

Personal Values, Traveler Personality Type, and Leisure Travel Style

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The study examined the relationship between the List of Values (LOV) and Plog's traveler personality type scale and the ability of each to predict travel style. Survey data were collected from a convenience sample of 514 visitors to a tourist destination in Arizona. Results indicated that personal values were significantly related to traveler personality type ($p < .001$). Moreover, personal values significantly differentiated group travelers from independent travelers ($p < .001$), whereas Plog's scale was unable to do so ($p > .25$). It was concluded that Plog's measure of traveler personality type may more accurately be conceptualized in terms of locus of control.

KEYWORDS: *Plog's allocentric-psychocentric continuum, personal values, tourist behavior, List of Values*

Separate streams of research have emerged over the years comparing leisure behavior to personal values and to personality. For example, personal values have been used to predict a number of leisure behaviors including choice of recreation activities (Beatty, Kahle, Homer, & Mirsa, 1985; Boote, 1981; Jackson, 1973; Veroff, Douvan, & Kulka, 1981), selection of vacation destinations (Dalen, 1989; Klenosky, Gengler, & Mulvey, 1993; Muller, 1991; Pitts & Woodside, 1986; Shih, 1986), and choice of leisure activities engaged in while on vacation (Madrigal & Kahle, 1994). Likewise personality has also been related to leisure activity decisions (Allen, 1982; Driver & Knopf, 1977; Howard, 1976; Martin & Myrick, 1976; Moss, Shackelford, & Stokes, 1969) and travel decisions (Nickerson & Ellis, 1991; Plog, 1974).

Despite the interrelatedness of values and personality, little is known about the nature of the relationship (Drennan, 1983). The current paper sought to integrate these two separate, yet related, theoretical streams of research in the context of leisure travel. More specifically, the purpose of this study was to assess the relationship between Plog's (1972, 1991b) theory of traveler personality types and personal value theory. Two instruments, each commonly cited in the literature, were used. Traveler personality type was measured using Plog's (1972) five-item allocentrism-psychocentrism scale, and personal values were assessed using the List of Values (Kahle, 1983; Veroff et al, 1981). A secondary purpose of the study was to examine each measure's ability to differentiate group travelers from independent travelers.

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Review of Literature

Personal Values

The study of personal values has been the focus of social science research for decades (Cantril & Allport, 1933; Duffy, 1940; Levin, 1973). Values have been defined as abstract beliefs about behaviors or end-states of existence that transcend specific situations and guide the selection or evaluation of behavior and events (Rokeach, 1973; see Schwartz & Bilsky, 1987, p. 551). Values are a type of social cognition (Kahle, 1983) that reflect internal states that intervene between stimuli and responses, and affect those responses (see Eagly & Chaiken, 1993).

Rokeach (1973) argued that once learned, values are hierarchically ordered into a system that differentially weights individual values by their perceived importance. Individuals rely on their value systems to maintain self-esteem or consistency in those situations where one or more conflicting values are activated. For example, a conflict arising between the values of excitement and security in a decision to participate in sky-diving would be resolved based on the priority given to each of those values in the individual's value system (Rokeach, 1979).

Because of their centrality to the individual's cognitive structure, personal values and value systems have long been recognized as effective predictors of human behavior in a variety of situational contexts (Parsons & Shils, 1951; Vernon & Allport, 1931). Social scientists have linked values to a number of behaviors, including cigarette smoking (Grube, Weir, Getzlaf, & Rokeach, 1984), religious behavior (Feather, 1984), consumer behavior (Henry, 1976; Homer & Kahle, 1988; Kahle, Beatty & Homer, 1986; Novak & MacEvoy, 1990; Kamakura & Mazzon, 1991; Kamakura & Novak, 1992; Vinson & Munson, 1976), charitable giving (Manzer & Miller, 1978), and political behavior (Feather, 1973; Rokeach, 1973; Tetlock, 1986). Personal values have also been related to leisure behavior. For example, Pottick (1983) reported that individuals valuing security most highly tended to be frustrated by leisure, whereas those favoring warm relationships with others benefited from leisure. Likewise, Beatty et al. (1985) reported that recreation activity preferences were successfully differentiated by respondents' prioritization of personal values. Values have also been able to successfully differentiate active discontinuers (i.e., those transmitting negative information about an activity) from passive discontinuers (Backman & Crompton, 1990) and continuers from discontinuers (Backman & Crompton, 1989) of selected leisure activities.

To date, the majority of research on values in the situational context of vacation travel has focused on market segmentation. Personal values are effective segmentation variables because they are less numerous, more centrally-held, and more closely related to motivations than more traditional demographic and psychographic measures (Boote, 1981; Valette-Florence, 1986, 1988; Vinson, Scott and Lamont, 1977). Pitts & Woodside (1986) found

that values were able to predict the cluster membership of respondents grouped on the basis of travel/leisure preferences and that values were related to actual vacation behavior. Similarly, Muller (1991) identified unique within-group personal value profiles for subjects segmented according to their perceived importance ratings of a city's attributes. Using a somewhat different approach, Madrigal and Kahle (1994) found differences in vacation activity importance ratings across segments of tourists grouped according to their perceived importance ratings of vacation activities.

Personality

The study of personality has received considerably more scientific attention over the years than has the study of values. Personality research focuses on the total individual and individual differences (Pervin, 1989). Interest in the total individual centers on the complex relationships among various aspects (e.g., motivation, learning) related to how one functions in the world. Although recognizing that similarities among all people exist, the study of individual differences is concerned with how people vary. More specifically, individual differences are related to the tendency for the behaviors of different individuals to fall at different points along various behavioral dimensions (Potkay & Allen, 1986, p. 6).

Theories related to personality and the development of personality have proliferated. For example, Ryckman (1993) has noted five distinct perspectives of personality theories and proponents of each: a) psychoanalytic and neoanalytic (Adler; Erickson; Freud; Fromm; Horney; Jung); b) trait (Allport; Cattell; Eysenck); c) cognitive (Kelly); d) humanistic/existential (Maslow; May; Rogers); and e) social-behavioristic (Bandura; Rotter; Skinner).¹ Therefore, a definition of personality depends to a large extent on one's theoretical orientation. A trait perspective was selected for this study because it was consistent with Plog's theory of traveler personality type. Thus, for the purpose of this study, an individual's personality was defined as "a set of points falling along several behavioral dimensions, each corresponding to a trait, resulting in a unique profile (i.e., type), different from that of other individuals" (Pervin, p. 7). Traits refer to a relatively stable tendency or disposition for an individual to react in a particular way over a wide range of situations (Pervin, 1989, p. G-11; Ryckman, 1985, p. 260). The concept of personality type refers to the clustering of many different traits, thus suggesting an even "greater degree of regularity and generality of behavior" (Pervin, p. 7).

According to Ryckman (1985), disagreement exists over whether traits *cause* or are *correlated* with behavior. He noted that Allport (1937) viewed traits as residing in the individual and as having the potential to cause be-

¹Due to space constraints, the reader is directed to Ryckman (1993) for a detailed discussion on each perspective. Likewise, the reader is directed to Drennan (1983) for a discussion of how values are related to a number of these perspectives.

havior when activated. In contrast, traits may also be viewed as constructs that describe behavior. For example, an individual who continues at a task until it is completed, in spite of obstacles, may be described as persistent. This information could then be used to predict future behavior in other situations where obstacles appear that complicate a task. It should be noted, though, that the trait label assigned to past behavior did not cause the individual to be persistent in the new situation. Rather, the individual's past behavior is correlated with behavior in the new situation. Although not adopting this idea completely, Cattell (1965) argued that there is also a neurological basis for traits, but that sufficient scientific information about the physiological basis of traits has not yet been discovered. Therefore, he suggested that it is best to think of traits as constructs whose physiological basis has yet to be determined. Similarly, Eysenck (1967) asserted that there is a substantial hereditary basis to personality. He pointed to empirical evidence on twins separated early in childhood and raised by different parents which suggests that the identical twins are much more alike in personality than are fraternal twins. Thus, trait theory appears to be heavily dependent upon a behavioral view, as opposed to a cognitivist view, of human motivation (see Furnham, 1990).

Most of the early research linking personality to leisure behavior relied heavily on trait theory (Driver & Knopf, 1977; Howard, 1976; Martin & Myrick, 1976; Moss, Shackelford, & Stokes, 1969). Nias (1985) noted that most of these studies demonstrated that the relationship between leisure behavior and personality was not very robust. Iso-Ahola (1980) criticized most of these early studies for lacking definitional clarity in variable operationalizations, for failing to rely on theory for the inclusion of specific activities, and for lacking consistency in measuring personality. He urged researchers to consider the situational context along with traits when measuring personality. Mannell (1984) also noted the importance of the interaction of personality variables and situational context. He suggested that researchers conceptualize personality dimensions that are germane to the leisure experience being investigated.

Traveler Personality Type

Plog (1972) conducted the first research on personality type as it applies to tourist behavior. Plog (1974, 1990, 1991b) delineated personality types along a continuum ranging from allocentrism to psychocentrism. The psychocentric personality type tends toward territory boundness, insecurity, and powerlessness. Psychocentric individuals also tend to have non-active lifestyles and are non-adventurous. In contrast, allocentric individuals tend to be self-confident, intellectually curious, and feel in control of their lives. Although most of Plog's work on the allocentric-psychocentric continuum predates the research of Iso-Ahola (1980) and Mannell (1984), Plog considered the relevant situational context of personal travel when developing his

scale. According to Plog (1991b), psychocentrics tend to prefer a high degree of familiarity in their travel and, as a result, enjoy group or "packaged" tours. In contrast, allocentrics enjoy vacations to exotic and unique destinations, and prefer to travel independently (i.e., not as part of group tours).

Plog's (1972) allocentrism-psychocentrism continuum has received considerable attention in tourism textbooks (Coltman, 1989; Gee, Makens, & Choy, 1989; Gunn, 1988; Mathieson & Wall, 1982; Mill & Morrison, 1985; Mill, 1990; McIntosh & Goeldner, 1986; Murphy, 1985) and though most of his work has been conducted in the private sector (see Plog, 1991b), there has been some research examining the allocentrism-psychocentrism continuum reported in the academic literature. In a study predicting vacation preferences, Williams, Ellis, & Daniels (1986) reported results that generally supported Plog's (1972) model. More recently, Nickerson and Ellis' (1991) used Plog's scale to demonstrate the efficacy of the continuum within the broader framework of activation theory. Plog's approach has been criticized by Smith (1990a) who was unable to find a relationship between the allocentrism-psychocentrism personality dimensions and destination preferences. Plog (1990) rebutted Smith's findings on the grounds of construct validity, inappropriate sampling (i.e., the sample had an allocentric bias), and a misapplication of the theory. He also criticized Smith for not using Plog's allocentrism-psychocentrism scale. Smith (1990b) responded to Plog's rebuttal by pointing out that the distribution of allocentrics-psychocentrics in his sample was normally distributed, thus indicating that no skew toward the allocentric end of the continuum existed. Smith also reported that the allocentric-psychocentric continuum was able to predict actual travel behavior (group vs. independent travel) in only two of 25 subgroups included in his study. However, Plog (1991b) noted in a second rebuttal that Smith failed to address the most important criticisms outlined in his first critique, namely an inappropriate measurement instrument and classifying scheme were used to assess allocentrism-psychocentrism.

Linking Personal Values to Personality

A number of studies have reported a link between personality traits and personal values (Crandall & Rasmussen, 1975; Feather, 1971; Rim, 1970; Ro-keach, 1973). Drennan (1983) suggested that the same two bases, genetics and internalization of expectancies, account for the development of personality traits and personal values. She also added that, in fact, most personality theories include a values component (e.g., Allport, 1968; Frankl, 1962; Fromm, 1956; Maslow, 1968; May, 1953). For example, Krampen has conceptually developed (1988) and empirically tested (1991) an action-theory model of personality that incorporates value orientations as a key component in explaining an individual's behavior. Furthermore, Segal, Segal, and Niem-czycki (1993) argued that personal value systems, personality and personality traits are interrelated. In this regard, Segal (1992) contended that values

appear to affect the same variables (actions, attitudes, beliefs) used to identify traits related to social behavior. As such, values should be viewed as a major determinant of the social and learned aspects of personality.

Although the relationship between personal values and personality has generally been assumed, little is known about the nature of the relationship. According to Drennan (1983), most personality theories tacitly imply that one's personality encompasses her/his values and value system; in effect, personality is viewed as having a superordinate role to values. In contrast, Rokeach (1973) challenged the centrality given to traits as concepts for understanding how personality functions. He argued that traits refer to human characteristics that are fixed and relatively unaffected by situational dynamics. Values, on the other hand, are more central to an individual and personality should therefore be conceived as a system of values. Furthermore, values should be a better predictor of overt behavior than personality because of their centrality to an individual's cognitive system.

Measurement of Values

The most commonly used measure of values has been Rokeach's Value Survey (RVS, 1973) which consists of 18 instrumental values (ideal modes of behavior) and 18 terminal values (ideal end-states of existence). Unfortunately, the instrument has been criticized because of the difficulty associated with ranking so many items, the impossibility of ties in individual rankings, and the lack of relevance of the values to daily life (Clawson & Vinson, 1978). In response to these criticisms, the more parsimonious List of Values (LOV) scale was developed and tested on a national probability sample (Kahle, 1983; Veroff et al., 1981). The LOV was derived from Rokeach's (1973) list of terminal values and has been used to examine behavior related to both leisure (Backman and Crompton, 1989, 1990; Beatty et al., 1985; Pottick, 1983; Veroff et al., 1981) and tourism (Madrigal & Kahle, 1994; Muller, 1991). The LOV scale used in this study consisted of nine personal values, each measured on a five-point Likert scale ranging from extremely unimportant (1) to extremely important (5). Respondents were asked to rate each value in terms of its importance in their daily lives.

Research has shown that the LOV scale consists of several underlying dimensions, including an internal-external locus of control dimension (Homer & Kahle, 1988; Kahle, 1983) and that this dimension is relevant in a leisure behavior context (Backman & Crompton, 1989, 1990; Madrigal & Kahle, 1994). Locus of control, represented by an internal and external dimension, refers to the extent to which an individual is willing to accept responsibility for what happens to himself or herself (Lefcourt, 1966; Rotter, Seeman, & Leverant, 1962). According to Kahle (1983), the values of *self-fulfillment*, *accomplishment*, *fun and enjoyment in life*, *excitement*, *warm relationships with others*, and *self respect* represent an internal orientation, whereas *security*, *belonging*, and *being well-respected* reflect externally-oriented values. Internally-oriented individuals tend to be more self-motivated and believe that they are

able to influence events and control outcomes in their lives. Externally-oriented individuals, on the other hand, tend to feel powerless and believe that forces outside of themselves determine solutions to problems.

Measurement of Traveler Personality Type

Plog's (1972) allocentrism-psychocentrism scale assessing traveler personality type was used in the current study. The scale was developed on behalf of 16 sponsors (U.S. and foreign flag airlines, airframe manufacturers, and several national magazines) interested in finding out who was not traveling by air and why (see Plog, 1991b). The first stage of scale construction consisted of monitoring 1,200 telephone calls to airline reservations centers; conducting 85 extensive one-on-one interviews (each lasting two or more hours) with non-flyers, each of whom could financially afford to fly but chose not to; and conducting extended interviews with 45 flight attendants and 25 travel agents designed to obtain their perceptions of first-time airline passengers. The second stage involved interviewing 1,600 individuals (flyers and non-flyers) residing in one of thirteen metropolitan centers in the United States or Canada. Plog's efforts resulted in a five-item scale, two of which are differentially weighted. Each item is measured on a dichotomous scale and all items are summated to arrive at an overall scale which ranged in the present study from 4.0 to 8.0 with higher scores indicating greater allocentrism. According to Plog (1990), "these questions are very specific, are *personality* [emphasis added by Plog] based, and each has a purpose" (p. 43).

Hypotheses

The review of literature on personality and values suggests that the two concepts are related. In addition, empirical findings have been reported linking each concept to leisure behavior generally, and travel behavior specifically. Although not previously investigated, the nature of the relationship between values and traveler personality type is implied in the work of Kahle (1983) and Plog (1991b). That is, internally-oriented individuals seek control over their lives and are more willing to assume risk, characteristics typical of allocentrics. In contrast, externally-oriented individuals desire a high level of security and familiarity in their lives, characteristics that describe psychocentrics. Thus, the first hypothesis is offered:

- H1: Internally motivated values (self-fulfillment, accomplishment, fun and enjoyment in life, excitement, warm relationships with others, and self respect) are positively associated with allocentrism, and externally motivated values (security, belonging, and being well-respected) are positively associated with psychocentrism.

The literature suggests that travel behavior can be predicted by values and traveler personality type. In fact, Smith (1990b) argued that rather than concentrate on the relationship between personality types and destination, research should focus on the possible link between personality type and

travel styles (i.e., how people choose to travel). Likewise, Plog (1990) suggested that research examining actual traveler behavior (i.e., group vs. independent travel styles) would yield important information about his theory. Plog (1991b) has also argued that his traveler personality-type scale is able to predict actual travel behavior. However, the literature on personal values suggests that because of their centrality to the individual's cognitive structure, personal values should be a better predictor of behavior than personality type. The travel behavior of interest in this study is participation in a group tour versus independent travel. For purposes of brevity this travel behavior will be referred to as travel style in this paper. Thus, the second hypothesis:

H2: Personal values are a better predictor of travel style than is traveler personality type.

Method

Data were collected from a convenience sample of tourists visiting a popular tourist destination in central Arizona (located approximately two hours from Phoenix). Subjects were contacted at one of three commonly visited tourist sites at the destination (an entrance to a hiking trail, a downtown shopping location, and an arts and crafts center) in the spring of 1991. Data were collected over a three week period in which time of day, day of week, and collection point were varied. Surveys were self-administered, but distributed and introduced by one of four female college seniors recruited to assist with the research (no more than one surveyor worked at any one site at a time). Surveyors were instructed to contact no more than one person per travel party. All respondents were tourists from North America (United States and Canada) who were traveling either as part of a group "package" tour (12% of the sample) or independently. The two-page survey instrument was comprised of four sections: a) items related to perceptions of the destination and overall satisfaction with the visit; b) five items measuring traveler personality type (Plog, 1972); c) nine items measuring values (Kahle, 1983; Veroff et al., 1981); and d) items requesting demographic information.

Results and Discussion

Description of the Sample

Of the 550 questionnaires distributed, 514 (93%) were deemed usable and included in the analysis. Those not included were eliminated due to missing data. Approximately 13% of those asked to participate in the study refused, most citing time constraints as their reason for not participating. The sample was comprised of 288 men (56%) and 226 women (44%) with a mean age of nearly 42 years. The majority of the sample resided outside the state of Arizona (71%) and most were visiting the destination for the first time (56%). Of those who had visited previously, the mean number of prior visits was slightly over four. Nearly 44% of the sample reported an

annual household income exceeding \$50,000, and 22% reported incomes ranging between \$30,000 and \$49,999.

The mean score for the entire sample on Plog's (1972) traveler personality type scale was 6.93 (range: 4.0 - 8.0), indicating that the sample tended toward the allocentric side of the continuum. Obtaining an accurate reliability coefficient for the summated scale was not possible because of the attenuation problem associated with correlating dichotomous scales (see Cohen & Cohen, 1983). The specific items comprising Plog's scale are not presented here because of the proprietary nature of the scale. Mean scores and standard deviations for each of the personal values included in the LOV scale are shown in Table 1. The personal value with the highest mean score (and lowest standard deviation) was *self-respect* ($M = 4.80$). The value receiving the lowest mean score was *excitement* ($M = 4.10$).

H1: Internally motivated values (self-fulfillment, accomplishment, fun and enjoyment in life, excitement, warm relationships with others, and self respect) are positively associated with allocentrism, and externally motivated values (security, belonging, and being well-respected) are positively associated with psychocentrism.

In order to address the first hypothesis, a multiple regression using stepwise entry was performed. Stepwise entry was deemed appropriate because there was no strong theoretical justification for a predetermined entry of predictors. Respondents' scores on the allocentrism-psychocentrism scale served as the dependent measure and the LOV items were used as predictors. The selection of personality type as the dependent variable was based on Drennan's (1983) comments that most personality theories consider personal values to be part of one's personality. Accordingly, the ability to predict one's personality type should, at least in part, be dependent on her/his personal values. Similarly, Rokeach (1973) and Segal (1992) have argued that values are a major determinant of personality type. Correlations among predictors and the results of the analysis are shown in Table 1. Positive relationships indicate greater allocentrism, negative relationships denote greater psychocentrism.

The results of the regression indicated that three of the nine personal values were significantly related to traveler personality type, $F(3, 480) = 7.13, p < .001$. As shown in Table 1, the personal value of *self-fulfillment* (Beta = .13) was the first variable to enter the equation, followed by *security* (Beta = -.19), and *accomplishment* (Beta = .11). Thus, those individuals valuing *self-fulfillment* and *accomplishment* more highly tended to have a more allocentric traveler personality type. In contrast, those valuing *security* more highly tended to be more psychocentric. It should be noted, however, that in spite of statistical significance, the total variance explained by the three variables was less than five percent.

Perhaps more pertinent than statistical significance is general support for the hypothesized directional relationship between values and traveler personality type. However, it should be noted that for the most part the corre-

TABLE 1
Correlations and Results of Stepwise Multiple Regression of Personal Values on Plog Score (N = 514)

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	Beta	<i>R</i>	<i>R</i> ²	<i>F</i>
1. Plog score	6.93	.82	1.00										—			
2. Self-Fulfillment	4.57	.68	.12	1.00									.13	.12	.01	6.60*
3. Security	4.37	.83	-.10	.34	1.00								-.19	.19	.03	8.67**
4. Accomplishment	4.62	.69	.09	.49	.43	1.00							.11	.21	.04	7.13**
5. Belonging	4.12	.98	-.06	.35	.47	.34	1.00						-.08			
6. Warm relationships with others	4.51	.77	-.04	.47	.37	.24	.51	1.00					-.07			
7. Being well-respected	4.26	.98	-.02	.39	.43	.42	.61	.32	1.00				-.05			
8. Excitement	4.10	.99	.06	.30	.25	.23	.38	.28	.30	1.00			.05			
9. Self-respect	4.84	.47	.08	.44	.31	.48	.27	.29	.30	.13	1.00		.04			
10. Fun and enjoyment in life	4.58	.70	.02	.33	.32	.25	.39	.44	.33	.50	.29	1.00	.01			

* $p < .01$; ** $p < .001$; All items were measured on a five point scale ranging from extremely unimportant (1) to extremely important (5).

lations were quite low. As hypothesized, the values of *self-fulfillment*, *accomplishment*, *fun and enjoyment in life*, *excitement*, and *self respect*, all considered to be representative of an internal orientation, were positively associated with allocentrism. The externally-oriented values of *security*, *belonging*, and *being well-respected* were negatively associated with the dependent measure, thus indicating a positive relationship with psychocentrism. Especially noteworthy is the positive and significant relationship between *security* and psychocentrism. As noted by Plog (1990), psychocentrics, because of their general insecurity, are more likely to seek out and participate in group tours. The only value not consistent with the first hypothesis was *warm relationships with others*, an internal motivator, which had a negative relationship with allocentrism.

H2: Personal values are a better predictor of travel style than is traveler personality type.

The second hypothesis addressed the general issue of whether personality type or a measure of personal values is a better predictor of travel style. Although originally developed to predict destination choice, Plog (1972, 1990, 1991b) has consistently maintained that his traveler personality type scale is an effective predictor of whether an individual is likely to choose to travel as part of a group tour or to travel independently. Although personal values have not been previously used to differentiate group travelers from independent travelers, they have been shown to be reliable predictors of certain types of traveler behavior (Madrigal & Kahle, 1994; Muller, 1991; Pitts & Woodside, 1986). In addition, personal value theory (Kahle, 1983; Ro-keach, 1973) suggests that values should be a better predictor of behavior than personality type because the former are more centrally held constructs. Thus, the second hypothesis independently examined the ability of Plog's allocentrism-psychocentrism scale and the LOV scale to differentiate travel style.

In order to examine the second hypothesis more objectively, only those visitors residing outside the state of Arizona and who were visiting the destination for the first time were included in the analysis. Only out-of-state residents were selected because so much of Plog's (1990, 1991b) theory is centered on mode and distance of travel. Plog argued that psychocentrics prefer driving over flying even when they can afford the cost of flying. Although mode of transportation to the site was not measured in this study, it was felt that those visiting the destination from out-of-state were more likely to have the option of either traveling by air or automobile. Only first-time visitors were included in order to eliminate any pre-existing conditions that may have influenced mode of travel.

The subgroup included in the following analyses was comprised of 256 individuals, 19% of whom were traveling as part of a group tour. Most of the group travelers were part of tours originating from either Las Vegas or Los Angeles and included the Grand Canyon as one of the stops on the tour. A

comparison of the demographic profile of group and independent travelers indicated that the former were somewhat younger than the latter, $t(62) = -4.06$, $p < .001$ ($M = 34.36$ to $M = 44.46$, respectively). A significant difference also existed between the groups on annual income, $\chi^2(2) = 68.71$, $p < .001$. The majority (68%) of independent travelers earned incomes exceeding \$50,000 compared to only 6% of the group travelers. In contrast, most (56%) of the group travelers earned \$30,000 or less compared to only 12% of the independent travelers. No differences in sex were found between the groups.

A t-test was conducted to examine whether any differences existed between group travelers and independent travelers on Plog's allocentrism-psychocentrism scale. A significant difference would indicate that the scale was able to differentiate the two groups. The results of the t-test indicated that although the direction of scores for group travelers ($M = 6.76$, $SD = .91$) and independent travelers ($M = 6.93$, $SD = .82$) was consistent with the allocentrism-psychocentrism continuum, no statistical difference was found, $t(67) = -1.15$, $p > .25$.

Direct discriminant function analysis was selected in order to determine whether the nine personal values included on the LOV scale were able to differentiate group travelers from independent travelers. The results of the discriminant analysis shown in Table 2 yielded a significant, Wilks'

TABLE 2
Results of Discriminant Function Analysis: Traveler Types and Personal Values
($N = 256$)

Variable	Standardized Discriminant Coefficient	Group Means (SD)	
		Group Travelers ($n = 48$)	Independent Travelers ($n = 208$)
Being well-respected	.85	4.59 (.74)	4.23 (.90)
Self-fulfillment	-.66	4.44 (.77)	4.62 (.60)
Accomplishment	-.51	4.42 (.77)	4.63 (.65)
Warm relationships with others	.49	4.71 (.50)	4.50 (.70)
Security	.22	4.52 (.65)	4.37 (.75)
Belonging	-.19	4.27 (.79)	4.08 (.96)
Fun and enjoyment in life	.13	4.75 (.48)	4.57 (.64)
Self-respect	-.12	4.81 (.39)	4.85 (.48)
Excitement	.09	4.21 (1.01)	4.03 (.94)

Group Centroids: 1. Group Travelers = .74; 2. Independent Travelers = -.17

$\lambda = .89$, $\chi^2(9) = 30.01$, $p < .001$. The correlation between the two sets of variables (i.e., predictors and criterion) was $r_c = .34$. Thus, the relationship accounted for approximately 12% of the total variance, an amount considered both statistically and meaningfully significant (Pedhauzer 1982). Therefore, the second hypothesis can not be rejected.

Of the nine values in the LOV scale, four exceeded the .30 minimum recommended for interpretation (Tabachnick & Fidell, 1989). Specifically, group travelers were more likely to value *being well-respected* and *warm relationships with others*, while independent travelers tended to favor *self-fulfillment* and *accomplishment*. Results of the classification procedure indicated that 62% of the cases were classified correctly compared to a chance rate of 53% (see Betz, 1987). Values were especially successful in classifying group travelers (81%) and only marginally successful in classifying independent travelers (57%).

It should be noted that consistent with the first hypothesis, the two significant predictors of independent travel were each internal motivators, while *being well-respected*—an external motivator—was significantly related to group travel. Interestingly, the value of *warm relationships with others*, an internal motivator, was positively associated with group behavior. This may be attributable to the context in which these data were collected. Kahle (1983, 1991) noted that although the internal and external dimensions representing the List of Values tend to be robust, certain value loadings may occasionally be context-specific. It may be that there is an interaction between this particular value and one's tendency to travel or participate in group activities. Intuitively it makes sense that those individuals traveling as part of a group tour do so because they desire greater interaction with others. Thus, it follows that these individuals may be more likely to place greater value on *warm relationships with others*.

Discussion and Conclusions

The current study makes two theoretical contributions. First, it offers insight to the theoretical relationship between personal values and Plog's model of traveler personality type. The results suggest that Plog's personality types may be conceptualized within the broader motivational perspective of locus of control. The values of *self-fulfillment* and *accomplishment*, both considered internal motivators (Drennan, 1983; Kahle, 1983), were significantly related to allocentrism. Although not referring to these values per se, Plog's (1991b) description of an allocentric is quite consistent with an internal orientation. The results also supported Plog's (1990) assertion that the personal value of *security* is of critical importance to psychocentrics. Furthermore, although not attaining statistical significance, the other values identified as internal and external motivators by Kahle were in a direction consistent with Plog's description of allocentrics and psychocentrics. The only exception was *warm relationships with others*, an internal motivator that

was positively associated with psychocentrism. This finding was given further credence in the results of the discriminant analysis which indicated that *warm relationships with others* successfully differentiated group travelers from independent travelers. As noted by a reviewer, these results suggest that the dimensional nature of the LOV scale in the situational context of leisure travel needs more research.

The second theoretical contribution made by this research is of a more applied nature. The data indicated that personal values were a better predictor of independent versus group travel behavior than Plog's allocentrism-psychocentrism scale. Independent travelers were significantly differentiated from group travelers by the internal values of *self-fulfillment* and *accomplishment*. In contrast, the values of *being well-respected* (an external motivator) and *warm relationships with others* (an internal motivator) significantly differentiated group travelers from independent travelers. On the surface, these results may lead one to conclude that personal values, as suggested by Rokeach (1973), are better predictors of actual behavior because they are more centrally held. However, what is not known is whether another personality measure or another theoretical perspective of personality would yield similar results. Regardless of whether personal values are the superordinate construct or not, the practical implications of these results reinforce past research in tourism behavior regarding their utility as market segmentation variables (Madrigal & Kahle, 1994; Muller, 1991; Pitts & Woodside, 1986; Shih, 1986).

Finally, as with any empirical investigation, certain limitations must be considered. First, as noted by Plog (1990) in his response to Smith (1990a), the sample used in the present study may have been inappropriate. Plog suggested that Smith's failure to differentiate traveler personality types may have been the result of collecting data predominately from just one type of traveler. Although data were collected from multiple sites in this study, each quite different from the other, it may be that the personality types drawn to this destination were more similar than different. This implies that these data may have suffered from a self-selection bias that resulted in a lack of differentiation among traveler types regardless of whether they were traveling with a group or independently.

A second shortcoming of this study was the use of Plog's allocentrism-psychocentrism scale itself. Despite its widespread application in the private sector, the psychometric properties of the scale have not yet been subjected to rigorous examination in the academic literature because of the proprietary nature of the scale. Third, as implied earlier, future research should attempt to use multiple measures to operationalize the constructs used in this study. Finally, the use of a convenience sample suggests that the results may not be generalizable. Related to the use of a convenience sample were the problems of group size disparity and the differences in income and age existing between the groups. Perhaps a more representative sample would have yielded a different set of data.

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