

ATTACHMENTS TO PLACES AND ACTIVITIES: THE RELATIONSHIP OF PSYCHOLOGICAL CONSTRUCTS TO CUSTOMER SATISFACTION ATTRIBUTES

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Abstract: This study explores the nature of place attachment, enduring involvement and human territoriality and their relationship with customer satisfaction for a diverse group of anglers at lakes in the New England region. Previous work has made limited headway in our understanding of how place attachment, enduring involvement, and human territoriality relate to people's evaluations of experiences and settings. This study attempts to address the deficiencies of previous research by combining the three constructs and examining their relationship with customer satisfaction. These constructs and their sub-dimensions (independent variables) were examined with twelve importance and satisfaction items as well as gap scores (dependent variables). The results suggest that, as place attachment and attraction (EI) increase, satisfaction with the type of fish an angler can catch increases. Meanwhile, as territorial beliefs increase, anglers' satisfaction with the type of fish they can catch decreases. Significant paths were also found for other domains of customer satisfaction.

Introduction

A number of factors including feelings that an individual may have for an area can play an intricate role in his or her choice of facility or setting (Bryan, 1977; Peterson, Stynes, Rosenthal, & Dwyer, 1985). A better understanding of how people discern, choose and relate to recreation settings and activities is important to understanding the recreation experience. Managers of recreation facilities attempt to use their own personal experience and knowledge along with information provided to them to make the best decisions. In the end, both researchers and managers want the recreationist to have the most satisfying experience possible. This study includes many of the variables that have been previously studied in order to improve visitor experiences.

A person's attachment to a geographic location has been of interest in a variety of fields for many years. In the field of geography, attachment to a place has been studied in terms of environmental behavioral issues (Relph, 1976; Stolkols & Shumaker, 1981; Tuan, 1974) as well as a person's

emotional or symbolic attachment to an area (Low & Altman, 1992; Relph, 1976; Tuan, 1980). While fields like geography have been studying attachment to place for some time, recreation researchers began exploring the concept during the first half of the 1980s. Research has consistently shown (Bricker, 1998; Moore & Graefe 1994; and Williams & Roggenbuck 1989) that place attachment is comprised of two central dimensions known as place dependence (functional meaning) and place identity (emotional or symbolic attachment to an area). A particular recreation area can be especially valuable to a person if it fulfills both dimensions of place attachment.

Past place attachment research has sought to understand what variables are most likely to influence the level of attachment a person will have with a recreation area (Moore & Graefe, 1994; Williams & Roggenbuck, 1989) and what influence place attachment will have on experience and managerial options (Bricker, 1998; Wickham & Kerstetter, 2000). Mowen, Graefe, and Virden (1998) took an important step in our understanding of place attachment when they examined the relationship of a combined place attachment/enduring involvement scale with both setting and experience evaluations.

Work by McIntyre (1989) generated interest in the concept of "enduring involvement" (EI) and its relationship to recreation specialization. In his study, McIntyre (1989) proposed the application of an EI instrument for examining the relationship between level of commitment to camping and choice of campground setting. The four-component EI model did not hold up under factor analysis. Rather, three components characterized enduring involvement in relation to camping. The three factors were termed attraction, self-expression, and centrality. An important step in our understanding of EI was taken by Mowen et al. (1998) when they examined the relationship between place attachment and enduring involvement with experience and setting assessments. The combined typology exhibited a positive and significant relationship with both setting and experience evaluations, confirming some previous work on involvement and service quality (Dimanche & Havitz, 1995).

In this study, as well as previous studies in the field of Environmental Psychology, human territoriality has been conceptualized as a person's attitude towards a specific place. Human territory is believed to consist of three dimensions known as territorial cognition, emotion, and behavior (Taylor, 1988). Territorial behaviors are an attempt on the individual's part to control not only the activities of others, but their access to a particular area. Territorial beliefs include an individual's perceptions or beliefs about who should enter a site, what goes on at the site, and who should take care of the site (Taylor, 1988). Territorial emotions include a positive emotional bond for a place and the condition of that site as well as the type of user that should use the area, and negative emotional reactions to possible changes in conditions and users in that very same area. Because recreation sites are often symbolic and have deep personal meaning for people, territorial models (e.g. crowding and conflict) stress an

individual's perceived control as an important part of a satisfying experience (Zinn, 1992).

Since the 1960s, researchers have been trying to determine what represents quality in outdoor recreation and how satisfied recreation customers are with their experiences. Consumer behaviorists have conducted similar research related to service quality and customer satisfaction. Parasuraman, Zeithaml, and Berry (1988) have played the leading role by developing a 22-item instrument named SERVQUAL. In the recreation and leisure field, SERVQUAL was adapted by Mackay and Crompton (1988) to better understand how people engaging in recreation activities evaluate quality of service from recreation providers. The gap analysis method (as used in this study) has been used to examine service quality. Gap scores can be positive or negative. When there is a positive gap score, this indicates that an item is performing greater than a person's expectation. A positive score represents satisfaction with an item a person is evaluating. Conversely, negative gap scores represent items that are performing below a visitor's expectation.

In an attempt to make satisfaction models more tangible for researchers and managers, Burns, Graefe, Absher and Titre (1999) created a customer satisfaction model with four domains (facilities, services, information, and recreation experience). This customer satisfaction model is believed to be more easily translated and understood by recreation researchers and managers because the items within the domains are designed to be more relevant and tangible. The domains used are also believed to be flexible in nature and may be adapted to meet the needs of the specific recreation area under study.

The purpose of this study was to examine the relationships between place attachment, enduring involvement, human territoriality and customer satisfaction. This study investigates the individual and cumulative effects of these variables on customer satisfaction. Data were obtained from anglers in the New England District of the U.S. Army Corps of Engineers (COE). Anglers were asked about the lakes they fish most frequently. The study's overall intended purpose was to investigate the relationships between several psychological constructs, service quality indicators, and overall satisfaction. More specific to this paper was the examination of the relationships between place attachment, enduring involvement, human territoriality and customer satisfaction attributes.

Methodology

A multiple-method approach was used for data collection to obtain a diverse sample of anglers from the New England region. Several COE project offices provided names of individuals, groups, and club representatives for researchers to contact by phone. A total of eight groups out of fifteen contacted agreed to provide the names and addresses of their members for a mail-out survey. As a means of increasing the sample size for the study, a stratified random sample of users was contacted on-site at four lakes (Hopkinton-Everett Lake, East Brimfield Lake,

Buffumville Lake, and West Thompson Lake). Upon the completion of a brief on-site interview, each respondent was asked if she/he was willing to provide his/her name and address for a follow-up mail-back survey.

In total, 433 addresses were collected for this survey. A modified implementation of Dillman's (1978) multiple mailing process was used (four instead of five mailings). A total of 123 usable surveys were returned from the address database for a response rate of about 33%. Surveys were also sent to two large state bass fishing organizations. By combining the surveys returned from the mail-out portion of the study and the surveys distributed to the state bass organizations, the total sample size for this study increased to 176.

A telephone survey of non-respondents was conducted as a precautionary measure in order to determine if there was a significant difference between non-respondents and respondents in the study. Thirty interviews were completed and the sample means of 13 items were compared with the results in the original mail survey. This comparison between respondents and non-respondents showed little significant difference between the two groups.

Measurement

Customer satisfaction was measured using a list of 12 items patterned after scales developed by Parasuraman et al. (1985), Mackay and Crompton (1990) and Burns et al. (1999). The domains used in this study include facilities, services, information, and recreation experience. Respondents rated each statement using a five-point Likert-like scale ranging from "not at all important" to "extremely important" and "not at all satisfied" to "extremely satisfied."

Respondents were asked to respond to eight place attachment statements patterned after previous research (Moore & Graefe, 1994; Bricker, 1998). The proposed sub-dimensions of this construct are place dependence and place identity. A five-point scale ranging from "strongly disagree" to "strongly agree" was used to measure level of agreement with each of the place attachment items.

An angler's level of involvement with fishing was measured with 13 items. These items were closely designed after previous researchers' use of the scale. The four domains of enduring involvement included in this study are enjoyment, importance, self-expression, and centrality (McIntyre, 1989). For involvement, a five-point scale with possible responses ranging from "strongly disagree" to "strongly agree" was used.

Human territoriality (Wickham & Zinn, 2001) was measured with 12 items. The items used in this study are newly designed and intended to measure recreationists' emotions, beliefs, and behaviors towards a specific place. The items in the human territoriality scale use a five-point scale with responses ranging from "strongly disagree" to "strongly agree."

Analysis

A factor analysis was used to determine the dimensions of place attachment, enduring involvement, human territoriality and customer satisfaction (importance/performance). One of the most important characteristics of factor analysis is its data reduction capability. Factor analysis and Cronbach's coefficient alpha were used to verify the internal dimensions of these constructs in an outdoor recreation setting. This study also used multiple regression analyses to examine the relationships between dependent variables (importance and satisfaction for each of the customer satisfaction items) and independent variables (place attachment, enduring involvement, human territoriality).

Results

In terms of past research regarding place attachment, studies have traditionally found the construct to consist of two main dimensions, place identity and place dependence. In this study, the 8 items used to measure place attachment loaded onto one factor. With all items contributing to the factor, it was not necessary to remove any items for further analysis. The single factor for place attachment, with an Eigenvalue of 4.43, explained 55.35% of the variance and had a reliability level of .88.

A factor analysis for the construct, enduring involvement, initially achieved four factors. Factor 1 was made up of items from the importance, enjoyment, and centrality domains. Similar in nature to a dimension McIntyre (1989) found, the 5 items that made up the first factor were called "attraction" (Eigenvalue=4.66; Variance=35.86; Reliability=.81). The second factor loaded with all the self-expression items (Eigenvalue=1.62; Variance=12.43; Reliability=.79). This factor loaded exactly as McIntyre's four self-expression items did with beach campers. Two more factors were extracted during the analysis, each with two items. Because of conceptually unusual factor loadings (factor 3) and low reliability scores (factor 4), both factors were removed from further analysis.

The third variable to be tested with factor analysis was human territoriality. An initial factor analysis of the 12 items in the construct identified five factors. Of the 12 items originally predicted to represent human territoriality, two items loaded separately from the first three factors and were dropped from further analysis. The first dimension, territorial emotions, retained all four items originally hypothesized to represent this domain (Eigenvalue=2.67; Variance=22.26; Reliability=.69). The second dimension, representing territorial behaviors, retained three of the four items predicted to represent this aspect of human territoriality (Eigenvalue= 1.93; Variance=16.07; Reliability=.52). Lastly, the third factor represented territorial beliefs. As with the dimension representing territorial behaviors, territorial beliefs retained three of the four predicted items (Eigenvalue=1.23; Variance=10.23; Reliability=.55). While the reliability scores for the three dimensions revealed through factor analysis were moderate to low, principle component analysis with varimax rotation supported the three factors initially conceptualized as

components of human territoriality. Therefore, it is believed that further analysis of these dimensions is warranted.

For the importance and performance variables, principle component factor analysis was again used to examine the dimensionality of the variables. For both sets of variables, factor analysis did not reveal any logical relationships between the items. Because the items did not load together in a logical manner, all individual items representing importance and satisfaction domains were used and no composite indices were created.

The use of factor analysis revealed some expected and some surprising results regarding the internal structure of the constructs used in this study. In summary, one dimension represented place attachment, two dimensions (attraction and self-expression) represented enduring involvement, and three dimensions (beliefs, emotions, and behaviors) represented human territoriality. The created indices were used with multiple regression to better understand the relationship between independent and dependent variables.

Based on the proposed theoretical model (Figure 1), regression models were developed to identify the relationships between place attachment, enduring involvement, human territoriality, and the importance/performance customer service items. Standardized beta coefficients were used to identify the relative importance of each independent variable to the subsequent dependent variable. For the relationships between independent variables, correlations between variables (*r*-values) ranged from .003 to .761. While there were a few moderately high correlation scores among the independent variables, the majority were well within an acceptable range. Figures 2 through 4 show the significant relationships between the identified independent and dependent variables.

A total of twelve items were examined as dependent variables (Importance items 1-12) with the independent variables of place attachment, attraction (EI), self-expression (EI), territorial beliefs, territorial emotions, and territorial behaviors (Figure 2). The purpose of this section of the study was to examine the relative strength of the independent variables in explaining the importance of various customer service items.

Four of the twelve regression equations tested were statistically significant. The importance of cleanliness of toilet facilities was related to territorial beliefs and self-expression (6% of variance explained). The importance of appearance and maintenance of the lake area was related to territorial behaviors and territorial beliefs (15% of variance explained). The importance that an angler places on the type of fish they can catch was significantly predicted by the attraction dimension of enduring involvement (8% of variance explained). Lastly, territorial behavior was the only significant predictor of importance of the number of fish a person can catch at a lake (5% of variance explained).

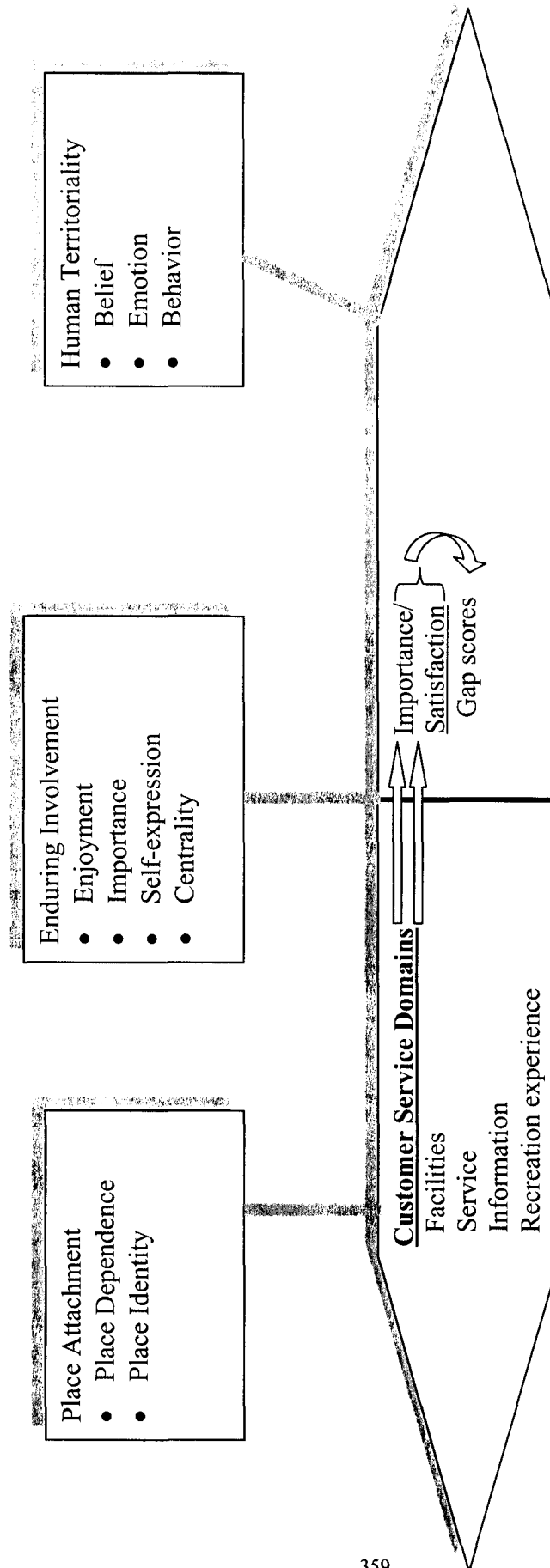
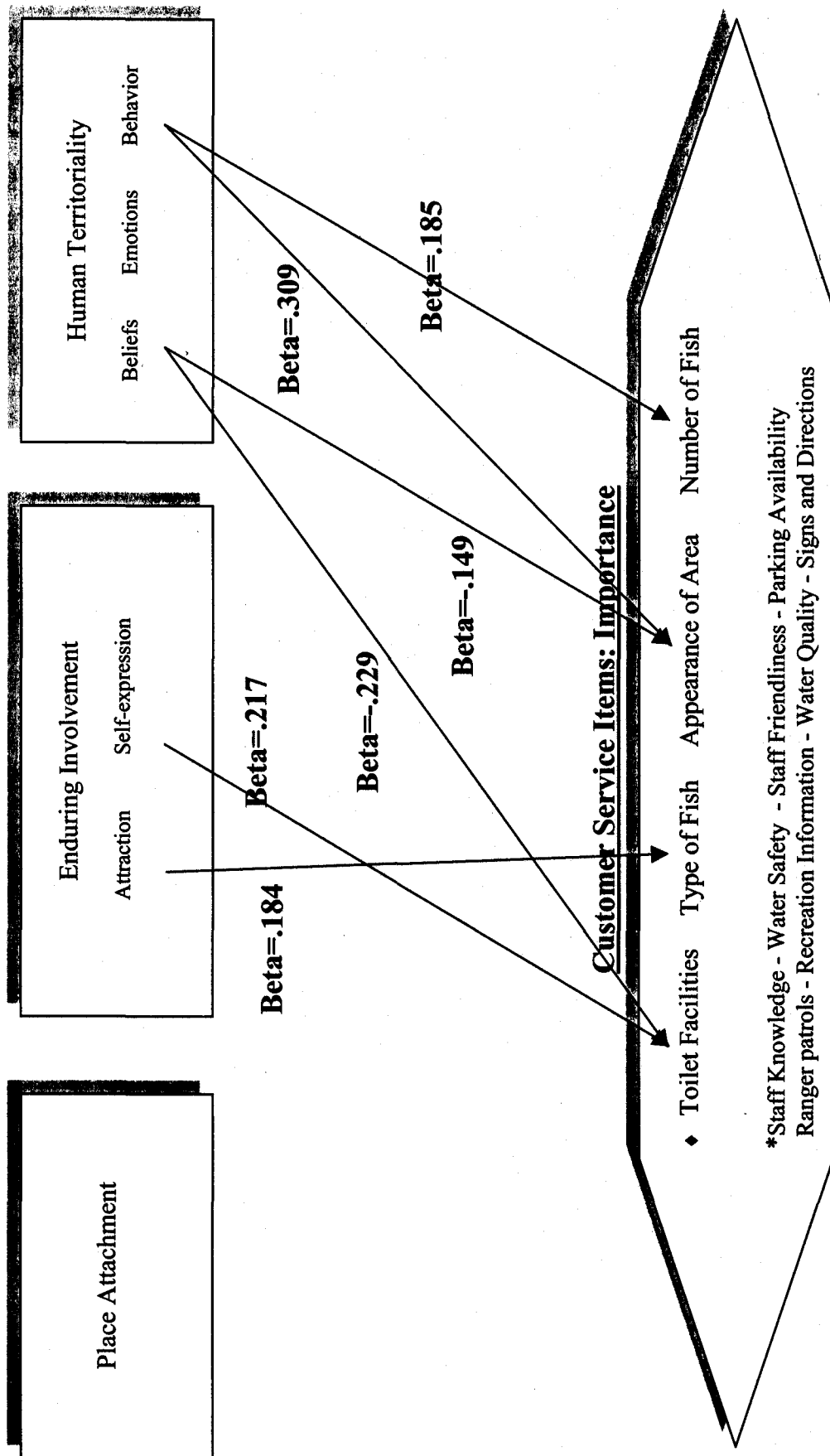
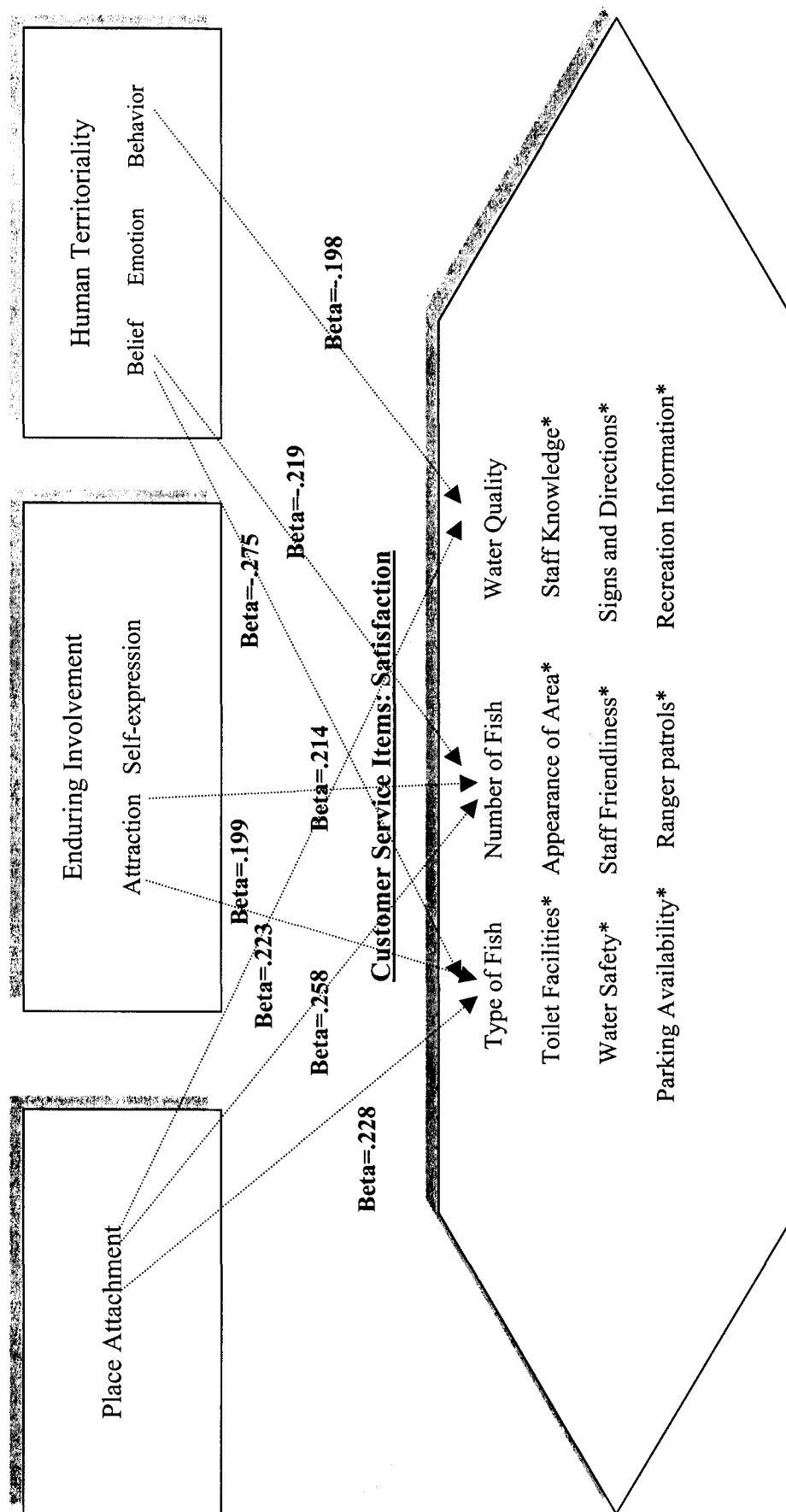


Figure 1. A Proposed Model of Place Attachment, Enduring Involvement, Human Territoriality, and Customer Satisfaction 1



- ◆ Dependent variables found to be significantly predicted by independent variables
- * Dependent variables found to have no significant relationship with independent variables

Figure 2. Relationship of Place Attachment, Attraction, Self-expression, Beliefs, Emotions, Behaviors with Importance Items as Dependent Variables



* Dependent variables found to have no significant relationship with independent variables

Figure 3. Relationship of Place Attachment, Attraction, Self-expression, Beliefs, Emotions Behaviors with Satisfaction Items as Dependent Variables

Place attachment, enduring involvement, and human territoriality were next tested for their relationship with level of satisfaction with the customer service items. For this hypothesis, three of the 12 regression equations were found to be significant (Figure 3). The significant relationships included: satisfaction with the type of fish that can be caught and territorial beliefs, attraction (EI), and place attachment (16% of variance explained); satisfaction with the number of fish a person can catch and place attachment, territorial beliefs and attraction (EI) (11% of variance explained), and satisfaction with water quality and territorial behaviors and place attachment (5% of variance explained).

The final step of the analysis was to examine the relationships between the independent variables of place attachment, attraction (EI), self-expression (EI), territorial beliefs, territorial emotions, and territorial behaviors and the item gap scores (Figure 4). Only one of the item gap scores was significantly predicted by any of the independent variables. Apparently, the independent variables are better predictors of importance and satisfaction scores than they are of the item gap scores (difference between importance and satisfaction). The only regression equation that was significant included the gap score for appearance and maintenance of the lake area with territorial behavior (7% of variance explained).

Conclusions and Implications

The theoretical framework for this study was formulated from both existing research and newly designed instruments to measure formerly speculated relationships. Previous research has explored the relationship between variables like place attachment and enduring involvement with various satisfaction-related items. However, no studies were found that used a management-oriented customer service model. This study takes place attachment, enduring involvement and human territoriality and explores the relationship of these variables within a conceptual model of customer satisfaction.

The customer satisfaction model examined in this study uses items that are believed to be closely related to actual services at recreation areas. Because the independent variables measure psychological constructs related to place and activity, it should not be surprising that they best predict those items that are theoretically related to either activity or place. The results are similar to those found by Mowen et al. (1998) in which place attachment and activity involvement measures were significantly related to measures of satisfaction for both place and recreation experiences. Thus, the results of this study partially support previous research in this area. Place attachment, enduring involvement, and human territoriality were less successful in predicting items that were related to either the service or information domains of customer satisfaction.

Future researchers should consider using the same variables and perhaps other recreation-related variables; however, some of the results show a need for modifying the current constructs as they were used in this study. As Bricker (1998) determined, qualitative methods of researching

recreationists' attachments to special areas can produce vastly different results than quantitative methods. Certainly, all four constructs (place attachment, enduring involvement, human territoriality, and customer satisfaction) could benefit from future qualitative research.

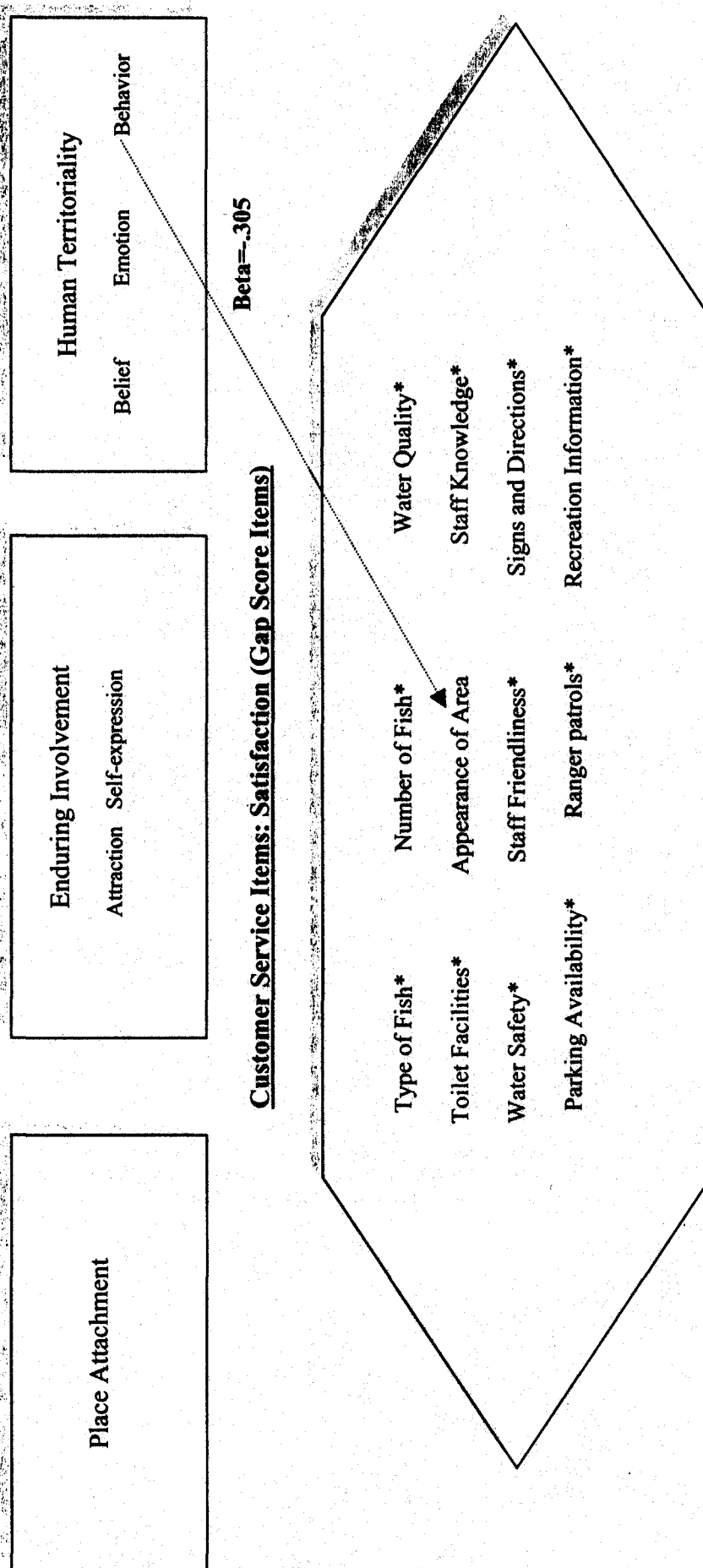
Most current studies examining involvement no longer use the construct examined in this study. A more common and current involvement scale has been designed and modified by Dimanche, Havitz and Howard (1991) and others over the last decade.

Human territoriality, as used in this study, will also have to be modified. Low to moderate reliability scores show a weakness in the current items and, perhaps, the dimensions will need to be altered for future research in this area. For the importance/performance domains, it may be useful to examine other domains such as a natural resources domain or a more developed recreation experience domain. While this study has opened many doors, it has also raised many questions. Researchers should continue to refine the measures that were used in this study and explore their relationships.

In this study, various dimensions of place attachment, involvement and human territoriality were related to different items measuring satisfaction. The continued use of these items and their refinement could help researchers and managers better understand how they might improve recreationists' experiences. Because public recreation agencies are being asked to provide a wide variety of activities and satisfying experiences within various settings, positively influencing place and activity attachment appears to be an effective strategy for increasing visitor satisfaction. This study supports this notion as has past research (Dimanche & Havitz, 1995; Mowen et al, 1998). A continued refinement of measures such as those used in this study could provide more information to make quality decisions with regard to management plans. In the end, if programs could target people in an effective and efficient manner, future policy decisions regarding the allocation of funds to specific programs could be more efficient and, ultimately, produce more satisfied customers.

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* Dependent variables found to have no significant relationship with independent variables

Figure 4. Relationship of Place Attachment, Attraction, Self-expression, Beliefs, Emotions Behaviors with Gap Scores as Dependent Variables

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