "Situational factors may cause different dimensions to be important in different contexts" [9]. Among the three studies, the one conducted in a tourism setting [27] found value systems which were most similar to the ones found in the present study. With eight value explanations measuring specific aspects of same value domains, the extended 17-item LOV demonstrated its added strength and interpretability.

The "hedonism" value system revealed by the extended LOV, however, more appropriately captured a unique dimension of needs and motives of international tourists. Research has indicated that pure physiological needs do not necessarily need to be satisfied on an international trip [47][48] (Beard & Ragheb, 1983; Crompton, 1979). On the other hand, such activities as participating in a beer or food festival in a foreign country is almost always fun-and-enjoyment driven. When relaxation is taking place on an international leisure trip, be it at a popular international beach resort or an isolated foreign mountain village, the benefits one seeks also seem to be least likely for simple physiological needs alone but often combined with fulfillment of other needs. This is supported by the findings of this study that in an international tourism context, "hedonism" is strongly correlated with two other value systems, "self-concept" and "fulfillment." Applying Maslow's hierarchy of needs in a study of motivation of 708 downhill skiers from the Tahoe area of California and Nevada, Mills also excluded physiological levels of motivation from his study arguing that skiers had already satisfied these needs [41].

The present study revealed a causal relationship between the respondents' five personal value systems and their preferences for novelty on three travel dimensions. These data supported the theory that value could influence attitudes, which would in turn influence behavior, in an international tourism context [9]. "Security" was found to be the only value system that influenced preferences for novelty on the Destination-Oriented Dimension and the Travel Arrangement Dimension, both of which primarily had to do with physical travel facilities and arrangement. The data indicated that different choices in travel infrastructure and travel services had to do mainly with security, safety and convenience, but had little to do with self-actualization, fun and enjoyment. On the other hand, except for "security" all the rest value systems, namely "connectedness," "fulfillment," "self-concept" and "hedonism," were all reflected on the Socio-Cultural Dimension. These results, to a large extent, helped illustrate that the structural changes in DOD and SCD of the 16-item ITR were appropriate.

It was the first time the International Tourist Role (ITR) Scale and the extended 18-item List of Values (LOV), along with measurement of past international travel experience, travel profile, and socio-demographics, were applied to an active international tourist sample. The survey provided valuable data on respondents' two consecutive international leisure trips to as many as 74 countries with a wide variety of travel motives and diverse travel styles, lodging types, and travel service selections driven by respondents' personal value systems and travel novelty preferences. The ITR and the LOV scales combined together with conventional travel information demonstrated a unique strength in measuring, predicting and explaining tourist role selection and destination activities. However, the sample was purposive and further tests were needed to determine whether the revised, 16-item ITR and the 17-item LOV were equally applicable in other international tourism situations. The original pool of 62 items from which the 20-item ITR was derived focused heavily on the three conceptualized dimensions based on Cohen's international tourist role typology but very little on the aspects of the novelty construct that may be better defined by activity types. The data from both current study and other research indicate that international tourists' travel novelty preferences may go beyond the three domains (namely DOD, SCD and TAD), which the ITR measures well [49]. For example, the model of the role of the novelty construct Lee and Crompton proposed contained such dimensions as "thrill" and "adventure," which were highly activity-based [49]. Although the TNS was not developed in an international tourism context, items like "I enjoy doing 'daring' activities while on vacation," and "I enjoy activities that offer thrills" [49] may be universally applicable. It can be reasonably postulated that such activities as downhill skiing in the winter



northern Europe, riding dog sleds in North Pole, scuba diving near an exotic Pacific island, weekend fishing in Canada, escaping a harsh winter to a warm destination like Mexico, can serve well as main motives for international leisure travel just as much as socio-cultural motives. Among a list of destination activities, Shoemaker reported sports, sunbathing and gambling as important for travel cited by tourists [50]. Destination activities are important attributes in differentiating different segments of a tourist market. As indicated in the current and previous research [8], tourists revisiting a familiar destination could always find something novel to do. In order to fully measure international tourists' novelty seeking preferences in addition to the three dimensions based on Cohen's typology, it is recommended that researchers interested in utilizing the ITR in future international tourist research should also consider using similar travel novelty measures such as the TNS in the same study so as to compare and combine the unique strength that each individual instrument possesses. This study analyzed several important variables and their influences in international tourist role selection. These variables, however, are among a vast number of known variables such as social influences, cost, artificial and natural disasters (e.g., riot, war, crime, earthquake, hurricane), new products and services, innovation and so on, and many latent variables such as the three travel novelty dimensions and the five personal value systems identified in this study. The effects of these manifest and latent variables, particularly when acting together, may cause a tourist to change roles, destination choices and travel behaviors. No single instrument may truly and precisely measure and predict these changes. Nevertheless, as the present study suggests, an interdisciplinary, multi-dimensional approach has obvious advantage of better understanding international tourist population and when possible an integrated approach in terms of theory and method will add unequivocal strength to tourism research.

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