Numerous theories of recreation and leisure have been used to deduce hypotheses which are testable empirically. This article contends that one need not resort of a "special theory" of leisure to predict and explain an individual's level of participation. An examination of social psychological variables, indicates that opinion leadership, self concept, and past participation influence present participation levels. After controlling for other personal and demographic variables, the relationships remain significant.

A persistent theme of recent recreation research is the presence of correlates, which in varying degrees, influence the extent to which individuals participate in leisure activities. More to the point, "past recreational behavior" (Yoesting and Burkhead, 1973; Christiansen and Yoesting, 1973; Sofranko and Nolan, 1972), "value orientation" (Christiansen and Yoesting, 1973; Bultena and Wood, 1970; Lindsay and Ogle, 1972), "age" (Christiansen and Yoesting, 1973; Lindsay and Ogle, 1972), "income" (Christiansen and Yoesting, 1973), "size of hometown" (Yoesting and Burkhead, 1973) and "definitions of the environment" (Knopp, 1972) have all been found to be significantly related to participation in recreational activities.

Despite these findings, two issues remain unresolved. The first pertains to a choice of theoretical perspective. Many investigators suggest that recreational participation can be understood by resorting to some special theory of leisure. Witt and Bishop (1970) point to five classical theories: catharsis, compensation, surplus energy, relaxation and task generalization. Each of these theories suggest that "people favor different activities after having been in certain (antecedent) situations" (Witt and Bishop, 1970:64). Hendee (1969) suggests that five theories or "mini theories" purport to explain individual recreation and leisure activity. These are termed "compensatory", "surplus energy", "opportunity", "task generalization" and "pleasant experience". Hendee concludes that "although there are several alternate theories to explain rural-urban recreation differences, almost all are cast in such general terms, that mobilizing operational data capable of testing them is an imposing task" (Hendee, 1969:338).

Related to the conceptual vegetable garden extant in the literature, is the problem of empirical findings. Most findings have been demographic
in nature. As noted, age, education, income and size of hometown have all been found to be related to recreation participation. These facts, however, do not cohere with the psychological underpinning of the theories. Terms such as "catharsis", "surplus energy", "pleasant experience", and "task generalization" are clearly psychological (See Witt and Bishop, 1970). Hence, a gap exists between the theoretic framework used to understand recreation behavior, and what is presently known about its determinants.

This study attempts to transcend previous research by exploring the effects of selected social-psychological variables on individual recreation participation.

Theoretical Bearing

Ever since George Herbert Mead's "Mind, Self, and Society" (1934), symbolic interactionism has provided a conceptual fabric for delimiting and studying social behavior. The perspective rests on three "root images": (a) human beings act toward objects on the basis of the meanings that the objects have for them, (b) the meanings of objects arise out of social interaction and (c) meanings are handled in and modified through an interpretive process (Blumer, 1969:7).

An objective of theoretic importance, is that of "self". Self is defined as "that organization of qualities that the individual attributes to himself" (Kinch, 1963). According to Mead's seminal formulations, the self or personality arises through role taking. Role taking is defined as the process whereby an individual subjectively places himself in the position of others. This is to say that the self, as object, can be understood only by assimilating the viewpoint of particular (significant) and composite (generalized) others. Since the self is object, it logically follows that the way in which individuals define themselves depends in large measure on the real or anticipated reactions of others. In a nutshell, the general arguments of the theory can be stated in one sentence: the individual's conception of himself emerges from social interaction, and in turn guides or influences the behavior of that individual (Kinch, 1963).

Kinch conceptualizes interaction as two somewhat distinct, but related notions. "Actual responses" of others pertain to the objective stimuli encountered by the actor (actual reactions of others). "Perceived responses" of others refer to the individual's interpretations of the actual responses of others.

An extension of Mead's social psychology is what is referred to as "role theory". Roles are defined as the expectations associated with a particular status position. Central to role theory is the assertion that expectations influence behavior. To understand behavior, one must account for the numbers and kind of expectations attached to the individual's position by significant others. This argument squares with interactionism in that "expectations" are objects, the meaning of which, arise in interaction.

Implications of the foregoing are first; that individual perceptions of the social structure (others) must in some way be reckoned with in explaining behavior, second, that structural variables determine the
various ways the individual perceives himself and third; behavior is a function of both structural and personality factors.

The following hypotheses can be derived from one or more of these implications:

Hypotheses:

1. The degree to which others come for advice on recreational matters (opinion leadership) will exert an independent effect on the degree to which the individual sought, participates in recreational activities.

2. The degree to which individuals perceive their peer group to be active will exert an independent effect on the degree to which they participate in recreational activities.

3. The degree to which individuals perceive themselves (self perception) as active will exert an independent effect on their recreational activities.

4. The degree to which individuals perceive their parents to be active will exert an independent influence on their recreational activities.

5. The degree to which individuals perceive their parents to expect participation in recreational activities will exert an independent influence on their recreational behavior.

6. The degree to which individuals perceive their peers as perceiving them to be active (role taking) will exert an independent effect on their behavior.

7. The degree to which individuals consider the norms of their peer group as important will exert an isolated effect on their behavior.

Sample and Procedure

The cases for this study come from a random sample of undergraduate sociology students located in Brookings, South Dakota. A total of 258 questionnaires were initially given to male and female respondents enrolled in courses at South Dakota State University. After deleting questionnaires with incomplete items, questionnaires for one hundred and sixty-six (N=166) remained for analysis. The final sample represents 64.3% of all students responding to the instrument.

The data were collected in November of 1973. A total of eighteen (18) independent variables are included in the analysis. Seven (7) of the antecedent variables are clearly social psychological and are hypothesized to independently influence student recreational activity. They are as
follows: opinion leadership (actual responses to others - $X_3$), perceived peer activity ($X_4$), self description ($X_5$), perceived parental activity ($X_{11}$), parental expectations ($X_{13}$), perceived attitude of peers ($X_{17}$), and perceived importance of peer group norms ($X_{18}$).

A last congeries of variables included are: parental subscription to recreational publications ($X_6$), family size ($X_8$), parental income ($X_{10}$), parental education ($X_{12}$), recreational energy expended alone ($X_{14}$), with friends ($X_{15}$), and with the family ($X_{16}$). These variables, although not contained in the hypothesis or review of literature, could possibly exert, or somehow influence, student recreational behavior. Hence, their effects should be recognized and in some way controlled for.

The social psychological variables were determined and measured by the following items: opinion leadership -- "In general, how often do other students come to you for advice on outdoor recreational matters?" Scored "never" (1), "rarely" (2), "occasionally" (3), "quite often" (4), and "constantly" (5); perceived peer activity -- "In general, how would you describe the outdoor recreational activity of your best group of friends?" Scored "very inactive" (1), "inactive" (2), "somewhat active" (3), "active" (4), and "very active" (5); self description -- "In general, how would you describe yourself in relation to outdoor recreational activity?" Response categories and scores were "I am very inactive" (1), "I am inactive" (2), "I am somewhat active" (3), "I am active" (4), and "I am very active" (5); perceived parental activity -- "The level of my parents outdoor recreational participation can be described as: "low" (1), "medium" (2), and "high" (3); parental expectations -- "How important is it to your family that you participate in outdoor recreation?" Scored "very unimportant" (1), "unimportant" (2), "neither important or unimportant" (3), "important" (4), and "very important" (5); perceived attitude of peers -- "Considering your best group of friends, how do you think they would describe your level of outdoor recreational participation?" Measured "I am very inactive" (1), "I am inactive" (2), "I am somewhat active" (3), "I am active" (4), and "I am very active" (5); importance of peer group norms -- "How important are the opinions of your best group of friends to the number of times you participate in outdoor activities?" Scored "very unimportant" (1), "unimportant" (2), "neither important or unimportant" (3), "important" (4), and "very important" (5).

Current recreational activity was delimited and measured by an index consisting of 35 separate outdoor activities. The index appears in an article by Yoesting and Burkhead (1973). Each undergraduate responded to the following item, "Which of the following outdoor recreational activities have you participated in during the past year?" A composite score was obtained by summing the total number of "yes" responses to each of the activities.

The operationalizations of the other variables, which, for the most part, are ancillary to this study, are listed in the appendix.

The statistical technique chosen for analysis is linear multiple regression (Steele and Torrie, 1960). This form of analysis allows the investigator to assay the relationships between an independent and a dependent variable while partialling out the variances of other antecedent variables in the regression equation. Since the effects of all other
independent variables are held constant, one can interpret the remaining relationship as "independent".

**Results**

The data in Table 1 are the correlations between each antecedent variable and undergraduate recreational activity. The zero order correlations indicate the degree of association (within the sample) between each independent variable and undergraduate participation scores. The data indicates that "value orientation", "past recreational participation", "opinion leadership", "perceived peer activity", "self conception", "parental subscription to recreational publications", "parental income", "parental activity", "parental education", "parental expectations", "perceived attitude of peer group", and "perceived importance of peer group norms" are all significantly related (P < .001 level) to current participation in recreational activities. Moreover, there is less than one (1) change in a thousand that the relations in the greater population (all sociology students in the University) are zero. A weakness in simple correlation analysis however is the failure of the technique to partial or hold constant each of the other independent variables. Hence, the connections between each of the independent variables and undergraduate recreational activity may be masked due to shared variance with other antecedent variables.

The results of regressing current recreational scores on the independent variables (X thru X18) are also presented in Table 1. Each regression weight indicates the increase in the dependent variable brought about by accompanying increases in each independent variable, while holding constant each of the other independent variables. For example, the regression coefficient between value orientation and recreational behavior equals +.08. This indicates that a unit increase in value orientation scores, accompany an "average" increase of .08 in participation scores while blocking out the variance of all other independent variables. The sequential "F test" assess the presence or absence of a relationship in the population (B=0) versus (B≠0). The data in Table 1 indicate that past recreational participation (P < .001), opinion leadership (P < .001) and self concept (P < .001) have an independent influence on the dependent variable. "Age" and recreational energy expended with the family "are independently related, but there are approximately ten chances in one hundred (P < .10) that the connection is not present in the population.

The coefficient of determination (R^2 = .61) indicates that sixty-one percent of the variance in undergraduate participation is explained by the combined effects of all antecedent variables. Thus, all variables taken together, have high explanatory power.

**Discussion and Implications**

A central thesis of this study is that too often, social psychological variables are neglected in leisure and recreation research in favor of more demographic explanations. The results of this study demonstrate that "opinion leadership" and "self conception" are independently related to recreational behavior. These findings square statistically with two (2) of the seven (7)
hypotheses derived from social-psychological theory. More to the point however, is the fact that only one demographic variable exerts a significant independent influence on the dependent variable (although significant at only .10 level). Age was observed to vary directly with undergraduate participation. This finding is somewhat antithetical to the literature in that some investigators have observed a negative relation. This can be explained by the fact that the sample for this study was based on students rather than community adults. University samples maintain skewed age variances reflecting relatively younger age than adult populations as a whole. The polarity of the relationship suggests that accompanying increases in student age are higher university standings (freshmen, sophomore, junior, etc.) and thus greater opportunities for recreational pursuits.

Student perceptions of the social structure, actual responses of other students (opinion leadership) and self conception were all found related to recreation behavior. After controlling however, only past recreational activities, opinion leadership and self conception remain significant at the .01 level. These findings suggest that social psychological variables exert influences on leisure and recreation, and are independent of demographic factors.

Social psychological theory can be articulated as follows: perceptions of the social structure indirectly influence individual behavior through relations to other variables. Behavior is more directly influenced by socialization or past recreational experiences, the way others react toward self, and conception of self.

These findings, although not generalizable to adult populations, suggest that some key notions of interactionism merit further consideration as an explanation of leisure behavior.

References

Blumer, Herbert

Bultena, Gordon and Vivian Wood

Christiansen, James E., and Dean R. Yoesting

Hendee, John C.
Kinch, John W.  

Knopp, Timothy B.  

Lindsay and Ogle,  

Mead, George Herbert  

Sofranko, Andrew and Michael Nolan  

Steele and Torrie  

Witt, Peter and Doyle Bishop  

Yoesting, Dean R. and Dan L. Burkhead  
Table 1 Zero Order correlations and regression coefficients between antecedent variables and sociology undergraduate recreation participation.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>B</th>
<th>r</th>
<th>Significance</th>
<th>STD ERROR</th>
<th>F Value</th>
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<tr>
<td>(X1) Physical Fitness Value Orientation</td>
<td>+.08</td>
<td>+.25</td>
<td>.001 level</td>
<td>.1499</td>
<td>.284</td>
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<td>(X2) Past Recreational Activities (6-11 yr. old)</td>
<td>+.35***</td>
<td>+.62</td>
<td>.001 level</td>
<td>.0726</td>
<td>23.293</td>
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<td>(X3) Opinion Leadership</td>
<td>+.91***</td>
<td>+.50</td>
<td>.001 level</td>
<td>.4197</td>
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<td>(X4) Perceived peer activity</td>
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<td>+.42</td>
<td>.001 level</td>
<td>.5104</td>
<td>1.082</td>
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<td>(X5) Self description (Activity level)</td>
<td>+2.26***</td>
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<td>.001 level</td>
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<td>(X6) Parental subscription to recreational Publications</td>
<td>+.40</td>
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<td>(X7) Age</td>
<td>+.23*</td>
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<td>(X8) Family Size</td>
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<td>.452 level</td>
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<td>(X9) Hometown Size</td>
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<td>(X10) Parental income</td>
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<td>(X11) Parental recreational activity</td>
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<td>(X13) Parental recreational expectations</td>
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<td>(X14) Recreational energy expended alone</td>
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<td>(X15) Recreational energy expended with friends</td>
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<td>(X16) Recreational energy expended with family</td>
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<td>(X17) Perceived attitude of others</td>
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<td>(X18) Peer pressure</td>
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R = .78

R² = .61 (Proportion of Explained Variance)

N = 166 undergraduates at South Dakota State University

*** Significant P = <.001

* Significant P = ≤.10
Appendix

Physical fitness value orientation ($X_1$) was ascertained by five (5) items. Each item was scored by the Likert technique. A composite score was obtained by summing the score for each item. The items were:

- "physical fitness activities are increasing in their value to mankind,"
- "physical fitness activities are valuable for maintaining health,"
- "physical fitness activities are not sufficiently practiced by college students," "planning physical activity is fundamentally a social practice," and "physical activities strengthen moral development"; past recreational activities ($X_2$) obtained by, "which of the following outdoor recreational activities did you participate in from the age of 6-11 years of age?"

An activity index consisting of 35 activities (Yoesting and Burkhead, 1973) was scored by summing the number of activities checked "yes"; age scored by raw years reported; size of hometown scored by placing the number reported over 1,000; parental subscription to recreational publications, "to how many outdoor publications do your parents presently subscribe to such as Field and Stream, Outdoor Life, American Sportsman, American Rifleman, etc." scored by adding the total number of publications reported; family size -- scored by adding total number of members reported; parental income -- "my parents combined income falls in which of the following categories: response categories were "under 1,000 dollars (scored 1), 1,000-2,999 (scored 2), 3,000-4,999 (scored 3) to 21,000 dollars plus (scored 12); parental education -- scored by total years of formal education fathers completed; energy levels determined by "what percent of time and energy do you devote to outdoor recreational pursuits is spent with the following?" Response categories were "self", "friends" and "family". Each percent was taken as a ratio measure of recreational striving."