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The Role Of Involvement In Identifying Users' Preferences For Social Standards In The Cohutta Wilderness¹

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Abstract. This study examined the relationship between Cohutta Wilderness users' level of involvement with the area, and their perceptions of acceptable social wilderness conditions. It was hypothesized that users showing higher levels of involvement with the wilderness resource would be more restrictive with regard to the number of alternative positions they were willing to accept in relation to their most preferred wilderness conditions. Concepts taken from social judgment theory, in conjunction with past research conducted with the concept of involvement, were used to test these assumptions. Results showed that although Cohutta users are highly involved with the area, this finding did not strongly correlate with the number of alternative positions they were willing to accept. Possible explanations for this finding are discussed.

INTRODUCTION

Planning methods such as the increasingly popular Limits of Acceptable Change (LAC) approach to wilderness planning place great emphasis on establishing measurable indicators that are considered important by managers and users, and then developing standards that are reflective of acceptable conditions for the indicators. Stankey et al, (1985) recognized both "social" and "resource" conditions as the major areas of emphasis for planners to focus upon when developing appropriate indicators and standards. This paper focuses upon social conditions and the relationship between involvement and wilderness users' perceptions of acceptable standards for social conditions in a wilderness area.

An important step in identifying standards for social conditions is understanding the preferences users have for the conditions. Many of the past research efforts have taken a normative approach to identifying users' preferences for acceptable conditions (Shelby and Heberlein 1986). Typically, users are asked to indicate the highest level of some impact that they can tolerate before their experience reaches unacceptable conditions. Strong agreement among users, or subgroups of users, may indicate the existence of a social norm that can be used as a standard to guide planning and managing efforts.

However, the social norm concept may hold only limited potential for understanding users' preferences for social conditions, and in some cases a social norm may not be present at all (Roggenbuck et al. 1989). The concept of social judgment theory seems to have the potential to provide planners and managers with additional information on users' feelings toward social conditions.

SOCIAL JUDGMENT THEORY

The concept of social judgment theory recognizes that in addition to a most preferred condition, users are likely to have a range of conditions which they find acceptable - the latitude of acceptance. Furthermore, at some point along a continuum users may recognize a level of conditions which are unacceptable - the latitude of rejection. Finally, there may be a level of conditions which are neither acceptable nor unacceptable about which users are unsure of their feelings - the non-committal range (Petty and Cacioppo 1981; Sherif and Hovland 1961; Sherif et al. 1965). An advantage of using this approach for identifying social standards is that it provides a basis for understanding the reaction users may have toward a range of possible standards for social conditions.

Inherent in the social judgment approach is the assumption that people order stimuli along a psychological dimension in a meaningful manner, relative to an internal reference scale. This reference scale is developed, as are

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norms, through social interaction, and is also influenced by significant people in one's life, as well as one's own feelings. This reference scale affects the stand, or "anchor point", one will take on any given issue. The anchor point serves as a reference point from which alternative positions are evaluated, and can be thought of as the ideal level of acceptability for a given situation. A person's judgments of alternative positions on the issue are subject to contrast and assimilation effects relative to the anchor point (Petty and Cacioppo 1981).

A contrast effect occurs when one shifts a judgment away from the anchor point. An assimilation effect refers to a judgment shift toward an anchor point. Thus, relative to one's most preferred condition (or anchor point), some alternative positions on an issue may be seen as being more similar, and hence more acceptable, to the anchor point than they actually are, while others may be interpreted as being more unlike, or unacceptable, from one's anchor point than they actually are. The latitudes of acceptance, non-committal, and rejection establish the boundaries, or extremes, for determining whether or not an assimilation or contrast effect is likely to occur.

According to Sherif et al. (1965), if an issue occupies an important part of one's scheme of things, that person may be more "ego-involved" than others for whom the issue is considered less important. As a result, for a person more highly involved in an issue, that person's attitude should serve as a stronger anchor point, rendering it less susceptible to contrast or assimilation effects and causing the user to discriminate more sharply between acceptable and unacceptable conditions when evaluating alternative positions on an issue. The important influence involvement is believed to have upon the latitude of acceptance indicates that an understanding and appreciation of involvement is important to any attempt to use the social judgment concept to identify and better understand users' standards for social conditions.

INVOLVEMENT

McIntyre (1989) has described "enduring involvement" as a unidimensional concept that is considered by many as being synonymous with "commitment". Selin and Howard (1988) use the term "ego involvement", and describe the concept as "the state of identification existing between an individual and a recreational activity, at one point in time, characterized by some level of enjoyment and self expression being achieved through the activity".

Recreation researchers have recognized the importance involvement may play in better understanding recreationists preferences and evaluations of social and managerial conditions by including measures of involvement in studies relating to specialization (Wellman et al. 1982) and in the field of recreation choice behavior (Williams 1985; McIntyre 1989). The role of involvement is also commonly included in studies of consumer behavior (Houston and Rothschild 1978; Zaichkowsky 1985). However, some researchers have noted that the use of the involvement construct in research has suffered from a lack of conceptual understanding and theoretical development (Buchanan 1985; Selin and Howard 1988; McIntyre 1989).

Selin and Howard (1988) have identified five dimensions that they consider important to a better understanding of the concept of involvement. These five dimensions are: 1) centrality, 2) importance, 3) pleasure, 4) interest, and 5) self-expression. McIntyre's (1989) treatment of "enduring involvement" explicitly recognized all of these dimensions except "interest". He found that factor analysis of twelve questions thought to lie in the domain of these dimensions resulted in three major factors which he termed: 1) attraction, 2) self-expression, and 3) centrality. Application of these three dimensions were found to be slightly predictive of choice of camping sites at three alternative locations in Cooloola National Park in Queensland, Australia (McIntyre 1989).

In regard to social judgment theory, Sherif et al. (1965) have noted that those more highly involved with an issue typically have a larger latitude of rejection than those less involved. However, Markley (1971) has pointed out that the distance between the most preferred condition and the beginning of the latitude of rejection is a more accurate reflection of involvement as it is less susceptible to bias in cases where the latitude of acceptance tends to lie along the extremes of the continuum of alternative positions on an issue. The width of the latitude of acceptance was not considered reflective of involvement as experiments showed it tended to remain consistent among individuals with varying degrees of involvement. Yet, it should be noted that the issues studied were bipolar, where people often took extreme positions in favor of one end over the other, whereas measures of social standards typically deal with polarities on a single issue, where preferences for more or less of some feature of the environment are usually measured.

The research reported in this paper attempts to assess the relationship between involvement and measures of standards for acceptable social conditions based upon social judgment theory. The results of studies reported above indicate that it can be hypothesized that wilderness users showing higher levels of involvement will also be more restrictive toward the number of alternative positions they will accept in relation to their most preferred conditions. Consequently, it is felt that this should result in more highly involved wilderness users having shorter distances from their most preferred conditions to the point where conditions become unacceptable to them.

METHODS

Study Area

The area chosen for this study was the Cohutta Wilderness, located on the Chattahoochee and Cherokee National Forests in northcentral Georgia and extreme southeastern Tennessee. The area consists of 37,042 acres of

ugged Southern Appalachian mountain forest. The Cohutta Ranger District estimates a use level for the area of about 70,000 recreation visitor days per year. Much of this use appears to be from the rapidly growing Atlanta region.

Sampling

Over a time period of approximately 7 months, from May through November 1989, a total of 265 groups containing a total of 797 visitors were contacted at area trailheads. Information concerning arrival and departure times, number of previous visits, alternative sites considered group type, and location of planned travel routes and camping sites were collected on an onsite contact form. Those visitors age 16 and over were asked if they would complete a mailed questionnaire which would be sent to them about 2 weeks after the initial contact was made. Of the 677 visitors age 16 or over, only 4 refused to participate, resulting in a sample size of 673.

However, due to time delays involved in completion of data coding and transfer, the data reported here are based on a sub-sample of the users surveyed. The research reported here is based on data available from 222 of the individuals returning the mailback questionnaires during the period from May through early September. This time period covered about 63 percent of the total number of addresses collected over the entire sampling period. This resulted in a response rate of about 52 percent. Due to the likelihood that not all of the questionnaires distributed to those visiting the area over the Labor Day weekend were received at the time the data reported here were analyzed, it is probable that the actual response rate will eventually be greater than 52 percent.

Measures of Involvement

In order to measure involvement, five items considered relevant to the involvement components described by Selin and Howard (1988), and used in past research efforts (Wellman et al. 1982; McIntyre 1989; Williams and Roggenbuck 1989), were included in the mailback questionnaire (Table 1). These items included: "I get greater satisfaction out of visiting wilderness than other recreation places"; "I find that a lot of my life is organized around wilderness use"; "One of the major reasons I now live where I do is that it has opportunities for visiting wilderness"; "I feel like wilderness is a part of me"; and "I seldom take time to visit wilderness areas".

The involvement items were measured on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". Because there seemed to be no convincing basis for assigning various weights to the five items, all were considered of equal importance and aggregated into a scale ranging from 5 to 25. This scale was then divided by the number of involvement items to produce a final index ranging from 1 to 5, with 1 being least involved and 5 being most involved.

Social Conditions

The survey also included 10 items relating to social conditions encountered in the wilderness (Table 2). The questions were formatted in a manner designed to measure the users': 1) most preferred conditions; 2) other conditions that were acceptable; 3) those conditions considered unacceptable; and 4) those conditions for which the respondents were non-committed. This was accomplished by using equal interval scales ranging from zero to fifty, zero to twenty-five, or zero to one-hundred percent, depending on the type of attribute and determined through pilot testing for the range of conditions typically considered by the users.

The respondents were asked to place an 'X' on the scales indicating their most preferred conditions. A line drawn below the scale represented other conditions which the respondent found "acceptable". Finally, the respondents placed a line above the scale over those conditions which they found "unacceptable". Conditions which were not included in any of these three categories were considered to be non-committal. Figure 1 shows an example of the format used, and was also included in the questionnaire.

Because it was felt that the large number of resulting scale items would possibly discourage the respondents from completing the entire questionnaire, the social condition items were separated into two groups. Thus, users were mailed one of two types of questionnaires with half the group receiving "Form A", and the other half receiving "Form B".

Data Analysis

In order to test the hypothesis that users more highly involved with wilderness would report smaller latitudes of acceptance than those less involved with wilderness, scores on the involvement index were correlated with the ranges of widths between the most preferred condition, and the point where conditions become unacceptable for each of the ten social conditions measured. Those respondents failing to answer four or more of the social condition items were discarded from the sample because it was felt that these people may have misunderstood the directions. In addition, those failing to answer one or more of the five involvement measures were discarded.

RESULTS

The aggregate measure of involvement resulted in a mean rating of 3.84, with a standard deviation of 0.71 (Table 1). The measure with the highest rating was “I get greater satisfaction out of visiting wilderness than other recreation places”, which had a mean of 4.38. The question “One of the major reasons I now live where I do is that it has opportunities for visiting wilderness” resulted in both the lowest rating among the group of involvement measures (3.20), and the highest standard deviation (1.12).

The social conditions concerning “The number of people I see hiking along the trails in a day” and “The percent of time other people are in sight while on the trail” showed the greatest distance from the preferred condition to the beginning of the unacceptable range (Table 2). The ranges were 12.68 people and 17.52 percent respectively. These were also the only two measures showing a significantly negative correlation with the level of involvement index (Table 3). In the former case, the correlation was -0.254 while the latter case had a correlation of -0.219. Both were significant at $p < .05$. None of the other items showed significant correlations, positive or negative, with the involvement measure.

DISCUSSION

The results reported here seem to be largely inconclusive. This can be concluded from the lack of many significant items in either the hypothesized direction, opposite direction, or neutral position. Of the items that did show significance, “the number of people I see hiking along the trail in a day”, and “the percent of time other people are in sight while on the trail” were both significant in the hypothesized direction. That is, the more involved users tended to have a smaller distance between their most preferred level, and the point where conditions become unacceptable than those less involved with wilderness. These items also had the highest preferred and beginning of unacceptable range values.

Correlations were also analyzed for the range of acceptability, as well as the non-committal range. The results in both cases were similar to those found for the preferred/lower limit unacceptable distance. The only item that consistently appeared significant was “the percent of time other people are in sight while on the trail”. Correlation analyses for the individual involvement items did not show any of the five items as being more significant than the others.

The unexpected results of this study may have been influenced by the relatively small amount of variation found among the involvement measure. It is possible that this resulted from a somewhat homogeneous sample of users as far as involvement is concerned. Our sample was drawn from primarily summer visitors, most of whom appeared highly involved with the concept of wilderness. Inclusion of autumn visitors, including those participating in hunting activities, may well introduce more diversity to the overall sample. For example, some of the hunters may be found to be more “functionally” involved than involved with the concept of wilderness. This may increase the variation in our involvement measure and result in an increase in the number of significant correlations between wilderness involvement and social condition preferences. Of course, functional involvement is likely to be present in various degrees with many of the summer users as well (i.e. involvement with fishing, backpacking, etc., rather than with wilderness per se). However, the small sample sizes that resulted from dividing our overall sample by activities prevented us from exploring this possibility.

Another potential problem with our study concerns the reliability of our involvement measure. An attempt was made to include items representative of the various dimensions of the involvement concept identified by past researchers (Wellman et al 1982; Selin and Howard 1988; McIntyre 1989). However, for the most part, our overall index of involvement was based on a single item for each of these dimensions. This was due in part to our greater focus on the application of social judgment theory as a means of obtaining realistic measures of users' opinions regarding social standards than with the role involvement plays in social judgment theory, but also, in part, due to the lack of guidance on appropriate measures for the involvement dimensions. More research is needed to develop items that are specific to, and reliably measure each of the involvement dimensions.

Attempts to measure involvement may also need to be more specifically directed toward the particular social conditions of interest. Our measure of involvement was focused upon the general concept of wilderness. Perhaps we should have asked users questions more directly indicative of their involvement with each of the social conditions we measured. Users were asked about the extent to which they “care about” the specific social conditions that were evaluated. When these items were correlated with the corresponding social condition scales, the result was both greater numbers of significant items, and relatively higher negative correlations (Table 4). However, the extent to which users “care about” these social conditions is not likely a thorough indicator of all the dimensions of involvement as identified by past researchers (Selin and Howard 1988; McIntyre 1989). Furthermore, this measure may be so issue specific as to be circular in nature, thus potentially resulting in the higher correlations.

Management Implications

Based on the concept of social judgment theory, level of involvement should play a key role in determining the relative strength that recreationists hold for their attitudes toward preferred social conditions, and the degree to which they are willing to accept other alternative positions. To the extent that wilderness users are homogeneous in terms of involvement with wilderness, this concept may not be as important for wilderness managers as it is for other types of more diverse recreation. However, involvement on an activity level may show more diversity, and hence, place greater importance on the role of involvement in identifying social standards.

If this potential finding turns out to be true, it will be important that wilderness planners and managers not only determine the acceptable extremes of social conditions for the population of wilderness users as a whole when developing standards for social indicators. In such a situation, establishment of social standards based upon the averaged measures of wilderness users' opinions of acceptable conditions may not satisfy those users that have more restrictive latitudes of acceptance due to their higher degree of involvement. Conversely, social standards based upon the acceptable extremes of the more highly involved wilderness users would likely also be satisfactory to those users that show less involvement. This should be true as long as the preferred conditions of the less involved wilderness users lie within the acceptable extremes of those more highly involved.

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Table 3. Correlations between involvement and social conditions based on the distance between the most preferred condition, and the lower limit of the unacceptable range (number of correlations per item shown in parenthesis).

Social Condition	Involvement
The number of people I see hiking along the trails in a day	-0.254 * (79)
The number of large groups (more than 6 people) that I see along the trails in a day	-0.087 (77)
The number of hiker groups that camp within sight or sound of my campsite ***	-0.009 (77)
The number of hiker groups that walk past my campsite	-0.080 (76)
The number of horse groups I see along the trails in a day	-0.152 (68)
The number of horse groups that camp within sight or sound of my campsite	-0.035 (70)
The percent of time other people are in sight while I am on the trail	-0.219 * (79)
The number of groups of hikers I see along the trails in a day	0.070 (65)
The number of hiker groups that camp within sight or sound Of my campsite ***	0.103 (71)
The number of horse groups that travel past my campsite while I am there	-0.130 (67)

* = $p \leq .05$

** = $p \leq .01$

***= item included in both form A & B

Table 4. Correlations between degree to which respondents stated they “care about” specific social conditions, and their evaluations of preferred conditions and, distance between preferred levels and the lower limit of the unacceptable range (n in parenthesis).

Social Condition	Preferred Level	Preferred/Lower Unacceptable	Limit Range
The number of people seen hiking on trail in a day	-0.311 ** (90)		0.003 (79)
The number of large groups seen hiking on trail in a day	-0.272 ** (88)		-0.119 (76)
The number of hiker groups camped within sight or sound of campsite ***	-0.322 ** (85)		-0.336 ** (77)
The number of hiker groups walking past campsite	-0.281 ** (87)		-0.400 ** (76)
The number of horse groups seen on the trail in a day	-0.448 ** (77)		-0.340 ** (68)
The number of horse groups camped within sight or sound of campsite	-0.365 ** (80)		-0.363 ** (70)
The percent of time other people are in sight while on trail	-0.321 ** (89)		-0.378 ** (79)
The number of groups of hikers seen on the trail in a day	-0.193 (80)		0.05 (64)
The number of hiker groups camped within sight or sound of campsite ***	-0.205 (82)		-0.012 (70)
The number of horse groups that travel past my campsite	-0.121 (76)		-0.151 (65)

* = $p \leq .05$

** = $p \leq .01$

*** = item included in both form A & B

Table 2. Means/standard deviations for social conditions (n in parenthesis).

Social Condition	Preferred Level	Lower Limit Unacceptable	Pre./Unaccep. Range
The number of people hiking on trail in a day	11.53/7.24 (81)	25.05/9.37 (80)	12.68/7.65 (79)
The number of large groups hiking on trail in a day	3.37/2.92 (81)	8.28/5.63 (80)	4.51/4.20 (77)
The number of hiker*** groups camped in sight or sound of campsite	2.22/3.23 (77)	6.49/4.85 (84)	3.67/3.03 (77)
The number of hiker groups walking past campsite	3.74/3.89 (78)	8.51/5.12 (82)	4.58/3.96 (76)
The number of horse groups seen on trail in a day	2.43/3.28 (70)	5.75/5.18 (79)	3.81/3.81 (68)
The number of horse groups camped in sight or sound of campsite	1.73/3.16 (73)	4.35/4.95 (81)	3.07/3.50 (70)
The percent of time other people are in sight while on trail	13.91/13.31 (80)	31.54/20.62 (83)	17.52/15.94 (79)
The number of groups of hikers seen on trail in a day	3.87/3.66 (67)	10.98/4.73 (63)	7.78/4.24 (65)
The number of hiker*** groups camped in sight or sound of campsite	1.58/2.65 (69)	5.71/4.14 (70)	4.38/3.65 (71)
The number of horse groups that travel past my campsite	1.22/1.89 (67)	5.09/4.35 (69)	3.53/3.36 (67)

*** Item used in both Form A and Form B

Table 1. Means and standard deviations for involvement measures.

Involvement Measure	n	mean *	s.d.
I get greater satisfaction out of visiting wilderness than other recreation places	221	4.38	0.79
I find that a lot of my life is organized around wilderness use	221	3.39	1.02
One of the major reasons I now live where I do is that it has opportunities for visiting wilderness	221	3.20	1.12
I feel like wilderness is a part of me	221	4.10	0.83
I seldom take time to visit wilderness areas	221	4.11	0.95
Involvement **	221	3.84	0.71

* Based on a scale ranging from 1 to 5

** Aggregation of the previous five measures

Figure 1. Example of equal interval scale measure for social condition standads.

