Involvement and Travel for Recreational Runners in North Carolina

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This study utilized an adaptation of the uni-dimensional involvement scale developed by Josiam, Smeaton, and Clements (1999) to test Havitz and Dimanche's Proposition XI, which states that "an individual's involvement profile with a recreational activity, tourist destination, or related equipment is positively related to frequency of participation, travel, or purchase" (1990, p. 189). Relationships between recreational runners' involvement in travel to road races and behavioral characteristics, including preparation for and participation in road races, travel behavior and running-related expenditures were examined. Proposition XI was partially supported. The research found statistically significant differences between the high involvement group and medium involvement group in terms of travel behavior and running-related expenditures. There were no significant differences between involvement groups and preparation for or participation in road races. It was concluded that involvement should be considered by sport and tourism agencies when planning, marketing, and managing events targeted at traveling recreational runners.

As competition for the tourist dollar grows, analyzing niche market travel is becoming increasingly important. One of the fastest growing tourism niche markets is sport tourism (Bull & Weed, 1999; Gibson, 1998a), and it constitutes a \$27 billion per year industry in the United States according to Kurtzman and Zauhar

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(1998). According to the Travel Industry Association of America, over 75.3 million individuals have traveled to a sporting event in the past five years (Travel Industry Association of America, 2000). Large-scale sporting events such as the Olympic Games, FIFA World Cup Football Championships, and the Super Bowl (Gibson, 1998a, 1998b; Zauhar, 1995) draw large numbers of people. The 2000 Super Bowl, for example, which was played in Atlanta, Georgia, attracted over 100,000 tourists. The spectators stayed an average of 3.7 days and spent \$350 a day. A North American Convention and Tourism Bureau study showed that sports accounted for 25% of total tourism spending (cited in Zauhar, 1995). In concert with its growth, Gibson points to the continuous investment in sport tourism development. An example of current capital investment in sport tourism is the \$200 million that the Walt Disney Corporation invested in its Wide World of Sports Complex in Orlando, Florida. In addition to the Disney sport complex, a soccer theme park is under construction in Salzburg, Austria, a healthy living theme park is being proposed in France, and an Olympic Spirit theme park has already been built in Munich, Germany. The economic impact of sport tourism has been extensively researched, evaluated, and measured (Brown, 2001; Gratton & Henry, 2001; Gratton, Dobson, & Shibli, 2000; Jones, 2001; Ritchie & Aitken, 1984; Shank & Beasley, 1996; Tow, 1994).

Economic impact is not the only topic of interest for researchers. There are a variety of segments within sport tourism that have been identified and examined from a marketing perspective. Sport tourism target markets have been segmented by gender (Nogawa, Yamaguchi, & Hagi, 1996), sexual orientation (Pitts, 1999), and activity types (Johnston, 1992). Most of this research has targeted sport spectators. This study will focus on a different group that historically has been understudied: sport tourism participants.

Kurtzman and Zauhar (1998) were among the first in North America to include an examination of the sport tourist as participant. They divided sport tourists into four distinct classifications or concepts: organized structure or team, sport spectator, heritage sport enthusiast, and individual sport participant. The last category consists of individual sport participants who are primarily competing against themselves. They are self-motivated and self-challenged. Examples of this group include mountain climbers, cross-country skiers (Nogawa, Yamaguchi, & Hagi, 1996), and, one may assume, distance runners. While this is a valid and important method of typologizing the sport tourist, it may prove to be problematic for many sport tourism promotion organizations to operationalize and incorporate into their marketing strategies and budgets. In Gibson's (1998a) research of active sport tourists, she classified sport tourists into three broad and easily recognizable categories. These categories consisted of sport tourists who visited sport-related attractions, watched sporting events, or were active participants. Active sport tourists are highly educated, affluent, and are likely to participate in sport tourism well into retirement. Upon initial examination, it appears that recreational runners might fall into this category. Support for this assumption may be found by examining various demographic characteristics of the survey population of recreational runners in this study, potentially adding them as a category to the typology and strengthening Gibson's argument. Additionally, if recreational runners are easily typologized and segmented according to basic demographic characteristics, they can be easily targeted by sport tourism promotion organizations.

While Jackson, Reeves, and Collins (1998) examined the travel habits and preferences of elite track and field athletes, the traveling recreational runner as a specific market within sport tourism has been given little attention. A traveling recreational runner is a non-professional runner who travels outside of her/his community to participate in road races. Thousands of road races are held in the US each year, ranging in distance from five kilometers to over 100 miles, with 100–60,000 runners participating in each race (Runners World, 2000), the vast majority of whom are non-professional recreational runners. Races may be staged on public lands in rural areas, through small towns, or down major urban thoroughfares. Many recreational runners travel to races, spend at least one night in the host community, eat several meals, visit attractions, and purchase souvenirs, in addition to registering for the featured road race. Little is known about the traveling recreational runner's specific travel behavior and activity preferences. As a result, communities attempting to target traveling recreational runners have very little empirical research upon which to base their marketing efforts.

Increased competition among tourism destinations has made it crucial to segment travelers. Segmenting the travel market is important because it provides a clearer understanding of the needs and wants of travelers, a more effective use of marketing dollars, and assistance in developing market positioning (Morrison, 1996). A number of tourism market analysis tools have been used extensively to categorize tourists, including niche marketing (Pitts, 1999), market segmentation (Grazin & Olsen, 1997; Yoon, Formica, & Uysal, 2001), motivation (Dann, 1977; McGehee, Loker-Murphy, & Uysal, 1996; Yoon, Uysal, & Mihalik, 2001), satisfaction scales (Crossley, Xu, & Xu, 2000; Pizam, Neumann, & Reichal, 1978), socio-demographics (Decorp, 1998), and involvement (Dimanche & Havitz, 1999; Dimanche, Havitz, & Howard, 1991, 1992; Jamrozy, Backman, & Backman, 1996; Josiam, Smeaton, & Clements, 1999; Zaichkowsky, 1985). While each of these perspectives is valuable and can be applied as part of a comprehensive approach to sport tourism, this study utilized the concept of involvement. The following is an explanation justifying the selection of the involvement construct.

Review of Literature

Involvement

Involvement is defined by Havitz, Dimanche, and Bogel (1994) "as an unobservable state of motivation, arousal, or interest, that is evoked by a particular stimulus or situation and has drive properties" (p. 39). Involvement is a means of understanding a person's consumer behavior and decision-making process (Assael, 1992), enduring by nature and therefore different from simple participation (Havitz, Dimanche, & Bogel), and continuous and measuring pleasure and value as aspects of consumer behavior and decision-making (Bloch, Sherrell, & Ridgeway, 1986). Because of its enduring and continuous nature, involvement is especially attrac-

tive to marketing researchers (and more especially tourism marketing researchers) who are trying to capture a consistent measure of consumer attitudes that is salient and unaffected by outside forces.

The involvement construct has roots in the consumer behavior and marketing literature (Assael, 1992; Bechling, 1999; Bech-Larson & Neilson, 1999; Bloch, Sherrell, & Ridgeway, 1986; Broderick & Mueller, 1999; Donovan & Jalleh, 1999). Consumers may exhibit varying levels of involvement. In a study of consumer behavior, Assael paralleled variance in involvement with a consumer's belief system, decision-making process, brand loyalty, and product identification. Specifically, a consumer who indicates high levels of involvement is more likely to become loyal and resist buying another product brand than a consumer with low levels of involvement. This is especially relevant in the sport tourism industry, where parity is a problem and competition for scarce discretionary income is fierce. By studying groups of consumers who are loyal to a product or activity, tourism marketers may become more savvy in their methods to encourage and promote brand loyalty.

In marketing, it is important to understand how to use involvement as a theoretical construct for understanding consumer behavior. Consumers with higher levels of involvement process information differently than consumers with lower levels of involvement (Assael, 1987, 1992; Maheswaren & Meyers-Levy, 1990). According to findings generated by consumer behavior researchers, there are three major differences between high involvement information processes and low involvement information processes among consumers. Those with high levels of involvement actively search for information (Beatty & Smith, 1987) and analyze it in order to assess brands (Chaiken, 1980). They also conduct an extensive brand evaluation (Maheswaren & Meyers-Levy) and recognize perceived risks, which include financial, performance or social impacts (Assael, 1992). A consumer with high involvement searches for a product, studies the product, analyzes its content, retrieves the information (from both internal and external searches) and forms a positive brand evaluation resulting in a purchase (Assael, 1987). Consumers with low involvement levels tend to process information passively, conduct very little brand evaluation, and perceive few risks (Assael, 1992; Maheswaren & Meyers-Levy). A consumer's involvement can help indicate differences in degrees of brand loyalty, decision-making processes, and product/activity identification (Maheswaren & Meyers-Levy). Levels of involvement—high, medium, and low—assist in determining the most effective types of marketing strategies. This kind of information is invaluable to sport tourism promotion organizations.

Involvement has become prevalent in the sport, leisure and tourism literature (Dimanche & Havitz, 1999; Dimanche, Havitz, & Howard, 1991, 1992; Jamrozy, Backman, & Backman, 1996; Josiam, Smeaton, & Clements, 1999). A great deal of work has been conducted in the area of involvement and leisure—over 50 leisure involvement data sets have been developed since 1988 (Havitz & Dimanche, 1997). More recently, researchers in the area of sport spectatorship (Guerhing & Mercer, 1995; Lascu, Giese, & Toolan, 1995) and, to a lesser degree,

sport participation (Shank & Beasley, 1996) utilized the involvement construct to measure involvement in both golf and baseball. Bloch, Black, and Lichtenstein (1989) examined the relationship between running activities and equipment in the context of involvement. Kyle, Kerstetter, and Guadagnolo (2002) were some of the most recent researchers to study involvement in sport participation and its value as a market segmentation tool in their study of a 10K road race in Pittsburgh, PA. However, overall very little has been done in the area of participatory sport tourism.

Differences in level of involvement in various studies examining the consumption of leisure and tourism are not as conclusive as those in the more general areas of consumer behavior. In terms of involvement and constraints to leisure, there are confounding findings. For example, Backman and Crompton (1989) determined that low involvement may act as a constraint to participation in public leisure services. However, Norman's (1992) research found no such relationship between involvement and leisure constraints. Hammer (1996) discovered that highly involved consumers of leisure products were more aware of promotional brochures and materials than less-involved participants, but Reid (1992) found mixed support for the same. Similar to Hammer, but from a tourism marketing perspective, Perdue (1993) established that level of involvement among marine anglers was positively related to information search. Norman's (1991) work concluded that involvement levels discriminate summer vacationers from non-vacationers. Each of these studies point to the overall complexity of the uses of involvement in leisure and tourism and the need for continued research.

Purpose of the Study

Although a great deal of valid and important work has been conducted in the area of involvement, an overall sense of continuity has been lacking. In an effort to galvanize the study of involvement in sport, tourism, and leisure into a focused and organized research strategy, Havitz and Dimanche (1990) developed 15 propositions. In support of their efforts, this study utilized an adaptation of the unidimensional involvement scale (Zaichkowsy, 1985) created by Josiam, Smeaton, and Clements (1999) to test Havitz and Dimanche's Proposition XI. This proposition states that "an individual's involvement profile with a recreational activity, tourist destination, or related equipment is positively related to frequency of participation, travel, or purchase" (Havitz & Dimanche, 1990, p. 189).

Proposition XI is especially useful to the study of sport tourism for a number of reasons. Proposition XI captures the importance of brand loyalty by taking into consideration frequency of participation in a specific sport tourism activity as indicated by Assael (1992). Additionally, if a consumer's level of involvement is directly related to her/his method of information search and evaluation (Beatty & Smith, 1987; Chaiken, 1980; Hammer, 1996; Maheswaren & Meyers-Levy, 1990; Perdue, 1993), determining whether varying degrees of involvement exist among sport tourists could then influence marketing strategies as found by Kyle and colleagues (2002). Finally, testing Proposition XI among recreational runners could contribute to the debate in the tourism literature surrounding the relationship

between level of involvement and consumption of the tourism product (Backman & Crompton, 1989; Norman, 1992).

Testing Proposition XI was accomplished by measuring levels of involvement in overnight travel to road races in a survey of members of three North Carolina running clubs (n = 222). Relationships were examined between involvement and recreational runners' behavioral characteristics, including travel behavior, running-related expenditures, preparation for road races, and participation in road races. In other words, this study posits that recreational runners with high involvement in overnight road race travel will resemble one another in the amount spent on running-related goods, likelihood to travel to road races, and the number of races in which they participate. Because the sample came from an entire population that logically would seem to be highly involved in running in general (members of a running club), it is expected that the groups to be compared will indicate high and *medium* levels of involvement as opposed to high and *low* levels of involvement. For the purposes of this study the term "involvement in overnight road race travel" implies involvement with each of the associated products, activities, agencies and settings surrounding overnight road race travel.

Findings from this study may provide information for travel destinations interested in targeting this niche market. Questions addressed in this study that directly reflect Havitz and Dimanche's proposition XI include: how and in what ways does involvement predict overnight road race travel behavior among recreational runners? Depending upon their level of involvement, are there any differences in the recreational runners' behavioral characteristics, specifically (a) participation in road races, (b) preparation for road races, (c) travel behavior, and (d) running-related expenditures. Four hypotheses were developed to systematically address these questions:

- **H1:** Recreational runners with high levels of involvement in overnight road race travel will participate in significantly more races than will recreational runners with medium levels of involvement in overnight road race travel.
- **H2**: Recreational runners with high levels of involvement in overnight road race travel will prepare for races significantly more than will recreational runners with medium levels of involvement in overnight road race travel.
- **H3:** Recreational runners with high levels of involvement in overnight road race travel will report significantly more overnight trips than will recreational runners with medium levels of involvement in overnight road race travel.
- **H4:** Recreational runners with high levels of involvement in overnight road race travel will spend significantly more in running-related expenditures than recreational runners with medium levels of involvement in overnight road race travel.

Behavior characteristics were targeted in part because they generally exhibit a stronger relationship with involvement than socio-demographic characteristics (Kerstetter & Kovich, 1997).

Method

Study Population and Data Collection

The study population included members of three North Carolina running clubs: The Cardinal Club (Chapel Hill, NC), Greensboro Running Club (Greensboro, NC), and The North Carolina Roadrunner's Club (Raleigh, NC). Seven running clubs were contacted in North Carolina based on the following criteria: (a) number of members, (b) rural/urban mix of member population, and (c) level of club organization. Three running clubs were chosen to represent recreational runners (non-professional runners) because all three were willing to participate and to provide access to a mailing list of their members. As a sampling frame, a total of 890 members were collected from the running clubs. A total of 444 members were randomly selected for the study sample. A self-administered questionnaire was sent to each participant in May 2000. A follow-up postcard was sent seven days later. A second questionnaire was sent to those who had not responded within 21 days of the initial mailing. The questionnaires returned by August 1, 2000 were included in the analysis. The response rate was 50% (n = 222).

Development of a Measurement Scale for Involvement

A wide variety of scales have been developed that measure involvement, including the Personal Involvement Inventory (PII), a uni-dimensional scale (Zaichkowsky, 1985); and the Involvement Profile (IP) and the CIP (Consumer Involvement Profile) scales, which are multi-dimensional scales (Laurent & Kapferer, 1985). Each scale was developed from and based on consumer behavior research, and all have been adopted and modified by tourism researchers (Dimanche & Havitz, 1999; Dimanche, Havitz, & Howard, 1991, 1992; Jamrozy, Backman, & Backman, 1996; Josiam, Smeaton, & Clements, 1999).

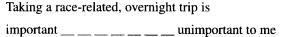
Jamrozy, Backman, and Backman (1996) used both a multi-dimensional scale and a uni-dimensional scale to measure involvement in nature-based tourism. The authors compared the two scales to determine whether they were valid and reliable and could be used to measure involvement. Their findings indicated that both scales share conceptual ground, were equally reliable and valid, and could be used to measure involvement.

Josiam, Smeaton, and Clements (1999) used the uni-dimensional scale to determine whether involvement of individuals on a spring break vacation can predict a person's travel motivation and destination selection. Josiam and colleagues chose the uni-dimensional scale over the multi-dimension scale because it is simpler and easier to administer, shorter in length, and can be used to evaluate the replicability of previous and/or future findings of involvement. They also felt that the translation of the multi-dimensional CIP scale from French to English raised questions of validity. The involvement scale in this study will be similar to both Josiam and colleagues' study and the scale used by Shank and Beasley (1996) in their research targeting involvement and sports.

A uni-dimensional scale was chosen for a number of reasons. First, while some researchers such as Havitz and Dimanche (1997) argued that a multi-dimensional scale of involvement is more appropriate than a uni-dimensional scale for the measurement of leisure and involvement, not all agree. Zaichkowsky (1990) argued that multi-dimensionality is somewhat tautological: if you enter "x" number of dimensions, you will get "x" number of dimensions as a result. What matters is that the facets are theoretically and conceptually sound. In this case, because the level of measurement is at the product level rather than the brand level (travel to any road race was considered rather than a particular road race), the PII scale fits best. Second, a uni-dimensional scale provided the best fit in the context of the baseline, exploratory nature of this previously under-studied group. Third, some multi-dimensional scales have been found lacking in their ability to capture some facets—primarily risk—as enduring in nature rather than simply inherent to certain types of activities (Havitz & Dimanche, 1997; Kyle et al., 2002). Finally, from a practical standpoint, in our pilot tests of various versions of involvement scales, a response bias was revealed when respondents lost interest or claimed that items in the scale were redundant in their use of what seemed to be "the same kinds of words used over and over." This response issue was virtually eliminated in the pilot study through the use of the PII Scale.

The Instrument

In order to maintain the anonymity of the participants, each survey was assigned an identification number. As an incentive to participation, all those who completed the questionnaire were included in a drawing for a free membership to the running club of their choice. The survey instrument for this study consists of three sections. First, in order to measure a recreational runner's level of involvement regarding overnight road race trips, nine involvement items were utilized in a semantic differential format (Table 1). For example, respondents were asked to indicate their answers on each involvement item that was designed as follows:



The data from the semantic scales were considered as interval data for the analysis (Zikumund, 1997). The second section of the survey instrument consisted of ten questions which measured respondents' behavioral characteristics related to (a) participation in road races (two items), (b) preparation for road races (three items), (c) travel behavior (four items), and (d) running-related expenditures (one item). Each item was addressed in an open-ended format (Table 1). Demographic variables were included in the questionnaires, including: gender, age, marital status, income, and education.

Data Analysis

The data analysis consisted of several stages. First, descriptive statistics profiled respondents' demographic information. Mean scores were developed for

Involvement ^a							
Taking a race-related,	overnight trip is to me.						
1. Important		Unimportant*					
2. Boring		Interesting					
3. Irrelevant		Relevant					
4. Means a lot		Means nothing*					
5. Valuable		Worthless*					
6. Mundane		Fascinating					
7. Appealing		Unappealing*					
8. Involving	IIII	Uninvolving*					
9. Not needed		Needed					

Behavior Characteristics^b

Participation in road races

- 1. Length of time I have participated in road races
- 2. Overall number of races in which I have participated since May 1999

Preparation for road races

- 1. Number of years running
- 2. Average number of miles I run per week
- 3. Average number of days I run per week

Travel behavior

- 1. Total pleasure trips taken since May 1999
- Likelihood that I will participate in a road race that requires overnight travel within the next year
- 3. Travel to road races as often as I'd like
- 4. Number of races I have participated in requiring an overnight stay since May 1999

Running-related expenditures

1. Amount spent on running since May 1999

Note. *Reverse coded, ainterval data, and bratio data.

recreational runners' behavioral characteristics, including travel behavior, participation in road races, preparation for road races, and running-related expenditures.

Second, the reliability of the involvement scale was measured using Cronbach's alpha, which assessed both the consistency of the entire measurement scale and the homogeneity of the single-factor of the measurement scale (Gable & Worf, 1993). In this study, the involvement scale proved to be internally consistent

($\alpha = 0.90$), which was comparable to previous studies (e.g., $\alpha = 0.94$; Jamrozy, Backman, & Backman, 1996).

Third, cluster analyses were performed based on the nine involvement items. The cluster analysis allowed the classification of the recreational runners into two or more mutually exclusive segmented groups based on their perceptions and attitudes about the nine involvement items. The hierarchical cluster procedure was conducted with the first split sample to determine the appropriate number of clusters. Ward's Method was adapted because it minimized within-cluster differences and maximized within-cluster homogeneity. Ward's Method also produced stable and interpretable results (Hair, Anderson, Tatham, & Black, 1998). As a result, a two-cluster solution was determined based on the agglomeration coefficients and a dendrogram. In particular, the agglomeration coefficient revealed rather large increases when going from three to two clusters, which changed 26% of the coefficient score (see in detail, Hair et al., 1998).

In order to confirm two cluster solutions as the meaningful and distinguishable segmented groups, a K-mean cluster procedure was performed with both the initial seeds obtained from the hierarchical cluster analysis and the holdout sample. The results indicated that as shown in the hierarchical analysis, cluster two has higher values on all the variables, as well as the mean values of each variable (Table 2). More specifically, all involvement items significantly differ in a test of mean differences across two clusters (p < .001). For another validation of the twocluster solution, stepwise discriminant analysis was employed and classification matrices were created for both the split-half and hold-out sample. The results indicated that 94.5% (split sample) and 98% (hold-out sample) of respondents were correctly classified, and further, the classification matrices indicated that 97.6% of the entire sample was correctly classified by the discriminant function of the two cluster groups. Therefore, the use of two cluster groups was the best solution in identifying the homogenous cluster groups based on recreational runners' perceptions of nine involvement items. The mean scores of involvement items in the first cluster have consistently lower values than the second cluster. Particularly, the mean scores of most of items in the first cluster were between 3.5 and 4.7, which were measured by a seven point Likert scale. In recognition that both clusters measured above 3.5 on a 7 point scale, the 2 groups were identified as high and medium involvement. The first cluster can be labeled as the comparatively "medium involvement group" while the second cluster can be referred to as the comparatively "high involvement group."

Fourth, a series of independent sample t-tests were performed to test the four proposed hypotheses in this study. The two cluster groups determined by cluster analysis were considered as independent variables, while recreational runners' behavioral characteristics were treated as dependent variables. This is because in the independent sample t-test, nominal or categorical data are required for the independent variable, and metric data (interval or ratio data) for dependent variables (Zikumund, 1998). A series of independent t-tests were employed to be able to answer if there were significant differences between the medium involvement

Table 2 Mean Score of Recreational Runners'	' Involvement	
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	Overall		Cluster	Cluster	
Variables	mean (M)	SD	one (<i>M</i>)	two (M)	
Important / unimportant*	4.24	1.83	2.61	5.51	
Boring / interesting	5.91	1.12	5.32	6.44	
Irrelevant / relevant	4.82	1.63	3.83	5.70	
Means a lot / means nothing	4.69	1.64	3.62	5.66	
Valuable / worthless*	5.23	1.32	4.40	6.02	
Mundane / fascinating	5.37	1.05	4.74	5.92	
Appealing / unappealing*	5.53	1.37	4.66	6.40	
Involving / uninvolving*	5.25	1.23	4.48	5.96	
Not needed / needed	4.69	1.56	3.67	5.64	

Note: *Reverse coded, 1 being the least involvement and 7 being the highest involvement.

group and the high involvement group in terms of travel behavior, participation in road races, preparation for road races, and running-related expenditures. It is important to note that as a part of this step Chi-square tests were performed in order to detect any possible relationships between demographic characteristics and involvement. No significant relationships were found.

Demographics and Running-related Characteristics

The sample consisted of 222 recreational runners, the majority of whom were male (58%). The mean age of the respondents was 46.2 years. The ages ranged from 23 to 79. Most of the recreational runners (65.8%) were either married or cohabiting, with the remainder (30.7%) single, separated, divorced, or widowed. On average, the recreational runners sampled were well-educated, 87.8% having at least some college. The mean annual household income was \$84,510, and ranged from \$15,000 to over \$100,000.

The respondents averaged more than five overall vacations or pleasure trips per year. Recreational runners indicated participation in six road races per year, 1.7 of which required an overnight stay. Road race trips averaged 3.2 days, with a range of 1 to 14 days. On average, recreational runners in the study had been running for 16 years and participating in road races for 12 years. Recreational runners ran an average of 4.5 days and 25 miles per week. From May 1999 to May 2000, respondents (both traveling and non-traveling) spent an average of \$640.40 on running-related expenses (equipment, shoes, clothing, travel, and race registrations). More specifically, average spending by traveling recreational runners was \$940.74, while average spending by non-traveling recreational runners was \$279.36.

Results

Hypotheses Tests and Interpretations

H1: Recreational runners with high levels of involvement in overnight road race travel will participate in significantly more races than will recreational runners with medium levels of involvement in overnight road race travel. The following variables were used to measure hypothesis one: (a) length of time I have participated in road races and (b) overall number of races in which I have participated since May 1999. Results from this analysis were mixed (Table 3). Independent t-tests indicated that there were statistically significant differences between the two cluster groups (medium involvement and high involvement groups) in

Table 3 Results of Independent t-tests for Research Hypotheses

Varia	Variables		Cluster Two	T Value				
Participation in road races (H 1)								
1.	Length of time I have participated in road races	12.71	11.75	-0.87				
2.	Overall number of races in which I have participated since May 1999	4.66	7.51	3.16**				
Prepa	eration for road races (H 2)							
1.	Number of years running	16.43	15.49	-0.68				
2.	Average number of miles I run per week	24.13	25.94	0.98				
3.	Average number of days I run per week	4.34	4.59	1.32				
Trave	el behavior (H 3)		<u> </u>					
1.	Total pleasure trips taken since May 1999	4.65	5.78	1.78				
2.	Likelihood that I will participate in a road race which requires overnight travel in the next year	1.01	2.65	.31***				
3.	Travel to road races as often as I'd like	1.75	1.54	3.29**				
4.	Number of races in which I have participated requiring an overnight stay since May 1999	0.86	2.33	3.79***				
Runn	ing-related expenditures (H 4)							
1.	Amount spent on running since May 1999	519.83	775.65	2.35*				

Note. *Significant at .05 level; **Significant at .01 level; ***Significant at .001 level.

terms of the item "overall number of races in which I have participated since May 1999" (p < .01, t = 3.16). In other words, level of involvement was related to recent participation in road races. Conversely, high levels of involvement were not significantly related to length of time (in years) participating in road races. As a result of the split in the findings, this hypothesis was not supported.

H2: Recreational runners with high levels of involvement in overnight road race travel will prepare for races significantly more than will recreational runners with medium levels of involvement in overnight road race travel. In order to test hypothesis two, three variables were utilized: (a) number of years running, (b) average number of miles I run per week, and (c) average number of days I run per week. The results did not show any statistical differences between the two groups in terms of the time and distance run per week by the respondents. These results imply that the amount of preparation for road races is not impacted by degree of involvement in race-related overnight trips. Hypothesis two was not supported by the analysis. This is not surprising, since an argument could be made that many runners could conceivably train hard for local races that require no travel. Conversely, recreational runners may also participate in limited training but be highly involved in traveling to races and participating in a non-competitive fashion.

H3: Recreational runners with high levels of involvement in overnight road race travel will report significantly more overnight trips than will recreational runners with medium levels of involvement in overnight road race travel. following four variables were used to test hypothesis three: (a) Total pleasure trips since May 1999, (b) Likelihood that I will participate in a road race which requires overnight travel in the next year, (c) Travel to road races as often as I'd like, and (d) Number of races in which I have participated requiring an overnight stay since May 1999. From the results of the independent t-tests as presented in Table 3, there were statistically significant differences between two groups (medium and high involvement groups) in terms of the item "likelihood that I will participate in a road race which requires overnight travel in the next year" (p < .001, t = 6.31), "travel to road races as often as I'd like" (p < .01, t = 3.29), and "number of races in which I have participated requiring an overnight stay since May 1999" (p < .01, t =3.16). Both past behavior and planned behavior are significantly and positively related to levels of involvement. Interestingly, involvement and "travel to races as often as I would like" have a significant relationship, but recreational runners with medium involvement in travel to road races average a higher score. In other words, recreational runners with medium involvement are more likely to travel to races as often as they'd like than their highly involved counterparts. Perhaps recreational runners who are highly-involved with overnight travel to road races have barriers or constraints that prevent them from participating as often as they'd like. It is important to note that both involvement clusters scored low on this scale. As a result of this analysis, hypothesis three was supported.

H4: Recreational runners with high levels of involvement in overnight road race travel will spend significantly more in running-related expenditures than recreational runners with medium levels of involvement in overnight road race

travel. One variable was used to measure the fourth hypothesis: estimated running-related expenditures. The independent t-test revealed that there was a statistically significant difference between the two groups regarding their "running-related expenditures" (p < .05, t = 2.35). In other words, recreational runners with high levels of involvement in travel to road races spend more on goods related to road races than recreational runners with medium levels of involvement. Therefore, hypothesis four is supported.

In summary, the first and second hypotheses were not supported and the third and fourth hypotheses were supported. These results were similar to the findings of McIntyre (1992) and Park (1996), who supported Havitz and Dimanche's Proposition XI.

Discussion

The findings in this study provided mixed support for Proposition XI. Of the five variables used to measure preparation for and participation in road races, only one was significant: number of races run in the past year. Since there were no differences between degrees of involvement in terms of length of time (in years) running, number of years running, average weekly mileage, and average number of run days, the findings in this study do not support Proposition XI. However, the results do reinforce the idea of involvement as enduring and separate from participation in activities related to involvement (Havitz et al., 1994). Recreational runners who have been running and participating in races the longest as well as training the most (miles run per week and days run per week) were no more or less involved than recreational runners who had fewer years of running experience and fewer years of participation in road races.

The next element of Proposition XI is the relationship between travel behavior and involvement. Findings from this study indicate that recreational runners with high involvement in overnight road race travel exhibit different travel behavior than recreational runners with medium involvement in overnight road race travel. This finding supports both Proposition XI and the research of Norman (1991), who found that involvement level discriminates vacationers from non-vacationers. Interestingly, recreational runners with high involvement will likely take an overnight road race trip within the following year, but will not travel to races as often as they desire. This is in conflict with Norman's (1992) research that found no association between involvement and leisure constraints. Apparently there are constraints that prevent highly involved traveling recreational runners from attending as many races as they would like. Further research should attempt to identify the relationship between specific constraints and involvement in order for race managers and promoters to consider ways to help traveling runners overcome them. For example, if family obligations are found to be a major constraint for highly involved traveling recreational runners, perhaps race organizers could focus on the creation of a more family-friendly environment surrounding their events. This may include races that allow runners to use baby joggers in races, shorter fun-runs

for children, and family-oriented prizes for race participants. Area lodging properties may want to offer special short-term day care for racers' children. Local restaurants may offer special family-oriented meals.

The findings provided evidence that there was a significant difference between recreational runner's level of involvement in travel to road races in terms of amount of money spent on running and recreational runner's level of involvement in travel to road races: the higher the level of involvement, the more money was spent. Since recreational runners in the study who had a high level of involvement with overnight travel spent more, it seems advantageous for both running-related equipment suppliers and race planners and organizers to market to recreational runners with high levels of involvement. These findings align with both Proposition XI and the work of Bloch, Black, and Lichtenstein (1989) who found relationships between involvement and equipment purchase among recreational runners. These two studies form a foundation for a future area of research that examines more closely the specific types of expenditures made. It is also important to note that in addition to those races that require an overnight stay, recreational runners who are highly involved in overnight road race travel also attend more races in their own community than recreational runners with medium involvement.

There are several practical applications for this research. As indicated in the review of the literature, consumer behavior research has found that individuals with high involvement process information differently than individuals with low involvement. Individuals with high involvement levels evaluate brands extensively, tend to form strong brand loyalties (Maheswaren & Meyers-Levy, 1990), actively seek information (Beatty & Smith, 1987), and recognize both social and financial risks (Assael, 1992). Furthermore, individuals with high involvement process advertisements, promotional materials, and marketing efforts more thoroughly than individuals with low involvement (Hammer, 1996). Perhaps this study will open the door to examination of a third group: those who indicate medium levels of involvement.

Race organizers, managers, and community policy-makers can derive practical uses from the research findings. Race organizers and managers, for example, should develop a multi-pronged marketing strategy that will attract recreational runners with both high and medium levels of involvement. Marketing efforts targeting recreational runners with high involvement should provide them with as much information about the race and the race location as possible. It is important to provide detailed information when marketing to recreational runners who are highly involved in overnight road race travel. Enticing potential racers with free T-shirts or complimentary hats alone will not attract these runners. Instead, marketers need to provide information on both the race itself and the travel-related amenities associated with the community in which the race is being held (e.g., available lodging, restaurants and attractions). This should be conducted through a variety of media sources, including radio advertisements, brochures, newspaper stories, and magazine advertisements. One method for providing continual information is to create a Web site specifically for the road race. The Web site could be updated

frequently and provide links to attractions in the community, lodging facilities, eating establishments, and to other pertinent information. Further research should examine exactly which types of communication best serve traveling runners.

Consumer behavior research findings indicate that individuals with high levels of involvement form strong brand loyalties (Maheswaren & Meyers-Levy, 1990). From this, we can gather that once highly involved traveling recreational runners attend a race, they may be more likely to attend the same race in the future. This indicates that attracting recreational runners with high levels of involvement may have a greater return on investment than attracting recreational runners with medium or low levels of involvement.

A word of caution is necessary at this point. Race organizers do not want to target only highly involved recreational runners who travel to overnight road races. Those who fall within the parameters of medium involvement are equally valuable customers. Consumers with medium involvement levels tend to process information more passively, conduct less brand evaluation, and perceive fewer risks than their highly involved counterparts. Therefore, marketing efforts must be aggressive and highly accessible in order to attract recreational runners with medium levels of involvement in overnight travel to road races.

Regardless of level of involvement, traveling recreational runners may contribute significantly to the economies of communities. Descriptive results from this study indicate the economic impact of traveling recreational runners on the host community, regardless of level of involvement, including number of night's stay, daily expenditures, and travel party size. This supports the work of others (Kurtzman, 2001; Weed, 2001), who recommend increased collaboration between sport and tourism agencies, in this case, race administrators and destination marketing organizations in order to facilitate a positive experience for visiting racers. Results also support Higham's (1999) commentary that smaller scale events such as road races have the potential to provide a modest injection of revenue into a community without the negative impacts associated with mega-events.

The limitations of this study center around three primary areas: sampling, choice of involvement scale, and the use of cluster analysis. Due to the limited sample size (n = 222), geographic area (North Carolina), and stratification of the convenience sample, generalizations should be made with caution to recreational runners outside of North Carolina. Certainly, the participants in this study parallel national demographic profiles among recreational runners (Running USA, 2001) and, therefore, the results of this study may hold some valuable insights into their participation in overnight races. The sample also resembles Gibson, Attle, and Yiannakis' (1998) and Gibson's (1998b) description of the active sport tourist. Recreational runners tend to be well educated, affluent, and likely to engage in repeat activities. Recreational runners and their families and friends (who travel to the races with them) stay at least one night in the host community, eat in restaurants, buy souvenirs, and visit local attractions.

A modified version of Zaichkowsky's (1985) uni-dimensional scale was chosen over other multi-dimensional scales for a number of reasons: questions

surrounding the potential tautological problems of the multi-dimensional scale, the product-orientation of the subject of this study (versus brand orientation), the baseline nature of this research, and in the pilot study response bias was evident when the multi-dimensional scale was used. Even though the multi-dimensional scale undoubtedly provides additional depth that the uni-dimensional scale does not provide, both scales have been found to be reliable and valid.

The final limitation consists of the subjectivity of using cluster analysis to cluster respondents. The dendrogram derived from Hierarchical Cluster Analysis (Ward's Method) delineated two distinct clusters. It can be argued that more than two clusters exist in the data and that the identification of their exact number rests with the researcher. This limitation was addressed by triangulating the two types of cluster analyses to assure greater validity and to minimize subjective research bias.

Although involvement in travel to road races among recreational runners is measurable, reliable, and has practical use, it should not be the sole variable used to segment, attract, and/or understand recreational runner behavior. Recreational runners' demographics, motivations, constraints, cultural background and other behavioral characteristics should be analyzed as well. Elements of involvement (e.g., value, interest, appeal, and meaning) should be considered by recreation programmers and managers and should be incorporated into marketing, management, or policy-making efforts designed to target recreational runners who are highly involved in overnight road race travel. A comprehensive research agenda addressing the evaluation and examination of involvement in the context of the niche market of the traveling recreational runner is a necessary and valuable contribution to the empirical study of active sport tourism.

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