

Outdoor Recreation and Family Cohesiveness: A Research Approach

by Patrick C. West and L. C. Merriam, Jr.

Outdoor recreation produces many kinds of highly valued social effects. One of these effects appears to be stronger family cohesiveness. Previous research supports the hypothesis that leisure activity and group cohesiveness are related. This study of family campers at St. Croix State Park, Pine County, Minnesota, was designed to test the hypothesis that mutual outdoor recreation helps sustain and increase family cohesiveness by inducing social interaction in the family group. Members of 306 randomly selected families were interviewed in the summer of 1967, and a follow-up questionnaire was sent in the fall. Cohesiveness was measured by ascertaining the amount of intimate communication of troubles, secrets, and mood among family members. Study results provide moderate support for the proposition that outdoor recreation helps maintain and increase family cohesiveness.

Outdoor recreation is perhaps unique among leisure activities in its dependence on public subsidy and public lands for its continued existence and growth. In our profit-oriented market economy, the existence of benefits of various kinds which cannot be effectively marketed by private enterprise is a principle argument for public provision of outdoor recreation areas like state parks. Thus, outdoor recreation more than any other particular type of leisure activity needs to be studied for its non-market social values. One of these non-market social values may be stronger family cohesiveness. This is not to imply that outdoor recreation may be a cure-all for lack of family cohesiveness. Indeed family unity is a complex web involving many factors, many of which are probably more vital than participation in outdoor recreation.

There has been a great deal of research on the importance of mutual leisure interests and activities to the cohesiveness of the modern family, but outdoor recreation has rarely been singled out and studied for its contribution

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to family cohesiveness. Consequently, the present study was designed to examine the hypothesis that *mutual outdoor recreation helps sustain and increase family cohesiveness by inducing processes of social interaction within the family group*. The main value of the study lies in the conceptual and methodological approach used, as statistical results from this particular study were limited.

Cohesiveness and its Importance

There are a number of terms that are used in roughly the same way, as the term group cohesiveness; among these are "solidarity," "morale," "bonds of intimacy," and "group unity." All refer to the intensity or quality of the relationship between members of a group.

Charles Horton Cooley (1962), one of the founders of modern sociology, has defined the cohesive family as one in which

. . . the members become submerged by *intimate* association into a whole wherein each age and sex participates in its own way. Each lives in imaginative contact with the minds of the others and finds in them the dwelling place of his affections, ambitions, resentments, and standards of right and wrong. Without conformity, there is unity . . . (p. 48)

The key word in Cooley's definition is "intimate." The intimacy of the *communications* between group members forms the conceptual definition of cohesiveness in this study. This definition views cohesiveness in objective terms of actual behavior, the intensity and intimacy of interaction between group members. Non-verbal interaction (mood, tone of voice, facial expression, etc.) are included in the concept of intimate communication.

The bonds of intimacy within the family are highly valued for their own sake, but they also have implications for other socially valued goals such as socialization of children, strengthening of self concepts, personal adjustment, and the companionship of satisfying day-to-day interaction. For this study, family cohesiveness is assumed to be a positive quality.

Characteristics of Outdoor Recreation

There are several unique characteristics of outdoor recreation activities that may serve to intensify interaction and communication in the recreating group.

1. Outdoor recreation is usually a part of a larger trip including planning, travel, and recollection—all of which provide occasions for reinforcing the bonds of intimacy. (Clawson and Knetsch 1963, p. 33; Stone 1965, p. 27)

2. Outdoor recreation is often associated with a group struggle against the environment that induces a strong "we" feeling in the group. Stone has termed this the "Combat Metaphor." (Stone 1965, p. 27)

3. Outdoor recreation often isolates the group from its normal social world. This isolation may tend to intensify interaction. (ORRRCb, p. 31)

4. Outdoor recreation has norms of interaction which often call for spontaneity of interaction and the breakdown of normal social reserves. (Neumeyer and Neumeyer 1958, p. 254)

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5. Ritualization often occurs in outdoor recreation activities which can increase solidarity.¹

6. Families tend to turn to outdoor activities almost more than to any other type of activity when the whole family participates together. (Nye 1958, p. 28; Johannis 1958, p. 25; West 1968, p. 231)

Previous Research

Previous leisure research strongly supports the hypothesis that leisure activity and group cohesiveness are related (Blood and Wolfe 1960; Bossard and Boll 1963; Cunningham and Johannis 1960; Gerson; Havighurst 1957; Hawkins and Walters 1952; Klapp 1959; Maddox 1963; Nye 1958; Phillips 1967; Ramsey; Stone 1963; Wylie 1953). It thus may be assumed that outdoor recreation activities, as leisure pursuits, also contribute to the relationship between leisure activity and cohesiveness for many families.

A study by Wylie (1953, p. 24) indicates that outdoor recreation may be playing a more important role in leisure satisfaction than any other type of leisure activity (which might be due in part to the six characteristics of outdoor recreation discussed above). Wylie asked respondents if they felt that they had achieved stronger family unity as a result of participation in family recreation; 69 percent felt that they had achieved greater family unity. He then asked those who felt that they had achieved greater family unity which activities were most instrumental in achieving it. Of these, 40 percent felt that nature and outing activities had the greatest influence, which was almost double the percent of the next most frequently identified activity (sports, 22 percent).

Study Designs and Methods

The present study was conducted at St. Croix State Park in Pine County, Minnesota, between June 26 and September 4, 1967. This 30,000-acre park is located about 100 miles north of St. Paul along the St. Croix River. Park developments include overnight camps, picnic areas, organized group camps and river access points.

A random sample of campers including 306 families was interviewed. Each day a random group of names of from 20-25 percent (average 23 percent) was drawn from camper registration cards. The sample was drawn each day *only* from parties who had registered the previous day. This procedure was specifically used to avoid the "length of stay" sampling bias in campground studies discussed by Lucas (Lucas and Schweitzer 1965). If the sample had been drawn each day from those *in* the campground, those who stayed a greater number of days would have had a proportionately greater chance of being included in the sample.

The study design incorporated two methodological techniques that distinguish it from most sociological studies in outdoor recreation, a factor which may be one of the main values of the study. The first technique was that the husband, wife, and oldest child over 12 were interviewed. This approach

1. Bossard and Boll (1963, p. 274) found that vacations were among the most commonly ritualized family activities. Klapp (1959, p. 213) found correlations of .39 and .44 between ritual and family solidarity.

recognizes the fact that outdoor recreation is largely a group phenomenon and should be examined from a group point of view. Most studies in outdoor recreation concentrate on the individual, usually the "head-of-party," and individual's motivations, satisfactions, etc. These studies often fail to recognize several things:

1. Individual motivations, values, attitudes, and satisfactions are often influenced by group processes.
2. Responses to individual attitude items can vary greatly among family members. For instance, the correlation between two particular attitude items was .66 for fathers and only .02 for children over 12. (Interviews of the head-of-party cannot be generalized to the rest of the group.)
3. It is especially important to interview other group members when trying to measure a group variable such as family cohesiveness.

The second technique was an ex post facto experimental design, in which the dependent variable (cohesiveness) was measured before and after the occurrence of the independent variable (outdoor activity). During the initial interview in the park (Time 1), questions about "spring cohesiveness" and past and present outdoor recreation were asked. In the fall (Time 2), a questionnaire was mailed to all families in the study to measure the outdoor recreation activity for the summer and "fall cohesiveness" (Figure 1).

This type of analysis helps to suggest causal relationships. If for instance a correlation between spring cohesiveness and summer activity were to be .12 and the correlation between summer activity and fall cohesiveness were .24, it could be inferred that activity may affect cohesiveness more than cohesiveness affects activity. However, cause cannot be totally verified by this method because of the possibility of other uncontrolled factors.

The procedure of asking about a state of affairs at some previous point in time (as was done at Time 1) is best reserved for questions about previous behavior and is so used here. This approach is questionable when it is used to obtain responses about previous attitudes, preferences, values or other subjective material.

TIME 1 Summer Interview at St. Croix State Park		TIME 2 Fall Mailed Follow-Up Questionnaire	
Dependent Variable	Independent Variable	Dependent Variable	Independent Variable
Questions about cohesiveness during May and June	Questions about present activity, values and background variables; questions about past activity	Questions about family cohesiveness during September and October	Questions about activity over the summer

FIGURE 1. DIAGRAMMATIC REPRESENTATION OF EX POST FACTO EXPERIMENTAL DESIGN—ST. CROIX STATE PARK STUDY, 1967

Some losses, amounting to 3 percent, from the original sample occurred for various reasons at Time 1. The return rate of the mailed follow-up questionnaire was 91 percent which is remarkably high for any mailed questionnaire.

Tests of the various losses from the sample revealed that losses were limited and appeared to be random in nature. A test was made of differences between groups that were interviewed and those selected for the sample but not contacted on four variables recorded from the camper registration cards that correlated with main study variables. No significant differences were found for any of the variables tested. Similar tests were made on differences in Time 1 variables between those who returned the mail questionnaire and those who did not. There was no systematic bias from these sample losses.

General family interaction was measured by asking how much different members of the family talked with one another. Cohesiveness was measured by ascertaining the amount of *intimate communication* of personal troubles, secrets about friends, and detection of moods among family members. This measure was derived from Cooley's conception of cohesiveness by Dr. Charles E. Ramsey, professor of sociology, University of Minnesota. The scale was modified for use in the present study.

All scale items were found to be reliable and passed tests of face validity and internal criterion validity. "Internal criterion" tests of validity showed significant correlations for all but one scale item ranging from .27 to .48 (average $r = .36$). The spearman-brown coefficient of reliability was .84 for the husband's responses and .82 for the wife's responses.

The measure of the independent variable, outdoor leisure activity, was based on the *number of outdoor activities participated in* together by the family. A measure of value similarity with regard to outdoor leisure activity was included in the study as an independent variable. The measure consisted of comparing the similarity of the husband's and wife's responses to questions about preferences for developed or primitive camping.

Study Results

Results from the study provide only slight support for the proposition that outdoor recreation activity helps maintain and increase family cohesiveness. Summer activity was related to fall cohesiveness more than spring cohesiveness was to summer activity, suggesting that activity affects cohesiveness more than cohesiveness affects activity. Most items showed no significant correlation. The two items that were mildly significant were related in the hypothesized direction (Table 1).

Correlations between cohesiveness items at Time 1 and Time 2 were consistently high, ranging from .27 to .60. Thus, a high degree of variance in fall cohesiveness is explained by the state of the family's cohesiveness the previous spring. On this basis, initial spring cohesiveness was then controlled for. Within each control group, unfortunately, the sample sizes became so small as to make significance level testing meaningless; therefore, only the pattern of correlation can be discussed.

Families with low initial spring cohesiveness appear to experience the greatest increase in cohesiveness over the summer after outdoor leisure activity.

TABLE 1
RELATIONSHIP OF FAMILY PARTICIPATION IN SUMMER OUTDOOR ACTIVITIES
TO SPRING AND FALL COHESIVENESS (SIGNIFICANT CORRELATIONS ONLY)
ST. CROIX PARK STUDY, 1967

COHESIVENESS ITEMS	FAMILY PARTICIPATION IN SUMMER OUTDOOR ACTIVITY (MEASURED AT TIME 2)	
	(CORRELATION <i>r</i>)	
	SPRING COHESIVENESS (TIME 1)	FALL COHESIVENESS (TIME 2)
Talks with children	.05	.17* [†]
Perception of wife's mood	.10	.20** ^{††}

* Significant at the .05 level

** Significant at the .01 level

[†] Change in correlation significant at .10 level

^{††} Change in correlation significant at .15 level

Correlations between summer activity and fall cohesiveness were consistently higher for families who had low spring cohesiveness. Families with high spring cohesiveness probably remained high through the fall regardless of summer outdoor activity. On the other hand, for families with low spring cohesiveness summer activity may indeed have fostered greater cohesiveness in the fall.

Families in the earlier stages of the family life cycle apparently contributed more to the correlations between number of activities and cohesiveness. Early stages in the family life cycle were associated with greater family outdoor activity *and* higher scores on various cohesiveness items.

Similarity of outdoor recreation leisure values measured by similarity of camping preference was more strongly related to cohesiveness than measures of summer activity based on the number of activities participated in by families. Table 2 shows the correlations between value similarity and family cohesiveness items. Similarity of camping preference was significantly related to the wife's perception of family cohesiveness. This suggests that it may be more important to cohesiveness for the wife to have similar leisure values with respect to outdoor recreation. This finding reinforces the findings from other studies that found companionship in marriage to be more important to the woman (Gerson, p. 26).

Limitations of the Study Design and Implications for Further Research

With the possible exception of the relationship between outdoor leisure values and cohesiveness, statistical results from the study were meager. As stated earlier, the main value of the study lies in the conceptual and methodological approach. Hindsight has also revealed several drawbacks in the study design that are discussed below. Discussion of these drawbacks helps explain the lack of statistical results of this study and suggests ways that future research might be improved.

TABLE 2
RELATIONSHIP BETWEEN CAMPING PREFERENCE SIMILARITY AND FAMILY
COHESIVENESS, ST. CROIX PARK RESPONDENTS, 1967

COHESIVENESS ITEMS	SIMILARITY OF CAMPING PREFERENCE	
	(CORRELATION r)	
	HUSBAND'S COHESIVENESS RESPONSES	WIFE'S COHESIVENESS RESPONSES
Perception of spouse's mood	.05	.18*
Tells spouse troubles	.01	.04
Spouse tells troubles	.02	.26**
Tells spouse secrets about friends	.04	.19**
Spouse tells secrets about friends	.00	.28**

* Significant at the .05 level

** Significant at the .01 level

One main limitation of the design of the study appears to have been in the measurement of the independent variable—leisure activity. The measure of summer outdoor recreation activity depended heavily on the *number of outdoor activities* participated in by camping families. "Number of activities" appears to have a distinct disadvantage as a measure of outdoor family leisure. Some literature suggests that the "number of activities" will probably have lower correlations with cohesiveness than other measure of leisure activity (Benson 1963; Gerson). The number of activities participated in together may not be a good measure because a family might participate a great deal in only one or two activities and receive more mutual reinforcement of the bonds of intimacy than a family who participates infrequently in a larger number of outdoor activities.

This disadvantage might be corrected by measuring other elements of family outdoor leisure. Some items to consider in this regard might be (1) satisfaction with amount of outdoor leisure time spent together; (2) satisfaction with number of outdoor activities engaged in together; (3) proportion of outdoor activities engaged in together; (4) perception of whether family participates "much," "some," or "little" in outdoor recreation; (5) satisfaction with the way spouses "get along" with respect to outdoor leisure activities; (6) extent of disagreement about matters of outdoor leisure time; (7) number of separate days on which family participated in each outdoor activity (activity-days); (8) barriers to desired participation in outdoor activities; (9) planning and recollection activity connected with outdoor recreation; (10) proportion of total leisure activity time spent in outdoor activity; and (11) direct subjective perception of which leisure activities contribute most to family unity.

The second major limitation of the design is that the study does not control for other types of leisure activity (i.e. if a family went camping only once and was interviewed, but did many other family activities not associated with

outdoor recreation, there would be a low activity score while the total family leisure activity might be high, thus reinforcing family cohesiveness). This drawback can be easily corrected by including measures of other leisure activity similar to the ones previously listed. Other leisure could be controlled for or a two-way analysis of variance scheme could be used, measuring the joint relationship of outdoor recreation and other leisure activity to cohesiveness.

A third major drawback of the study was that the population sampled did not provide significant variability in the independent variable. Because the study was an "on site" campground study, the sample was drawn only from families who camp, and thus no comparison is made with families who do not camp or who do not participate in outdoor recreation at all. Only 60 percent of American families participate in two or more outdoor recreation activities as a family (ORRRCa, p. 28) and only about 2 percent of the total activity days spent in outdoor recreation in 1960 were spent camping (ORRRCa, p. 46). Future studies could be greatly improved by sampling the general population, which would mean removing the study from an "on site" setting and conducting interviews in people's homes.

Increasing the sample size would also increase the quality of future studies. This would permit controlling of variables (such as initial cohesiveness) without reducing sample sizes in each control group below levels desirable for statistical testing.

While this study provided strong evidence for the validity and reliability of the cohesiveness measure used, based on the intimacy of interaction, other methods might be employed as well. Wylie's method of asking directly and subjectively how leisure activity contributes to family unity could be used. Another measure that would be very objective would be to compare outdoor leisure patterns between spouses who divorce and those who do not.

Conclusions

This study has proposed a means for studying a non-market human value of outdoor recreation—family cohesiveness—and suggests pitfalls, measurement problems and techniques, plus a framework and questions to which future research might be directed. It was stated in the introduction that the existence of "non-market" benefits of various kinds which cannot be effectively marketed by private enterprise is a principle argument for public provision of outdoor recreation areas like state parks. Studies such as this contribute to the ability to discuss such "non-market benefits" more articulately and more specifically. Other human values, satisfactions and needs from outdoor recreation can and should be studied in this way, so that they might be more adequately represented in the decision making processes.

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