Behavioral involvement in the Jefferson Reservoir issue: a model of alternative forms of involvement

Vincent Joel Webb
Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/rtd

Part of the Sociology Commons

Recommended Citation
https://lib.dr.iastate.edu/rtd/4709
INFORMATION TO USERS

This dissertation was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in “sectioning” the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from “photographs” if essential to the understanding of the dissertation. Silver prints of “photographs” may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
A Xerox Education Company
WEBB, Vincent Joel, 1945-
BEHAVIORAL INVOLVEMENT IN THE JEFFERSON RESERVOIR
ISSUE: A MODEL OF ALTERNATIVE FORMS OF
INVOLVEMENT.

Iowa State University, Ph.D., 1972
Sociology, general

University Microfilms, A XEROX Company, Ann Arbor, Michigan
Behavioral involvement in the Jefferson Reservoir issue:  
A model of alternative forms of involvement

by

Vincent Joel Webb

A Dissertation Submitted to the  
Graduate Faculty in Partial Fulfillment of  
The Requirements for the Degree of  
DOCTOR OF PHILOSOPHY

Department: Sociology and Anthropology  
Major: Sociology

Approved:
Signature was redacted for privacy.

In Charge of Major Work
Signature was redacted for privacy.

For the Major Department
Signature was redacted for privacy.

For the Graduate College

Iowa State University  
Ames, Iowa

1972
PLEASE NOTE:

Some pages may have
indistinct print.
Filmed as received.

University Microfilms, A Xerox Education Company
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>THE INVOLVEMENT PROCESS</td>
<td>7</td>
</tr>
<tr>
<td>METHODS</td>
<td>44</td>
</tr>
<tr>
<td>FINDINGS</td>
<td>69</td>
</tr>
<tr>
<td>DISCUSSION, SUMMARY, AND CONCLUSIONS</td>
<td>95</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>124</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>132</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>133</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>145</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>149</td>
</tr>
<tr>
<td>APPENDIX D</td>
<td>158</td>
</tr>
<tr>
<td>APPENDIX E</td>
<td>160</td>
</tr>
</tbody>
</table>
INTRODUCTION

A long-standing sociological interest has been the study of participation in voluntary associations. A research tradition in political science also has emphasized participation, but within an individual rather than a group context. While sociologists have focused on correlates of participation in voluntary associations, political scientists have been interested in individual participation in the political process. While both traditions have proven fruitful, there has been a general failure to consider alternative participation strategies, both individual and collective, as they simultaneously operate in efforts to affect the resolution of public issues. The primary objective of this study is to present and test a model of behavioral involvement in public issues which considers both individual and collective forms.

Rationale

The study of voluntary associations and membership participation has long been of interest to sociologists. De Tocqueville's (1954) early characterization of America as a society of joiners set the stage for one type of voluntary association research of which the national sample survey work of Wright and Hyman (1958) is representative. Research
of this type has most directly concerned itself with identifying the extent of membership in voluntary associations. A second approach has been the search for correlates of membership. Typical work in this vein is the research of Lynd and Lynd (1929), Komarovsky (1946), Hausknecht (1962), Freeman et al. (1957) and Milbrath and Klein (1962).

While each of these areas of voluntary association research might be defined as elementary attempts at developing a theory of membership in voluntary associations, it is only with the more recent work of Smith (1966) and Bohrnstedt (1966) that a formal effort has been directed to constructing complete "theories" of voluntary association membership. Theoretical attempts such as these have surpassed simple correlational research in that they are more directly concerned with explanation. These explanations are limited in scope, and their inadequacies provide a point of departure for this study. Part of the proposed model is concerned with membership in voluntary associations and represents an extension of existing membership models.

Another rationale for this study stems from the functional interpretations that have been given to the proliferation of voluntary associations in American society. Some sociologists (Olson, 1965; Warner, 1970) see voluntary associations as providing a link between individuals and the larger social structure. Warner (1970) conceptualizes this
linkage as the mediatative function of voluntary associations. A major function of voluntary associations in a complex society is to mediate between individuals and more complex forms of social organization. It has been assumed that voluntary associations are an efficient way in which individuals can affect larger decision-making structures.¹ In a society where positive value is placed on citizen contribution to decision-making, it would seem that knowing how to motivate individuals to join voluntary associations is a worthy pragmatic objective. This research fosters that objective to the extent that the proposed model and research results provide insight into factors precipitating voluntary association membership.

An added rationale for this study stems from the major dependent variable - involvement in a public issue. While Chapter II provides the conceptualization of this variable, a skeletal discussion of it is in order here. First it should be noted that the term "involvement" has not been widely employed as a sociological concept. Rather, the term comes from popular usage and, as such, its meaning is probably understood intuitively rather than analytically. Second, it

¹One incidental piece of evidence to support this notion is the founding of the Society for the Study of a Volunteer Society. While many of the goals of this society are purely theoretical in terms of research; an underlying theme seems to be that a "volunteer society" and its promotion shall result in the enhancement of the individual's contribution toward larger decision-making structure.
should be pointed out that involvement as a conceptual term is used synonymously with other popular sociological terms such as participation. For purposes of this study, involvement in an issue is conceived in behavioral terms and refers simply to activities individuals undertake for purposes of affecting or influencing decision-making. Sociology has generated models of collective involvement but has left largely unattended individual forms of involvement. This omission may stem from the positive value that has been attributed to collective action in recent years. Warner (1970) in speaking of the sociological interest in voluntary associations maintains that there is "...a concern for volunteer action and a belief that people can and should do more for themselves through private associations" (p. 1). Beliefs such as this have undoubtedly contributed to the failure of sociologists to give systematic attention to noncollective forms of involvement.

A final purpose of this study is to examine noninvolvement in an issue. This is where an individual has a position on an issue, but fails to make behavioral inputs into affecting the outcome of that issue. If there is value in

\[2\] This point of view is not being challenged. Rather, the concern of the author is simply that sociological research also concern itself with noncollective alternatives for citizen involvement.
having individuals actively involved in issues which impinge on their lives, it is important that a better understanding be achieved of factors underlying involvement-noninvolvement behavioral strategies. The model presented in this study provides insights into noninvolvement patterns.

In summary, this study presents and tests a model of behavioral involvement in public issues. The model is of sufficient scope to encompass both individual and collective involvement forms. Some more limited objectives of this effort at model building are:

(1) To provide an explanation of the relationship between socioeconomic status and membership in voluntary associations.

(2) To elaborate and build upon existing models of membership in voluntary associations.

(3) To assess individual forms of behavioral involvement in an issue.

(4) To determine correlates of noninvolvement in an issue.

The specific public issue under investigation is the proposed Jefferson Reservoir near Jefferson, Iowa. Like most Corps of Engineers reservoir proposals in recent years, this project has been the source of considerable public controversy. The Jefferson Reservoir issue, along with
its proponent and opponent groups, provides a reasonable setting for the research objectives of this study.
THE INVOLVEMENT PROCESS

An explanatory model of behavioral involvement in public issues is presented in this chapter. We are concerned first with conceptualizing the dependent variable of the study, behavioral involvement. Next, a review is made of previous research relevant to the model. Finally, the nature and linkages of the several variables in the model are articulated.

The dependent variable - involvement in an issue

As was pointed out in the preceding chapter, involvement as a sociological concept has not been defined in an analytical sense. It is a term that has been borrowed from popular usage and is used synonymously in the professional literature with terms such as participation, affiliation, and membership. Very often these terms have been used to refer only to collective involvement, and not to individually based action strategies. Two areas of sociological study in particular have focused on behavioral involvement: research on voluntary associations and on social movements. Little attention has been paid to issue-relevant behavior not falling in these topical areas. It should be pointed out that this study is not concerned with involvement per se, but rather with a

David L. Rogers (1971) has used the term behavioral involvement without giving the term a precise definition. For Rogers, behavioral involvement essentially refers to activity of members in voluntary associations.
special class of behavior, involvement in a public issue. Involvement in an issue is here defined as behavioral action directed toward affecting a decision-making outcome. The term issue is used to mean a difference in public opinion over potential decision-making outcomes.

It is possible to distinguish three properties of involvement in an issue. It might be argued that involvement varies in terms of its overtness-covertness, or along a behavioral-cognitive dimension. Although this conceptualization may be useful in some respects, this study is concerned only with overt behavior.

A second property of involvement is its degree of intensity. Involvement in an issue may vary in terms of the amount of behavioral action directed toward affecting decision-making outcomes.

A third property is the dimension of style of involvement. This can take one of three forms: individual, collective, or a combination of these (mixed).

**Individual involvement** in an issue includes behavior directed toward affecting decision-making outcomes which are independent of organized efforts and are initiated and carried through by the individual. Examples of individual behavioral involvement include contacting public officials, writing letters, and signing petitions, all of which may be pursued independent of organizational ties.
Collective involvement refers to behavioral actions directed toward affecting decision-making that (in contrast to individual involvements) are enacted through participation in a voluntary association.\(^4\)

Mixed involvement in an issue is a combination of individual and collective forms. Being collectively involved does not preclude engaging in individual action. A person may work through a group (collective form) in order to affect decision-making outcomes, yet the same individual may also work independently of his group. It may be that no purely collective form of involvement exists in practice, instead there may be only individual and mixed forms.

Noninvolvement represents a fourth behavioral pattern an individual may enact. Persons confronted with a public issue may have strong sentiments concerning the desirability of certain decision-making outcomes, but fail to behave in ways designed to affect such outcomes.

Involvement in an issue as intensity and as form

Two dimensions of involvement are intensity and form. Intensity refers to the number of behavioral actions that are

\(^4\)It should be noted that in this study the concern is for voluntary associations that have specific interests in a given public issue. The use of the term voluntary associations is therefore limited to those that are basically instrumental.
directed to affecting decision-making. **Form** refers to the style of behavioral involvement.

What is the relationship between intensity and form? Do styles of issue participation differ with intensity of commitment? Do collective forms of involvement reflect greater intensity than the individual form? In reality the pure collective form of involvement in an issue may not exist, but only the individual and mixed forms. If a direct relationship between intensity and form existed, it seems the mixed form would probably represent the greatest overall amount of behavioral action. Figure 1 presents schematically what the relationship between intensity and the forms of involvement might be.

<table>
<thead>
<tr>
<th>Noninvolvement</th>
<th>Individual Involvement</th>
<th>Collective Involvement</th>
<th>Mixed Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensity</td>
<td>Hi</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. A hypothetical relationship between intensity and form of involvement

The nature of this relationship is basic to several empirical questions which will be treated in the analysis.

5It should be noted that the interest is only in overt behavior. It may well be that covert behavior can be more intense than overt forms of involvement.

6It would be tempting to simply hypothesize the relationship as diagrammed. But as Warner (1970) and Black (1957) have pointed out, simply being a member of an association does not necessarily reflect a great deal of behavioral intensity.
One test of this relationship would be an examination of whether or not a collective form of involvement exists separate from individual forms. If it is found that individuals who become involved collectively in an issue also are involved singularly, then the relationship should be supported. In essence, then, use of forms of involvement in the analysis may also reflect intensity of involvement.

A preview of the model

The explanatory model of alternative forms of involvement in public issues is presented in Figure 2. With the exception of socioeconomic status, variables (B through I) in the model are cognitive in nature. Variables B through E are considered as relatively stable characteristics that the actor carries with him into an issue situation. Variables F through I are considered more dynamic in that these are variables which the actor works through once he has encountered a particular issue situation.

Position-on-issue is not considered a variable for purposes of this model, but rather as a condition which limits the applicability of the model. We are treating only individuals who have taken a supporting or opposing attitudinal position on a given public issue. A note of caution in interpreting Figure 2: solid lines refer to hypothesized relationships between variables. However, these solid lines
Figure 2a. A model of alternative forms of involvement:
should not necessarily be considered as signifying causal relationships. While it will become apparent that many of the hypothesized relationships make a causal assumption, the major focus of the study is not on causes per se. Broken lines refer to the dynamic steps of the involvement process. They are meant to portray the direction and steps that the individual works through in the process.

Presentation of the model proceeds in two ways. First attention is given to development and conceptualization of the variables contained in the model. Following this, concern will be with presenting the appropriate hypothesized relationships between component variables.

Conceptualization of Variables in the Model

**Socioeconomic status - A**

The sociological literature is replete with studies testing the relationship between socioeconomic status and participation in voluntary associations. Some of the early community studies by Lynd and Lynd (1929) and Warner and Lunt (1941) provided observations on the class status of persons joining local organizations. One of the first studies which systematically tested for a relationship between socioeconomic status and organizational participation was Mather (1941). He found that males in the higher income
groups were eight times more likely to join voluntary associations than males in low income groups. Komarovsky (1946) demonstrated a similar relationship between occupational status and participation, with males in professional occupations being about three times as likely to belong to voluntary associations as males in unskilled occupational categories. Numerous other studies (Brown, 1953; Foskett, 1955; Scott, 1957; Freeman et al., 1957; Beal, 1956; Wright and Hyman, 1958; Hodge and Treiman, 1968) have consistently documented a positive relationship between these variables.

While a relationship between socioeconomic status and participation has been widely demonstrated, substantial disagreement remains as to underlying causes of this relationship. Most of the early explanations were variations of the theme that with increased urbanization of American society primary relationships were displaced and the secondary relationships of voluntary associations provided a substitute (Wirth, 1938; Komarovsky, 1946; Dotson, 1951; Bell, 1955). However, Bohrnstedt (1966) suggests that research has really not substantiated this claim since low rates of voluntary association participation are found in urban places. An explanation provided by Knupfer (1947) is that low socioeconomic status is accompanied by apathy toward mainstream culture, and that the low rates of participation for lower socioeconomic sectors are indicative of a withdrawal from
mainstream culture.

Another explanation (Foskett, 1955) draws on processes of social mobility. It is suggested that persons in higher socioeconomic groups use participation in voluntary association to achieve upward mobility, whereas persons in lower classes fail to perceive potential similar mobility gains and, therefore, fail to participate.

The author agrees with Bohrnstedt (1966) that no satisfactory explanation has been provided for the relationship between socioeconomic status and participation in voluntary associations. Another body of literature in the participation tradition which sheds some light on this relationship and suggests that it is indirect rather than direct is provided by researchers who have been concerned with developing more complete models of participation in voluntary associations.

Drawing on the work of such researchers as Martin and Siegel (1953), Wilson (1954) and Beal (1956) sought to ascertain the relative importance of socioeconomic status variables in predicting participation. These earlier researchers had found a relationship between attitudinal variables and participation, and Beal's strategy was to assess the relative contribution of attitudinal variables compared to socioeconomic variables. Beal found that attitudinal
variables were better predictors of participation levels, a finding which suggests that the relationship between socioeconomic status and participation may be indirect rather than direct. More recently, such researchers as Bohrnstedt (1966), Smith (1966), and Rogers (1971) in attempting to build more complex models of participation also have found that attitudinal and personality variables are better predictors of participation than socioeconomic status.

The conclusion to be drawn from the research literature on socioeconomic status and participation in voluntary associations is that: socioeconomic status is related to becoming involved in a collective form, but is only indirectly related.

There is a paucity of sociological literature dealing with the relationship between socioeconomic status and individual forms of involvement in issues. The most pertinent materials are in the area of political participation, particularly voting behavior.

Research by Milbrath and Klein (1962), Milbrath (1965), and Rosenberg (1956) has consistently demonstrated greater voting participation by persons from high, rather than low, socioeconomic status levels. This relationship, as with the relationship between socioeconomic status and voluntary association participation, is indirect. All of these studies, with the exception of Milbrath (1965), found that the strength
of the relationship between socioeconomic status and voter participation decreased when variables such as anomia, political alienation, and misanthrophy were controlled.

The conclusion is clear that socioeconomic status is related to both individual and collective involvement in issues, but that this relationship is mediated through intervening variables. The model in this study tests for several variables which are posed in the research literature as affecting such issue involvement.

Subjective competence - B

As Mulford and Klonglan (1970) and Bohrnstedt (1966) indicate, the recent direction of research in building models of participation in voluntary associations has been to include cognitive variables such as attitudes and personality dimensions, rather than using solely structural factors, such as socioeconomic status. In fact, it has been the inclusion of cognitive variables that has demonstrated an indirect relationship between socioeconomic status and participation in voluntary associations.

Numerous researchers have demonstrated a relationship between socioeconomic status and anomia (Srole, 1956; Bell, 1957; McDill and Ridley, 1962). The consistent finding is that lower socioeconomic groups demonstrate higher rates of anomia than do higher socioeconomic
groups.

In addition to demonstrating the relationship between socioeconomic status and anomia, other researchers have demonstrated relationships between individual and collective forms of involvement and anomia. Previous research (Milbrath, 1965; Milbrath and Klein, 1962; Milbrath, 1965; McDill and Ridley, 1962; Rosenberg, 1956) has revealed an inverse relationship between anomia and participation in voluntary associations.

Previous research supports the hypotheses: 1) that socioeconomic status is related to anomia, and 2) that anomia is, in turn, related to participation in individual and collective forms of involvement.

Almond and Verba (1965) have conceptualized the powerlessness component of alienation as subjective competence. This refers to the degree to which an individual believes he can exert influence on governmental decisions. The preference for the concept of subjective competence over alienation or anomia lies in that notion that it is the powerlessness component of alienation that has the greatest bearing on involvement in an issue, a view that is supported.

---

7As Dean (1961) points out, the concept alienation as used by sociologists has five dimensions. These are: powerlessness, meaningless, normlessness, isolation, and self-estrangement. For this study the interest is in only powerlessness.
by the work of Almond and Verba as well as Rose (1959). Almond and Verba found in their cross-cultural study that subjective competence was related to political participation in a positive fashion. They further found a positive relationship between socioeconomic status and subjective competence. Rose concluded that the item "There is little use writing to public officials, because they aren't really interested in the problems of the average man" was really accounting for most of the relationship between anomia and participation. It is felt that this one item taps subjective competence and supports a relationship between subjective competence and participation.

The research on powerlessness or subjective competence suggests the hypothesis that: There is a relationship between socioeconomic status and subjective competence; and second, that there is a relationship between subjective competence and involvement in an issue.

Democratic value orientation - C

Mulford and Klonglan (1970), in developing a model of participation in voluntary associations, suggest that at least one correlate of voluntary association participation is what has been conceptualized as a general obligation to

8See Leo Srole (1956).
participate. Apparently the conceptualization is based, in part, on the research of Nelson, Franz, and Marshall (1969) which revealed that commitment to solve community problems and affect obligation to participate was significantly related to participation in voluntary associations.

Perhaps more than other researchers, Almond and Verba (1963) have directly tried to include this notion of a "general obligation to participate" in their research on political participation. Almond and Verba suggest the existence of three political cultures. Political culture is defined as:

... specifically political orientations—attitudes toward the political system and its various parts, and attitudes toward the role of the self in the system.

The three political cultures are the parochial, the subject, and the participant; and it is suggested that members of each of these have different sets of expectations regarding the relationship of the self to the political system. In the parochial culture the members expect nothing from the political system. In the subject culture the members expect to receive benefits from the political system, but are passive in regard to making inputs into the political system. Finally, in the participant political culture, participants are oriented toward both the inputs and outputs of the political system. Essentially, Almond and Verba disregard the
parochial culture when describing complex societies. Complex societies of the democratic form such as the United States are regarded as containing a mixture of the subject and participant orientations.

Within each of these two political cultures the individual as an actor has a different orientation toward government. The actor in the subject culture can be described as a passive victim of government action, and in fact, his political outlook orients him to accept his role as a passive victim. The actor in the participant political culture believes that he ought to participate in political activity since in his orientation toward the political system he is just as concerned with inputs as he is with outputs. The amount of "oughtness" associated with these two political outlooks would seem to have a bearing on a need of involvement in public issues. That is, the participant's political orientation should lead one to become involved in public issues whereas the subject orientation should prevent one from becoming involved. It is felt that both of these conceptualizations of political orientations can be subsumed under the more general conceptual notion of democratic value orientation. For purposes of this study, democratic value orientation is defined as the individual's perception of the degree to which he should become involved in public issues.

The literature suggests two relationships that have a
bearing on democratic value orientation as it applies to a model of involvement. In their five nation study Almond and Verba (1963) found that a sense of obligation to participate was positively related to socioeconomic status. Second, they found that the participant outlook was related to the preferred strategy that an individual would take in influencing his government, as individuals with a participant outlook were more likely to favor collective strategies than if they possessed a subject orientation. Third, Almond and Verba, as well as Mulford and Klonglan (1970) and Nelson, et al. (1969), have found a positive relationship between democratic value orientation and participation in organized groups. But as Almond and Verba point out, "...that an individual believes he ought to participate in the political life of his community or nation does not mean that he will in fact do so." In fact, their own data suggests a gap between the sense of participation and the fact of participation. This suggests the hypothesis that: there is a relationship between socioeconomic status and democratic value orientation.

**Perception of strategy treatment - D**

Another variable which might help to explain the gap between democratic value orientation and actual involvement in an issue is the notion of perception of strategy treatment. This refers to the individual's perception of the treatments he will receive should he enact preferred involvement
strategies. It should be emphasized that the reference is not to treatment in terms of punishment and rewards, but rather to the individual's perceptions of the actual effects of enacting preferred involvement strategies. That an individual has unfavorable perceptions of treatment as a result of enacting preferred involvement strategies would seem to have something to say about that individual's failure to employ such strategies.

A hypothesis that suggests how perceptions of strategy treatments might vary: there is a relationship between subjective competence and the perception of strategy treatment. The rationale for this hypothesis is straightforward: namely, that individuals who are confident that they can influence decision-making outcomes will have more favorable perceptions of the mechanisms for exerting such influence.

Involvement strategy preferences - E

Much of the analysis thus far has been based on the work of researchers building models of participation in voluntary associations. We move beyond the customary analysis with the introduction of additional concepts. It is hoped that these concepts will serve two functions: first, they permit elaboration of the model to deal with both individual and collective forms and, secondly, they will provide an explanation of the gap between felt obligation to participate
(Democratic Value Orientation) and actual participation. Simply because an individual feels he ought to be involved in political affairs doesn't mean he will become involved. Almond and Verba's (1963) data demonstrates that a gap between commitment and behavior does in fact exist.

Almond and Verba themselves provide a hint as to what is partially responsible for this gap. In their discussion they imply that individuals in the several political cultures differ in the way they report they would influence the government. Here it is important to note the phrase would influence. In the Almond and Verba study the respondents were given a hypothetical situation and asked how they would try to influence their governments. The reason it is felt that the phrase would influence is significant is that it suggests the possibility that individuals vary in their preferences of how influencing the government should be carried out. It would seem that Olson's (1968) research which illustrated differential patterns with regard to the approval of various forms of protest provides some support for this argument. The possibility that individuals possess preferences for different styles of involvement may exist. Essentially this means that individuals differ as to preferences they have for how to make inputs into decision-making outcomes. Here the reference is really to a cognitive sort of structure, which is termed involvement strategy preference. The
suggestion, then, is that individuals differ in the way they prefer to become involved in a public issue. To be consistent, involvement strategy preference refers to the preferred strategy of involvement that the individual would use if he were to become involved in an issue.

A legitimate question given this argument is: "What are the factors that determine involvement strategy preferences?" Here the evidence is sparse with one factor being suggested by Almond and Verba. They found in their five nation study that preferences varied by the predominant political culture of the country. In the United States, which they considered to be the most participant oriented, 56 percent of their respondents would work through organized groups. Conversely, they found that only 18 percent of their United States respondents would work alone, and that 43 percent of the Italian respondents would work alone. These findings suggest the hypothesis that there is a relationship between democratic orientation and involvement strategy preference. As will be pointed out shortly, support of this hypothesis would not by itself be an adequate explanation of the relationship between democratic value orientation and involvement in a public issue.

Awareness - F

In a recent paper Orum (1971), in proposing a model of involvement in social movements, points out that an individual
must be aware of the movement before he can possibly participate. The idea that individuals must be aware of an organization prior to involvement is obvious and simple. However, it would seem that awareness helps to partially explain the gap found between a felt obligation to participate and actual participation. For example, if it is assumed that democratic value orientation leads one to prefer collective strategies for becoming involved in an issue, but the individual is unaware of opportunities for collective involvement, he is unlikely to become involved in collective action. On the other hand, if the individual's preferences are to individual forms of involvement, then it is unnecessary that he be aware of organizations to become involved in an issue.

General attitudes toward collective forms of involvement - G and specific attitudes toward opportunities for involvement in a collective form - H

Mulford and Klonglan point out that Morton and Siegel (1953), Wilson (1954), and Beal (1956) were among the first researchers to relate attitudinal variables to participation in voluntary associations. In their literature review of participation studies Mulford and Klonglan (1970) note that 15 attitudes have been found to be consistently related to participation.

Much of the discussion in this section draws on a paper by Mulford and Klonglan (1970) which extensively reviews the literature relating attitudinal variables to participation in voluntary associations.
affiliation with voluntary associations. These range from the general obligation to participate, to favorable evaluations of friendly relations in specific voluntary associations. These early researchers as well as subsequent researchers\(^\text{10}\) generally worked within a correlational framework and were not directly concerned with elaborate model building. Out of this collage of the attitudinal correlates of participation in voluntary associations, several researchers (Bohrnstedt, 1966; Smith, 1966; Mulford and Klonglan, 1970; Rogers, 1971) interested in building more complex models of participation in voluntary associations have capitalized on two central themes which provide continuity in the recent models of participation in voluntary associations. These are that individuals in order to participate must possess a set of general attitudes favorable to voluntary associations, as well as a set of attitudes favorable to specific voluntary associations. General attitudes refer to attitudes toward general classes of objects (e.g., voluntary associations) while specific attitudes refer to attitudes toward a particular object (e.g., a specific voluntary association).

Smith's (1966) study of Chilean voluntary associations suggested that while both general attitudes toward voluntary

\(^{10}\) Other researchers that have dealt with this topic are: Deveraux (1960); Jesser (1967); Schwirian and Helfrich (1968); and Downing (1957).
associations and attitudes toward specific voluntary associations were important correlates of involvement in voluntary associations, the specific attitudes accounted for more variance than did the general attitudes. Step-wise regression analysis by Rogers (1971) demonstrated findings consistent with Smith. These findings suggest the temporal ordering (see Mulford and Klonglan, 1970) that the individual must first possess a set of attitudes favorable to voluntary associations and then secondly must possess a set of attitudes favorable to a specific organization before he joins that organization. This temporal sequence would seem to have direct implications for a model of involvement in an issue, and suggests the hypothesis that there is a relationship between general attitudes toward collective forms of involvement and involvement in a collective form. A second hypothesis is that there is a relationship between attitudes toward specific opportunities for collective involvement and involvement in a collective form.

**Perceived reference group effects - I**

Reference group theory maintains that the social groups to which individuals belong, identify with, or use for comparative purposes affect their cognitions and behavior (Mead, 1934; Kelley, 1952; Rose, 1962; Williams, 1970). Campbell and Alexander (1965) argue that before some element
in the community can have a real effect, the people in the community must perceive that element. Flinn (1970) found that respondents who perceived that innovativeness was valued in a community tended to be innovative in their own behavior, despite possible personal values toward status quo operations. This pattern is conceptualized by Flinn as "perceived structural effects". That is, social structure affects individual behavior to the extent that the individual perceives existing structural values and aligns his behavior to accord with these values.

Moore's (1968) discussion of different uses of the concept "social structure" implies that reference groups are important components of social structure. It seems that perceived structural effects are in fact reference group effects. That is, that individuals adjust their behavior to accord with their perceptions of the norms and values of reference groups.

Both Bohrnstedt (1966) and Rogers (1971) suggest that peer influences and familial influences are important predictors of involvement in voluntary associations. In addition to these two, community influence may be suggested as a possible predictor. That is, communities vary as to the expectations they have for participation in voluntary associations or for collective forms of issue involvement; and to the extent that individuals in the community perceive
a supportive norm they are more likely to become involved in voluntary associations. The hypothesis appropriate here is that: there is a relationship between perceived reference group effects and the collective forms of involvement in a public issue. The discussion above has delineated variables used in the model, has reviewed the pertinent literature, and presented some general hypotheses. Attention is now directed to specifying the working hypotheses by which the model is tested.

**Hypothesized Relationships**

The model of alternative forms of involvement in public issues is more fully described in this section. This model is based on the discussion and conceptualization presented above. Proposed linkages between concepts in the models flow from the hypotheses that have been presented. As will be seen, these hypotheses are modified in some instances and additional hypotheses are proposed. These hypotheses may be identified in Figure 2b by locating the same hypothesis number used for reference in the text. While the hypotheses are stated in terms of a traditional approach they could be also stated as if-then propositions. As previously stated, the model applies only to persons who either have taken a supporting or opposing position on an issue.

The first variable in the model is socioeconomic status.
Figure 2b. A model of alternative forms of involvement in...
Involvement in an Issue

<table>
<thead>
<tr>
<th>Form</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noninvolvement</td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td></td>
</tr>
<tr>
<td>Collective</td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td></td>
</tr>
</tbody>
</table>

option of strategy Treatment GH 5

F. Awareness of Collective Forms GH 7

G. General Attitudes Toward Collective Involvement GH 8

H. Specific Attitudes Toward Opportunities for Involvement in a Collective From GH 9

I. Perceived Reference Group Effects GH 10

involvement in public issue
which is defined as the individual's position within the societal stratification system. Here the notion is that life experiences and socialization outcomes differ as a result of one's location in the stratification system, and that basic values surrounding expectations about involvement in public issues are determined by these differential life experiences and socialization outcomes.

The second variable in the model is democratic value orientation which was previously defined as the individual's perception of the extent to which he should become involved in an issue. As previously discussed, the concept of democratic value orientation can be thought of as containing two sub-types, the participant and subject orientations. The participant orientation refers to a democratic value orientation whereby the individual believes he ought to involve himself in public issues, whereas persons holding a subject orientation feel they should remain passive and accept decision-making outcomes without making personal inputs. It already has been suggested that an individual's socioeconomic status plays a part in determining his values toward involvement in an issue. Here the notion is that differential life experiences and socialization outcomes as a result of socioeconomic status determine values about involvement. This is stated as the first general hypothesis (GH) in the model.
GH 1: There is a relationship between socioeconomic status and democratic value orientation.

The two concepts of democratic value orientation, the participant and subject value orientations, suggest two sub-hypotheses (SH):

SH 1a: The higher the socioeconomic status the higher the participant value orientation.

SH 1b: The higher the socioeconomic status the lower the subject value orientation.

Essentially, it is proposed that individuals in higher socioeconomic groups have life and socialization experiences which lead to a considerable value being placed on active involvement in issues, whereas experiences of persons in lower socioeconomic groups lead them to value passive receptiveness toward decision-making outcomes.

The third variable in the model is subjective competence which is defined as the degree to which the individual feels he can exert influence on decisions surrounding public issues (Almond and Verba, 1965). The model implies that an individual's subjective competence is determined (in part) by the individual's position in the stratification system.

The general hypothesis is that:

GH 2: There is a relationship between socioeconomic status and subjective competence.

The sub-hypothesis suggested by the model is:
SH 2a: Socioeconomic status is related positively to subjective competence.

Evidence from the literature supporting these hypotheses has been discussed. The reasoning underlying this hypothesized relationship is similar to that underlying the hypothesized relationship between socioeconomic status and democratic value orientation; namely, that differential life experiences as a result of one's location in the stratification system produce variations in assessment of persons' abilities to influence social system outputs. Life experiences of persons in higher socioeconomic groups lead them to feel they can influence decision-making outcomes of larger social systems, whereas experiences of persons in lower socioeconomic groups produce a felt inability to affect decision-making.

The fourth variable in the model is involvement strategy preference. The four major types of involvement strategy preferences are: 1) individual strategies, 2) collective strategies, 3) mixed strategies, and 4) noninvolvement strategies. Individuals vary in their preferences for becoming involved in a public issue, with some preferring individual forms, others collective forms, and still others both individual and collective (mixed) forms of involvement. Some may prefer none of these forms and pursue instead a strategy of noninvolvement, despite commitment to a desired resolution
of the issue. The model suggests the general hypothesis that:

**GH 3:** There is a relationship between democratic value orientation and involvement strategy preference.

The following sub-hypotheses help to explain this hypothesized relationship.

**SH 3a:** The higher the participant value orientation the higher the preference for all involvement strategies.

**SH 3b:** The higher the participant value orientation the higher the preference for collective involvement strategies.

**SH 3c:** The higher the subject value orientation the lower the preference for all involvement strategies.

**SH 3d:** The higher the subject value orientation the higher the preference for a strategy of noninvolvement.

The argument implied by these hypotheses is that persons who believe they should become involved in public issues have greater preferences for strategies of involvement than persons who do not believe they should become involved. That is, an individual who feels an obligation to participate is likely to approve of means for participation. The Almond and Verba (1965) data also suggest that individuals with a political outlook corresponding to the participant political culture disproportionately report that they would elect organized forms of collective involvement if they were to try to influence a governmental decision. It seems that the reason for this is that democratic culture contains a norm
of approval for organized action. Individuals with higher democratic participant value orientations have internalized this norm, whereas individuals with weaker participant value orientations are more likely to prefer individual forms of involvement. Finally, it seems reasonable to expect that those whose values dictate they remain passive in public issues are less likely to approve of strategies for involvement, but rather prefer a passive role.

The model also suggests that involvement strategy preference is related to the forms of involvement. The following general and sub-hypotheses capture this argument.

GH 4: There is a relationship between involvement strategy preference and the form of involvement in an issue.

SH 4a: Individuals tend to enact the forms of involvement that correspond to their involvement strategy preference.

At this point the processual aspect of the model begins to operate in that if individuals prefer noninvolvement strategies they will bypass the other components in the model and will not become involved in a public issue.

The fifth variable in the model is perception of strategy treatment which is defined as the individual's perception of the treatment he will receive if he enacts a preferred strategy. The model suggests two sets of relationships here. First, that:

GH 5: There is a relationship between subjective competence and perception of strategy treatment.
SH 5a: The higher the subjective competence the more favorable the perception of strategy treatment.

The reasoning underlying this hypothesis is that individuals who are confident they can influence decision-making outcomes will, as a result of such feelings, also be assured that enacted strategies for involvement will be effective in making inputs which affect decision-making outcomes. Individuals who have faith they can make a difference will also have faith in the mechanisms available for making a difference. The second set of hypotheses is:

GH 6: There is a relationship between perception of strategy treatment and involvement in an issue.

SH 6a: The more favorable the perception of strategy treatments the greater the involvement in an issue.

SH 6b: The more favorable the perception of a given strategy treatment the greater the involvement in that form.

Here the model relates perception of strategy treatment to the forms of involvement in two ways. First it suggests that individuals who have favorable perceptions of the treatment they will receive upon enacting a preferred strategy of involvement are more likely to become involved in an issue than those building unfavorable perceptions. Second, it suggests that an individual is more likely to enact the involvement form(s) for which his perceptions of strategy treatment are favorable. The model suggests that
at this point the individual could bypass the subsequent components in the model in two ways. First, those who have unfavorable perceptions of treatment for all possible involvement forms might drop out and, in essence, enact a strategy of noninvolvement. Secondly, individuals whose preference is for individual forms, and who have favorable perceptions of strategy treatment as a result of enacting these forms, should elect the individual forms of involvement.

The sixth variable is awareness of collective forms. This variable can be thought of as a stimulus which in effect starts the individual working through the process variables. If an individual prefers collective strategies for involvement, and has favorable perceptions of treatment as a result of collective strategies, then before he can enact the collective form of involvement on an issue he must be aware of a collective form. Stated simply, before an individual can join a protest organization, he must be aware of the existence of such organizations. The general and specific hypotheses are:

GH 7: There is a relationship between awareness of collective forms for involvement in an issue and the form of involvement.

SH 7a: Individuals who are not aware of collective forms for involvement in an issue will not be involved in a collective form.

It is likely that individuals who have favorable predisposi-
tions in terms of strategy preferences and perceptions of treatment toward becoming involved in a collective form, but who are not aware of opportunities for collective involvement, will bypass the process variable in the model. For individuals whose predispositions are favorable, awareness of a collective opportunity for involvement is a necessary condition for working through the remaining variables. While these hypotheses seem trite, the intent is to convey that awareness is a necessary but not sufficient condition for collective involvement.

Perception of treatment is the point in the model where the involvement process begins to operate as a result of strategy. As previously indicated, those who favor individual involvement strategies and who perceived favorable results from enacting these strategies will bypass the additional process variables in the model. The actual process begins at this point since the model suggests that individuals who prefer collective involvement strategies, who have favorable perceptions of treatment as a result of these strategies, and who are aware of opportunities for collective involvement will work through the seventh variable in the model, which is General Attitudes Toward Collective Involvement.

The argument is that individuals who perceive favorable treatment as a result of collective strategy go on to evaluate
the general class of objects that has been labeled as "collective forms of involvement" in an issue, or voluntary associations. No mention has been made of the specific attitudinal dimensions that the individual evaluates on his general evaluation of voluntary associations or collective forms of involvement. These specific dimensions will be discussed later when these variables are operationalized.

It is at this point that our notion of general attitudes toward collective forms of involvement differs from such writers as Bohrnstedt (1966), Smith (1966), Mulford and Klonglan (1970), and Rogers (1971). Whereas they were more interested in explaining the exact attitudinal dimensions which go to make up general attitudes toward voluntary associations, the author remains more interested in dealing with the concept at a general level, and is concerned with the overall favorableness-unfavorableness of evaluations of the collective form.

The model suggests the following. First, if the individual's general evaluation of the collective form is unfavorable, he will bypass the next two variables in the model and in so doing will drop out of the rest of the process. That is, if an individual's general evaluation of the collective form of involvement is unfavorable, there is no expectation that the individual will become involved in a collective form. This suggests the general hypothesis:
GH 8: There is a relationship between general attitudes toward collective involvement and the form of involvement.

The sub-hypothesis is:

SH 8a: The more favorable the general attitudes toward collective involvement the higher the involvement in a collective form.

The model suggests that individuals who make favorable general evaluations of the collective form of involvement (voluntary associations) will go to a second evaluation, that of the specific opportunities for collective involvement.

Specific attitudes toward opportunities for involvement in a collective form

The next variable in the model refers to the individual's evaluation of specific local voluntary associations in which he might become involved. Whereas the general attitudinal notion referred to the evaluation of voluntary associations as an abstraction, specific attitudes refers to the evaluation of existent collective forms (i.e., operative voluntary associations). Again, specific attitudes toward opportunities for involvement in a collective form as an evaluatory process is being thought of in terms of favorability-unfavorability dimensions. The hypotheses suggested by the model at this point are:
GH 9: There is a relationship between specific attitudes toward opportunities for involvement in a collective form and the form of involvement.

SH 9a: The more favorable the specific attitudes toward opportunities for involvement in a collective form, the higher involvement in a collective form.

The model indicates that individuals who evaluate specific opportunities for involvement unfavorably will bypass the final process variable and will not become involved in a collective form. Individuals whose attitudes are favorable will work through the next process variable, which is perceived reference group effects.

If an individual has favorable attitudes toward local voluntary associations (opportunities for involvement) the model suggests that he next takes into account the normative expectations of significant referents as regards collective involvement. The reference groups of community, family, and friends are examined here. Individuals who perceive that their community, family, or friends are supportive of their becoming involved in a collective form are more likely to enact such involvement than are individuals who perceive these referents as non-supportive. The hypotheses are:

GH 10: There is a relationship between perceived reference group effects and the form of involvement in an issue.

SH 10a: The more favorable perceived reference group effects are toward the involvement in a collective form, the higher involvement in a collective form.
It is suggested that individuals whose perceptions of reference group support for becoming involved in a collective form do not detect support for this involvement behavior will bypass the collective form of involvement, whereas the individual whose perceptions detect support will become involved in a collective form.

In summary, the model of involvement suggested in this section consists of variables descriptive of various individual tendencies. Depending upon the complexion of these tendencies the individual may or may not work through the model to actual individual, collective, or mixed involvement in a social issue. The individual may drop out of the involvement process at various points, depending how he fares on previous variables.
METHODS

Several types of information are presented in this chapter: 1) a brief overview of the public controversy which was studied, 2) a description of field procedures, 3) sampling techniques and sample characteristics, 4) operationalization of concepts, and 5) the statistical techniques used in the analysis.

Setting for the Study

The divided public opinion surrounding the desirability of building the Jefferson Reservoir was the focus of this research. The Jefferson Reservoir was first formally proposed in 1966 by the United States Army Corps of Engineers. If constructed as proposed, the reservoir would be located on the Raccoon River about 10 miles northwest of Jefferson, Iowa. The reservoir itself would extend northward approximately 24 miles and be located in Greene, Carroll, and Calhoun counties. The surface area of the lake formed by the Jefferson Dam would be approximately 10,700 acres. The latest cost estimate for the reservoir is given by the Corps as $25,037,000.

Like most reservoir projects proposed for Iowa by the Corps, the Jefferson Reservoir has become a major community issue. In addition to being a local issue, the Jefferson
project has held considerable extra-community interest since it involves both state and federal governmental agencies, as well as nongovernmental interest groups. The Corps claims project benefits for water quality control, recreation, and flood control. Acknowledged costs are loss of farm land, certain wildlife losses, and construction costs. Much of the issue surrounding the proposed Jefferson Reservoir can be understood in terms of the project benefits and costs. Supporters of the project, while agreeing with the benefits claimed by the Corps, tend to see the desirability of the reservoir in terms of providing water-based recreation opportunities and giving an economic boost to the local area. The project's opponents tend to base their claims on loss of farmlands, improper accounting methods used in calculating the project's benefit/cost ratio, and the ecological and aesthetic destruction of the Raccoon River Valley.

Two voluntary associations sprang up in the course of the controversy, one supporting the reservoir and the other opposing it. Each of these groups claims a membership of approximately 300. Each has distributed literature in support of its position. Both groups, but especially the opposition group, have been actively trying to change public opinion to a position consistent with their views. Organization leaders also have actively attempted to sway the policies of government officials at the state and federal levels.
The most recent highpoint of conflict in the Jefferson Reservoir issue seems to have occurred with public hearings held in November of 1970 at Scranton, Iowa. Since this time the issue appears to have cooled, at least on the surface. Discussions with knowledgeable indicated that the leaders of the supporting and opposing factions were still actively pursuing their interests in the project. At the time of the study, both proponents and opponents were awaiting the outcome of reviews by the Corps' Division Engineer. If, as a result of a favorable review, the Division Engineer recommends construction of the reservoir, a number of additional steps would have to be taken before the project could actually be constructed.

Field Procedures

The data reported in this study was obtained through the use of an interview schedule. Interviews were conducted by persons employed and trained by the Iowa State Statistical Laboratory. Sociology staff provided a two-day training school for the interviewers. The length of interviews ranged from 20-90 minutes, depending on the extent of the respondent's knowledge about the reservoir project. Respondents who were unaware of the proposed Jefferson Reservoir were interviewed using a short form of the interview schedule.
The Sample

The sampling was conducted in two stages to insure that a sufficient number of respondents were available to test the several theoretical models employed in the study. First, an area probability sample was drawn by the Iowa State Statistical Laboratory. The sampling area was defined in terms of townships adjacent to the proposed reservoir site and the downstream portion of the Raccoon River. The area probability sample resulted in a sample size of 268. Eligible respondents were all persons 21 years or older, living in households in specified areas of Calhoun, Carroll, and Greene counties. The sampling frame consisted of 15 townships and 10 towns. Based upon 1970 census data, a sampling rate of 1 out of 185 was used to achieve the desired sample size. That is, the probability of a household being included in the area sample was 1 in 185. So that both sexes were properly represented, a random procedure was used to determine which person(s) in the household was (were) eligible to be interviewed. The procedure resulted in an individual sampling probability of 1 in 37. The response rate for the general sample was 87 percent. Most non-responses resulted primarily from illness or senility of elderly persons and from persons being away on winter vacations.
The original intent was to sample members from both the proponent and opponent groups, but unfortunately the proponent group was not willing to provide a membership list. Therefore, a separate sample was not drawn from this organization. The second sample was drawn from a list of members of the organization opposing the reservoir. The sample size was 47, with the total membership in the organization listed as approximately 300. This second sample was drawn to assure that the study would have respondents in the collective form of involvement in the issue. With a total population of over 14,000 in the sampling area, it was unlikely that the area probability sample would generate a sufficient number of members of either the proponent or opponent groups.

The area probability sample produced a total of 13 members, with 6 being from the proponent organization and 7 being from the opponent organization. Combining the organizational and general population sample, a total of 60 persons holding membership in the two organizations was obtained.

Since the model under investigation deals only with individuals who have a position on an issue, respondents from the area probability survey who held no opinion - pro or con - on the proposed reservoir, along with those who were unaware that a reservoir was being planned were excluded from the study. These persons were dropped from this analysis total of 56 respondents. A total of 259 respondents
were included in the analysis. Some general characteristics of the respondents (N 259) are shown in Table 1.

Table 1. Selected characteristics of study respondents

<table>
<thead>
<tr>
<th>Income</th>
<th>Percent</th>
<th>Education</th>
<th>Percent</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>under $1,000</td>
<td>2</td>
<td>8 years or less</td>
<td>16</td>
<td>49.8</td>
</tr>
<tr>
<td>$1,000-2,999</td>
<td>12</td>
<td>9-11 years</td>
<td>18</td>
<td>50.2</td>
</tr>
<tr>
<td>$3,000-4,999</td>
<td>17</td>
<td>Completed high school</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>$5,000-6,999</td>
<td>17</td>
<td>High school plus vocational school</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>$7,000-9,999</td>
<td>23</td>
<td>Completed 4-year college program</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>$10,000-14,999</td>
<td>20</td>
<td>Some graduate or professional work</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>$15,000 or more</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Operationalization and Measurement

Forms of issue involvement

In operationalizing the concepts reference will be made to both the form and intensity of involvement; theoretically it is assumed that form exists on a continuum.
Individual involvement in an issue was defined as behavioral action directed toward affecting decision-making outcomes which occur outside group membership. To measure this concept, items were constructed which determined whether or not the respondent had engaged in several possible actions in the Jefferson Reservoir issue. These actions were:

1. At any time have you discussed the proposed reservoir with other members of your family?
2. Have you ever discussed the reservoir with any of your neighbors or friends?
3. Have you ever personally talked to any politicians or government officials about the reservoir?
4. Have you ever attended any public discussions or educational programs which dealt with the proposed reservoir?
5. Have you written any letters to express your opinion on this project?
6. Have you signed any petitions either supporting or opposing the Jefferson Reservoir?
7. Did you personally attend public hearings on this project?

Whereas items 3-7 obviously reflect behavioral involvement, items 1 and 2 do so to a lesser degree. They were included because generating opinion and opinion change in
discussions with family and friends can be considered as an individual form of involvement. These items were scored using dichotomous response categories. For each item, a yes was given a score of 2 and a no, a score of 1.

Collective involvement This concept was defined as behavioral action directed towards affecting decision-making outcomes that are enacted as part of an organized group. This concept was measured by asking the respondent to indicate whether or not he was a member of either the group that had formed to support the Jefferson Reservoir, or the group that was opposed to the reservoir. Membership was coded as 2; nonmembership as 1.

Mixed form of involvement This form is a combination of collective and individual forms. Persons responding positively to both individual/collective items were defined as exhibiting a mixed form of involvement.

Noninvolvement Respondents were defined as non-involved if they did not report behavior directed to affecting public decision-making on the reservoir.

Respondents were assigned to these four categories by the following procedure: (1) Those falling into the non-involvement category were given a score of 0; (2) those indicating they had enacted any of the individual forms, but had not joined an organization, were scored 1; (3) those who had
joined an organization, but had not pursued any individual action were given a score of 2; and (4) persons who engaged in both individual and collective forms were scored 3.

Involvement as intensity - the overall involvement score

Involvement in an issue as intensity was defined as the amount of behavioral action directed toward affecting decision-making outcomes. In order to analyze the relationship between involvement as form and involvement as intensity it was necessary to use additional scoring procedures. The first procedure included all of the items previously mentioned but also included items dealing with the respondent's organizational behavior if he had joined an organization. These items included length of membership, attendance at meetings, taking part in group discussions, holding an office, and serving on committees. Since the response categories varied from dichotomous to trichotomous patterns, item scores for all items (individual and collective) were divided by the number of response categories for that respective item in order to prevent items from contributing unequally to total scores (Nie, Bent, and Hull, 1970). Total scores were formed by summing across all items. Item information in terms of a Guttman analysis is now presented.
The dependent variable - a Guttman analysis

A question was raised in Chapter 2 as to the relationship between involvement as behavioral form and involvement as behavioral intensity. It is tempting to hypothesize that collective involvement is more intense than individual involvement; in other words, that there is a direct relationship between involvement as form and involvement as intensity, with individual involvement representing low intensity and collective involvement high intensity. To answer this question, a Guttman (1944) analysis was made of items used to measure the dependent variable of issue involvement. This analysis was not used for purposes of assigning scale values but rather as an analytic technique. The rationale for using this form of analysis is that if collective involvement reflects high behavioral intensity, then involvement in an issue should be cumulative. That is, persons who are collectively involved in an issue should also be involved in other (individual) behavioral forms. As Nie, Bent, and Hull (1970) point out:

"...Guttman scales must be cumulative...operationally a cumulative scale implies that the component items can be ordered by degree of difficulty and that respondents who reply positively to a difficult item will always respond positively to less difficult items and vice versa... (p. 167)

Essentially, then, if collective involvement items reflect the greatest intensity, they should, in terms of a
Guttman analysis, have the greatest difficulty levels. That is, if subjects respond positively to collective involvement items they should also respond positively to individual involvement items if, in fact, the positive relationship between form and intensity obtains. Guttman analysis provides one way of testing this possibility.

Table 2 presents a hypothetical ordering of the involvement items. The first five items are considered as collective items and the last seven items as individual items. If the posited relationship between involvement as form and as intensity holds, a Guttman analysis should not reorder the items. Here the concern is with item movement among the two categories and not with item movement within each category.

Table 2. Hypothetical ordering of involvement items to reflect intensity

<table>
<thead>
<tr>
<th>Item</th>
<th>Involvement Form</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Officer in organization</td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>2. On committees</td>
<td></td>
<td>Collective</td>
</tr>
<tr>
<td>3. Take part in discussions</td>
<td></td>
<td>Collective</td>
</tr>
<tr>
<td>4. Attendance at meetings</td>
<td></td>
<td>Collective</td>
</tr>
<tr>
<td>5. Join organization</td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>6. Attend public discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Attend public hearings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Talk to politicians</td>
<td></td>
<td>Individual</td>
</tr>
<tr>
<td>9. Write letters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Sign petitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Discuss with friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Discuss with family</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 presents the results of the Guttman analysis. Each involvement item was dichotomized, and the SPSS Sub-Program Guttman Scale (Nie, Bent, and Hull, 1970, pp. 196-207) was used to order and evaluate the items. While the criteria presented at the bottom of the table indicate that in general the items scale quite well, the major interest is in the way the items were ordered. In general, the collective items were more difficult and reflect greater intensity of involvement than do the individual items. The two exceptions to this were "talked to politicians" and "wrote letters". These items had a difficulty level greater

Table 3. Results of Guttman analysis on involvement items

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Form</th>
<th>Percent Passed</th>
<th>Percent Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>On committees</td>
<td>Collective</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>Officer in organization</td>
<td>Collective</td>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>Talked to politicians</td>
<td>Individual</td>
<td>12</td>
<td>88</td>
</tr>
<tr>
<td>Write letters</td>
<td>Individual</td>
<td>15</td>
<td>85</td>
</tr>
<tr>
<td>Join organization</td>
<td>Collective</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Attendance at meetings</td>
<td>Collective</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Take part in organizational discussions</td>
<td>Collective</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Attend public hearings</td>
<td>Individual</td>
<td>22</td>
<td>78</td>
</tr>
<tr>
<td>Attend public discussions</td>
<td>Individual</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>Sign petitions</td>
<td>Individual</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Discussion with friends</td>
<td>Individual</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>Discussion with family</td>
<td>Individual</td>
<td>64</td>
<td>36</td>
</tr>
</tbody>
</table>

Coefficient of Reproducability .93
Minimum Marginal Reproducability .79
Percent Improvement .13
Coefficient of Scalability .66
than three of the collective items, but less than two collective items, (on committees and officer organization). While it may appear that in as much as two individual items were reordered into collective categories that the positive relationship between involvement as form and as intensity is challenged, an alternative interpretation might be that writing letters and talking to politicians stems from organizational behavior. Since respondents who wrote letters and talked to politicians tended also to be members of organizations it is possible that these actions were precipitated out of organizational membership. Unfortunately, since the data is static, it is not known if letter writing and talking to politicians occurred prior to or after organizational membership. However, it is not uncommon for an issue-related organization to encourage its members to write and talk to elected officials.

The Guttman analysis demonstrates that organizational members tend to engage in individual forms of action. In other words, the collective form of involvement in an issue is really "mixed". Individuals who passed the item "join organizations" also tended to pass the last five individual involvement items included in Table 3. A frequency breakdown of the Involvement Form Scores demonstrates this same finding (Table 4). Of the 259 respondents 22 percent
were noninvolved, 55 percent were involved in individual forms, and 23 percent were involved in a mixed form. None of the respondents were involved in the "pure" collective category, since all respondents who belonged to organizations also were involved in individual forms. The finding that the collective form as a pure type does not exist has implications for the hypotheses to be tested in the next section.

Table 4. Frequency breakdown of involvement form scores

<table>
<thead>
<tr>
<th>Involvement Form</th>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noninvolvement</td>
<td>0</td>
<td>58</td>
<td>22</td>
</tr>
<tr>
<td>Individual involvement</td>
<td>1</td>
<td>141</td>
<td>55</td>
</tr>
<tr>
<td>Collective involvement</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mixed involvement</td>
<td>3</td>
<td>60</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>259</td>
<td>100</td>
</tr>
</tbody>
</table>

**Socioeconomic status**

This concept was defined as the individual's position within the societal stratification system. This definition permits one to take into account relative position in the stratification system without considering the exact make-up of class structure. Socioeconomic status was measured through the use of an index based upon educational attainment, income, and occupation. In forming the socioeconomic index, a standard score transformation \( z = \frac{X - \bar{X}}{S} \) was used for each component of the index. These transformed scores were
combined additively to provide the index score. Table 5 summarizes the procedure for constructing the socioeconomic index.

**Democratic value orientation**

This concept was defined as the individual's perception of the appropriate level of his personal involvement in an issue. Democratic value orientation was operationalized in terms of its two sub-concepts, the participant orientation, where the individual feels he should become involved in public issues; and the subject orientation, where the individual feels he should remain passive and accept decision-making outcomes without making any inputs into the decision-making process. In order to measure these concepts, a scale was constructed for each sub-type.

The participant orientation scale consisted of six items designed to tap the respondent's feelings about the extent to which the public should become involved in decision-making. The scale contains items referring specifically to the proposed Jefferson Reservoir as well as items containing nonreservoir referents. A Likert type response format of five categories was used. These categories were strongly agree, agree, undecided, disagree, and strongly disagree. The respective scores for the categories were 5, 4, 3, 2, 1. The data upon which the evaluation of the scale was made is contained in Appendix B. The reliability
Table 5. Socioeconomic index construction

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $1,000</td>
<td>1</td>
<td>8 years or less</td>
<td>1</td>
<td>Laborer</td>
<td>1</td>
</tr>
<tr>
<td>$1,000 - 2,999</td>
<td>2</td>
<td>9-11 years</td>
<td>2</td>
<td>Farm laborer</td>
<td>2</td>
</tr>
<tr>
<td>$3,000 - 4,999</td>
<td>3</td>
<td>Completed high school</td>
<td>3</td>
<td>Farmer</td>
<td>3</td>
</tr>
<tr>
<td>$5,000 - 6,999</td>
<td>4</td>
<td>High school plus vocational school</td>
<td>4</td>
<td>Skilled worker, Foreman</td>
<td>4</td>
</tr>
<tr>
<td>$7,000 - 9,999</td>
<td>5</td>
<td>Completed 4-year college program</td>
<td>5</td>
<td>Clerk, Salesman</td>
<td>5</td>
</tr>
<tr>
<td>$10,000 - 14,999</td>
<td>6</td>
<td>Some graduate or professional work</td>
<td>6</td>
<td>Businessman</td>
<td>6</td>
</tr>
<tr>
<td>$15,000 or more</td>
<td>7</td>
<td></td>
<td></td>
<td>Professional</td>
<td>7</td>
</tr>
</tbody>
</table>
for the scale using Richardson's formula was .73
and the average inter-item correlation coefficient ($r_{ij}$) was .32.

The subject orientation scale also consisted of six items designed to tap the extent to which the respondent felt that decision-making should rest in the hands of policy makers without inputs by the public. Again, both general items and items referring to the proposed Jefferson Reservoir were used (Appendix A). The response categories and scoring system were the same as on the participant orientation scale. Reliability ($r_{tt}$) was .77 and the average inter-item correlation was .37.

Subjective competence

This concept was defined as the degree to which the individual feels he can exert influence and decisions on public issues. The concept was measured through the use of a four item scale (see Appendix A) designed to assess the extent to which the individual feels he can have any impact on policy decisions. Whereas items used to measure participant and subject value orientations were designed to tap what the individual feels he should do, these subjective competence items are designed to tap what the individual thinks he can do. These four items were taken from Olsen's (1968) powerless scale. Five response categories were used ranging from strongly agree to strongly disagree with scoring
being 5, 4, 3, 2, 1. A reliability coefficient ($r_{tt}$) of .65 was obtained; the average inter-item correlation coefficient ($r_{ij}$) was .32 (see Appendix B).

**Involvement strategy preference**

This concept was defined as the individual's preference for involvement strategies. In order to measure this concept the individual was provided a hypothetical stimulus which asked what he would likely do if he wished to oppose a proposed government program that would affect his area. The respondent was then provided four alternative courses of action. Three of the alternatives reflected individual strategies and one of the alternatives reflected a collective strategy. The stimulus and items used were:

What would you be likely to do if a government agency was proposing a program in this area which you strongly opposed? Do you think you would be likely to:

1. Write your elected officials?
2. Write officials in the agency responsible for the program?
3. Try to meet with agency officials working on the program?
4. Join a group which was organized to fight the program?

Responses to each alternative were simply a **yes** or **no**. A **yes** was assigned a value of 2, and a **no** a value of 1. **Two types** of scores were given each respondent. The first was simply a summation of item scores to form a total score.
This score, which shall be referred to as the **overall strategy score** reflects the extent to which the respondent prefers all forms of involvement strategies. In addition, higher scores reflect preferences for collective strategies, whereas lower scores reflect preferences for individual strategies or for noninvolvement. The overall strategy score was evaluated using Kr20 as an estimate of reliability (Nunnally, 1967). A reliability coefficient ($r_{kk}$) of .65 was obtained.

The second scoring procedure which is referred to as the **strategy preference form score** consisted of assigning a 0 if the respondent answered **no** to all items, which in turn represents a preference for noninvolvement. If an individual answered **yes** only to an individual item(s) a value of 1 was assigned, thus reflecting preference for individual forms. A value of 2 was assigned if preference was expressed only for the collective form (joining a group), and 3 was assigned if preferences for both individual and collective forms were expressed. A score of 3 reflects a preference for mixed strategy.

**Perception of strategy treatment**

This variable is defined as the respondent's perception of the treatment he will receive if he enacts a preferred strategy. It was measured by four items. For each item, the respondent was provided alternative responses describing what
might happen if a specific strategy was enacted. Two scores were constructed. The overall perception of treatment score was constructed by assigning a coded value of 2 to agreement with unfavorable statements and a 1 to agreement with favorable statements. A total score was created by summing individual item scores. Using Kr20 and rkk of .47 was obtained. While this reliability was much lower than desired, a decision was made to include it for analysis since this was the first time that the scale had been used.

The second score, the specific perception of treatment score was constructed as follows. Respondents who agreed only with negative response statements were given a score of 0; respondents who had favorable perceptions of only individual strategy treatments were given a 1. Respondents who had favorable perceptions of only the treatment for the collective strategy were given a score of 2, and respondents who had favorable perceptions of treatment as a result of both individual and collective strategies were given a score of 3.

These scores reflect the perception of treatment as a result of enacting each of the forms of involvement. It should be noted that a score of 0, which reflects unfavorable perceptions of all strategies, has noninvolvement as its counterpart on the involvement strategy preference scores.
Awareness of collective forms

This concept was defined simply as the individual's cognizance of an issue-related voluntary association that was compatible with his position on the reservoir issue. Awareness of collective forms was measured by an item which asked the individual if he were aware of either of the two groups which had developed explicitly for dealing with the Jefferson Reservoir issue. Scoring was treated dichotomously with individuals being assigned a 2 if they were aware of the organization compatible with their own position, and a 1 if they were not aware of this organization.

General attitudes toward collective involvement

This concept, defined as evaluation of collective involvement forms (voluntary associations) as a general class of objects, was measured through the use of a ten item scale (general attitudes toward collective involvement scale). These items (Appendix A) were phrased in such a way that no reference was made to a specific group(s), but rather to voluntary associations as a general form of organization. The items were designed so that the respondent would evaluate voluntary associations generally on such dimensions as effectiveness, instrumentality, strategy, leadership, influence, and group-member relationship. The response format was a five part Likert type, with the responses ranging from
strongly agree to strongly disagree with scoring being 5, 4, 3, 2, 1. The reliability \( r_{tt} \) was 71.4, and the average inter-item correlation was .20.

Specific attitudes toward opportunities for involvement in a collective form

This concept was defined as the individual's evaluation of specific/local voluntary associations in which he might become involved. Measurement of this concept was made through the use of an eight item scale (see Appendix A). Respondents were asked to evaluate the two organizations specifically available for dealing with the Jefferson Reservoir issue. The items were designed so that respondents would evaluate these organizations on such dimensions as recruiting ability, organizational influence, style of operation, organizational strategy, size, member-group relations, and the organization's prestige in the community. Seven of the items provided the respondent with four response categories which reflected a range of favorability. The wording of the response categories varied by item. An item dealing with success in recruiting had response categories which ranged from very successful to not too successful, whereas another item dealing with organizational influence had responses ranging from a great deal of influence to no influence.
The seven items with four response categories were scored 4, 3, 2, or 1; with 4 representing the most favorable response and 1 the least favorable response. One item which had only three response categories was scored 3, 2, or 1; with 3 representing the most favorable response and 1 the least favorable response. So that each item was weighted equally, each item was divided by its number of response categories (three or four). A summated total score was then calculated with high scores representing favorable evaluations. The scale reliability ($r_{tt}$) was 75.6, and the average inter-item correlation was 30.6.

**Perceived reference group effects**

This concept was defined as the individual's perception of norms for becoming involved collectively. It was measured with respect to the individual's family, friends, and community. Three items were used to assess perceived reference group effects (see Appendix A). The first item (Indicator I) asked the respondent whether or not his or her spouse belonged to one of the two organizations which had developed to promote or oppose the Jefferson Reservoir. The second item (Indicator II) ascertained if his or her friends belonged to one of these organizations. The third item (Indicator III) required the respondent to evaluate the extent to which his community generally attached
importance to local persons joining community groups. Table 6 summarizes scoring procedures for these three items. Since perceived reference group effects is a complex concept, a composite of the three items was not constructed because there was an interest in assessing the relative effect of each of the three indicators.

Table 6. Scoring procedures for perceived structural effects items

<table>
<thead>
<tr>
<th>Item</th>
<th>Scoring Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse belong</td>
<td>Yes 2 No 1</td>
</tr>
<tr>
<td>Friends belong</td>
<td>Most 4 Some 3 Few 2 None 1</td>
</tr>
<tr>
<td>Community attaches</td>
<td>Great deal of importance 4 Some Importance 3 Little Importance 2 Unsure 1</td>
</tr>
</tbody>
</table>

Table 7 presents a matrix of the correlations between the three indicators. As can be seen, the magnitude of the correlations between indicators varies from .19 to .57. Each correlation between indicators is statistically significant (P < .001).
Table 7. Correlation matrix of relationships between perceived structural effects indicators

<table>
<thead>
<tr>
<th></th>
<th>I Spouse Belong</th>
<th>II Friends Belong</th>
<th>III Community Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Spouse</td>
<td>1.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II Friends Belong</td>
<td>.57</td>
<td>1.00</td>
<td>-</td>
</tr>
<tr>
<td>III Community Importance</td>
<td>.19</td>
<td>.29</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Analysis Techniques

Two statistical techniques were used in the data analysis. Correlation was employed to test the two variable hypotheses. It should be noted that simple regression would accomplish the same task. Second, to assess the model as a whole, several regression techniques were utilized. Each of these techniques is discussed in conjunction with the appropriate findings. The rationale for using regression is to assess the relative contribution of the various components in the overall involvement model.
FINDINGS

Introduction

The research findings are presented as follows: 1) tests of the hypotheses using zero order correlation, and 2) tests of the model using regression analysis.

Tests of Hypotheses

Data on each empirical hypothesis is reported in this section. Analysis of these two variable hypotheses used Pearsonian Correlation with a one-tailed test since the hypotheses were directional. All relationships reported as being significant are at the .05 level of probability or less. The results of this correlation analysis are summarized in Table 8.

Socioeconomic status and democratic value orientation

E.H. la: The higher the score on the socioeconomic status index the higher the score on the participant orientation scale.

\[ r = .07 \quad P > .05 \]

11 The empirical hypotheses which are tested are identified as E.H. The number and letter following these terms correspond to the general and specific hypotheses presented in Chapter II.

12 Tables in Walker and Lev (1969) were used for tests of significance.

13 The general form of the statistical hypotheses being tested are: 1) the null hypothesis, \( H_0: P \leq 0 \) and 2) the alternative hypothesis that \( H_A: P > 0 \).
The hypothesized relationship between socioeconomic and participant orientation was not supported.

\textbf{E.H. 1b:} The higher the score on the socioeconomic status index the lower the score on the subject orientation scale.

\[ r = -0.03 \quad \geq \quad 0.05 \]

The obtained correlation coefficient was not sufficient to confirm the hypothesized relationship between socioeconomic status and subject orientation.

In summary, these data fail to support the hypothesis of a relationship between socioeconomic status and democratic value orientation. However, when the socioeconomic status index was decomposed into its component parts, low relationships were found for income and education. A significant relationship \((r = 0.12)\) obtained between the participant orientation scale and respondent's income, and an inverse relationship was found \((r = -0.23)\) between the education index scores and subject orientation scores.

\textbf{Socioeconomic status and subjective competence}

\textbf{E.H. 2a:} The higher the score on the socioeconomic index the higher the score on the subjective competence scale.

\[ r = 0.21 \quad P < 0.05 \]

The relationship hypothesized between socioeconomic status and subjective competence was supported.
Democratic value orientation and involvement strategy preference

E.H. 3a: The higher the score on the participant orientation scale the higher the overall strategy preference score.

\[ r = .19 \quad P < .05 \]

The data support the hypothesized relationship between participant orientation and involvement strategy preference.

E.H. 3b: The higher the participant orientation score the higher the strategy preference form score.

\[ r = .05 \quad P < .05 \]

The correlation coefficient was not of sufficient magnitude to support this hypothesized relationship.

E.H. 3c: The higher the subject orientation score the lower the strategy preference form score.

\[ r = .22 \quad P < .05 \]

The hypothesized relationship is supported.

In summary, three of the four sub-hypotheses generated by the general hypothesis that there is a relationship between democratic value orientation and involvement strategy preferences were supported. Respondents who scored high on participant orientation had greater preferences for all types of involvement. However, the data do not reveal a high level of correspondence between participant orientation and a preference for one form of involvement over others. It is found that persons with subject orientations had low
preferences for all involvement forms, and that they preferred a strategy of noninvolvement.

**Strategy preference and the form of involvement**

E.H. 4a: The higher the strategy preference form score the higher the involvement form score.

\[ r = .20 \quad P < .05 \]

These data reveal a correspondence between the preferred form of involvement and actual form of involvement.

E.H. 5a: The higher the score on the subjective competence scale the higher the overall perception of treatment score.

\[ r = .31 \quad P < .05 \]

This hypothesis is supported in that the data reveal that respondents who felt they were competent to effect decision-making had favorable perceptions of the treatment they would receive if they enacted alternative involvement strategies.

**Perception of strategy treatment and involvement**

E.H. 6a: The higher the overall perception of treatment score the higher the overall involvement score.

\[ r = .12 \quad P < .05 \]

The data support the hypothesized relationship between overall perception of treatment and involvement.

E.H. 6b: The higher the specific perception of treatment score the higher the involvement form score.

\[ r = .08 \quad P > .05 \]
Here the obtained correlation coefficient does not support the hypothesized relationship.

In summary, the data reveals that respondents who had favorable perceptions of all strategy treatments had higher rates of involvement in public issues. There is no evidence that individuals who perceived favorable treatment as a result of enacting a specific form necessarily would enact that form.

**Awareness of collective forms and involvement in a collective form**

E.H. 7a: The lower the awareness score the lower the involvement form score.

\[ r = .56 \quad P < .05 \]

The hypothesized relationship between awareness of collective forms of involvement and involvement in those forms is supported. The data suggests that while awareness of a collective opportunity for involvement is a prerequisite for collective involvement, being aware of such an opportunity is no assurance in itself that an individual will become involved in that opportunity.

**General attitudes toward collective involvement and involvement in a collective form**

E.H. 8a: The higher the score on the general attitudes toward collective involvement scale the higher the involvement form score.

\[ r = .29 \quad P < .05 \]
The hypothesized relationship between general attitudes toward collective involvement and involvement in a collective form is supported. The data reveal that respondents who had favorable attitudes toward collective involvement also tended to become involved in collective endeavors.

**Specific attitudes toward collective involvement and involvement in a collective form**

E.H. 9a: The higher the specific attitudes toward opportunities in a collective form score the higher the score on the involvement for scale.

\[ r = 0.50 \quad P < 0.05 \]

The data indicate that respondents who evaluated specific opportunities for collective involvement favorably were more likely to become involved in these opportunities than were respondents who had unfavorable attitudes.

**Perceived reference group effects and the form of involvement**

E.H. 10a-1: The higher the score on Indicator I (spouse) the higher the involvement form score.

\[ r = 0.74 \quad P < 0.05 \]

E.H. 10a-2: The higher the score on Indicator II (friends) the higher the involvement form score.

\[ r = 0.66 \quad P < 0.05 \]
E.H. 10a-3: The higher the score on Indicator III (community) the higher the involvement form score.

\[ r = .20 \quad P < .05 \]

Each of the three empirical hypotheses (E.H. 10a-1, E.H. 10a-2, and E.H. 10a-3) was supported. These findings reveal that the more favorably one perceives reference groups to be toward involvement in a collective form, the higher the rate of personal involvement in such forms.

Table 8 summarizes results of the tests of these two variable hypotheses. Additional regression analysis will now be considered.

Table 8. Summary of correlational analysis for two variable hypotheses

<table>
<thead>
<tr>
<th>Empirical Hypothesis (E.H.)</th>
<th>Obtained Value of ( r )</th>
<th>Hypothesis Supported</th>
<th>Hypothesis Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.H. 1a</td>
<td>.07</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 1b</td>
<td>-.03</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 2a</td>
<td>.21</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 3a</td>
<td>.19</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 3b</td>
<td>.05</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>E.H. 3c</td>
<td>-.23</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 3d</td>
<td>-.22</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 4a</td>
<td>.20</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 5a</td>
<td>.31</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 6a</td>
<td>.12</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 6b</td>
<td>.08</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 7a</td>
<td>.56</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 8a</td>
<td>.29</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Table 8 (Continued)

<table>
<thead>
<tr>
<th>Empirical Hypothesis (E.H.)</th>
<th>Obtained Value of $r$</th>
<th>Hypothesis Supported</th>
<th>Hypothesis Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.H. 9a</td>
<td>.50</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 10z-1</td>
<td>.74</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 10a-2</td>
<td>.66</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>E.H. 10a-3</td>
<td>.20</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Regression Analysis**

The results of two major types of multiple regression analyses are reported in this section. The objective is to more fully evaluate the model of alternative forms of involvement in public issues. It will be recalled that in the testing of hypotheses only one relationship was tested at a time without consideration of the impingement of other variables in the model. The regression analysis accomplishes several things. First, it permits an assessment of the relative importance of the several components of the model. Secondly, it permits a determination of the effect each independent variable in the model has upon the dependent variable of involvement while taking into consideration other variables in the model. Finally, regression analysis permits assessment of how well the independent variables in the model accounts for variation of the dependent variable. Regression also aids in determining whether certain independent variables should
be deleted from the model.

Before examining the actual results of the analysis, several of the conventions that were used should be considered. The regressions all used the overall scores rather than form scores for strategy preference, for perception of strategy treatment, and for the dependent variable of involvement. It was felt that the overall scores more nearly approximated the type of measurement required for regression. As the Guttman analysis indicated, high scores on the overall involvement scale reflected mixed involvement which in turn contains the collective form. In essence, higher scores on this scale reflect collective involvement. This is the case for both the overall strategy preference scale and the perception of strategy treatment scale. A high score on the overall strategy preference scale reflects a preference for collective strategies as well as for mixed strategies and a high score on the perception of strategy treatment, scale reflects favorable perceptions of the result of collective and of mixed strategies.

Another convention used in the regression analysis was the inclusion of all respondents by assigning missing data a score of zero on all variables. The problem here was that respondents who were not aware of either of the two voluntary associations which had developed to support or oppose the Jefferson Reservoir could not respond to certain items. For
example, they could not evaluate either of these two organizations and, therefore, could not be given a score on the measure of attitudes toward specific involvement opportunities. The same problem applies to two of the perceived reference group effects indices (spouse belong and friends in organization). The SPSS (1970) regression procedure which was used provides two options for this sort of problem. One option, pairwise deletion, eliminates totally from the analysis those cases (respondents) for whom data is missing. The effect of using this option would have been a fluctuating sample size depending upon what variable was under consideration. In essence, one could really be talking about different populations. The second option, listwise deletion would have resulted in a constant n, but would have deleted a great deal of information. Neither of these options was elected. Instead, missing data was recoded as 0 and figured into total scores on that basis. In order to assess whether or not this procedure would greatly distort the results of the regression analysis, a listwise deletion was compared to the carry-through procedure. There was very little difference in the results. $R^2$ for the listwise procedure was .7413 whereas for the carry-through procedure $R^2$ was .7521.

The first regression analysis was conducted to assess the relative importance of the various components in the model in terms of their ability to explain scores on the dependent
variable of involvement. Variables on the model were divided into sets, and the dependent variable was regressed upon each set. The sets were analyzed in terms of order in which they appeared in the model. The analysis initially used variables which were considered closest temporally to the dependent variable.

**Perceived reference group effects**

The first regression included the three indicators of perceived reference group effects. Table 9 summarizes the results of this analysis. It is found that the perceived reference group effects set is a strong predictor of involvement. The set accounts for 63 percent of the variance in the dependent variable. Within the set there is considerable variation among the separate indicators in their ability to predict. Consistent with the earlier findings, whether or not a respondent's spouse belonged to an organization is the best predictor of the respondent's issue involvement. The other two indicators have poorer predictive ability. While friends in organizations is a significant predictor, the variable adds little to the amount of variance explained (.073). When accounting for the two other perceived reference group effects indicators, the perception of the importance that the community attaches to joining organizations becomes non-significant and little is contributed toward explaining
variance in the dependent variable (.002). The magnitude of
the standardized coefficients (b*) also reflects the rela-
tive importance of the three predictors with "spouse belong"
having the largest (b* = .55) and "community importance" the
smallest (b* = .03).

Attitudes toward specific opportunities for collective involve-
ment in an issue

Table 10 presents the results of the regression analysis
of attitudes toward specific opportunities for collective
involvement in terms of the overall involvement scores. This
variable, by itself, accounts for 17 percent of the variation
in the dependent variable. This suggests that individuals' 
attitudes toward specific collective involvement opportuni-
ties are important predictors of their involvement in such
opportunities, but less so than perceived reference group
effects.

General attitudes toward collective involvement

In regressing the dependent variable of involvement upon
the variable of general attitudes toward collective involve-
ment it was found that 9 percent of the variance in the
dependent variable was explained (Table 11). The F test for b
proved significant at the .001 level. While the variable
"general attitudes toward collective involvement" is a
significant predictor of collective involvement, by itself it
Table 9. Results of multiple regression for perceived reference group effects

<table>
<thead>
<tr>
<th>Regression Coefficient</th>
<th>Standardized Coefficient</th>
<th>Standard Error for R</th>
<th>R^2</th>
<th>R^2 Change</th>
<th>r</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse Belong</td>
<td>3.33**</td>
<td>.55</td>
<td>.31</td>
<td>.746</td>
<td>.556</td>
<td>.556</td>
</tr>
<tr>
<td>Community Importance</td>
<td>.03</td>
<td>.01</td>
<td>.12</td>
<td>.747</td>
<td>.559</td>
<td>.002</td>
</tr>
<tr>
<td>Friends in Organization</td>
<td>.61**</td>
<td>.34</td>
<td>.09</td>
<td>.795</td>
<td>.633</td>
<td>.073</td>
</tr>
</tbody>
</table>

Set R = .79
Set R^2 = .63
Set Standard Error 1.51
F for set = 117.3

**F test for set significant at .01.
Table 10. Results of multiple regression for attitudes toward specific opportunities for collective involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient b</th>
<th>Standardized Coefficient b*</th>
<th>Standard Error for R</th>
<th>R^2</th>
<th>R^2 Change</th>
<th>r</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes toward specific opportunities for collective involvement</td>
<td>.05**</td>
<td>.42</td>
<td>.007</td>
<td>.42</td>
<td>.17</td>
<td>-.42</td>
<td>55.2</td>
</tr>
</tbody>
</table>

Standard Error = 2.26

** F test significant at .01 level.
would appear to be a less important predictor than either perceived reference group effects or attitudes toward specific opportunities for collective involvement. Not only does the difference in $R^2$ for these three sets demonstrate this, but the standard error for general attitudes (2.37) is larger than it is for either of the other two sets.

**Awareness**

By itself the variable of awareness (of opportunities for collective involvement) would appear to be a relatively strong predictor of collective involvement in an issue. This variable accounts for 30 percent of the variance in the dependent variable. The standard error for the regression (1.96) along with the $R^2$ (.30) would suggest that awareness is second only to perceived reference group effect in importance (Table 12). An assessment of $b^*$ for awareness (.54) in comparison to $b^*$ for these other variables supports this conclusion.

**Perception of strategy treatment, strategy preference, democratic value orientation, and subjective competence**

These four variables were treated as a set for purposes of the initial regression analysis. Actually five variables were entered into the equation since democratic value orientation was sub-conceptualized into the participant and subject orientations. The reason for treating them as a set is that
Table 11. Results of multiple regression for general attitudes toward collective involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient (b)</th>
<th>Standardized Coefficient (b*)</th>
<th>Standard Error for b</th>
<th>R</th>
<th>R² Change</th>
<th>r</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>General attitudes toward collective involvement</td>
<td>.17**</td>
<td>.30</td>
<td>.03</td>
<td>.30</td>
<td>.09</td>
<td>.30</td>
<td>25.9</td>
</tr>
</tbody>
</table>

Standard Error = 2.37

Table 12. Results of multiple regression for awareness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient (b)</th>
<th>Standardized Coefficient (b*)</th>
<th>Standard Error of b</th>
<th>R</th>
<th>R² Change</th>
<th>r</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>1.27</td>
<td>.54**</td>
<td>.12</td>
<td>.54</td>
<td>.30</td>
<td>.54</td>
<td>110.5</td>
</tr>
</tbody>
</table>

Standard Error = 1.96

** F test for b significant at .01 level.
they are essentially pre-process variables in the model, but are qualitatively different than the socioeconomic status variables. Table 13 presents the result of the regression analysis with these variables. This set explains 22 percent of the variance in the dependent variable. While this is larger than the amount of variance explained by the general or specific attitude variables, it should be noted that the set contains several variables. As the F test indicates, the contribution made by subjective competence, perception of strategy treatment, and strategy preference are insignificant. Of the 22 percent of variance accounted for, one variable (subject orientation) accounts for 16 percent of the total variance. Its counterpart, participant orientation, accounts for 4 percent, and the other three variables account for only 2 percent. Essentially, within this set of variables, it appears that the two variables which go to make up democratic value orientation are really the best predictors and for all practical purposes are accounting for the variance explained by the set.

**Socioeconomic status**

Rather than using the socioeconomic status index, which was a composite, the three indicators of income, education, and occupation were entered separately into the regression equation. Unlike the other sets previously described, the
Table 13. Results of multiple regression with perception of strategy treatment, strategy preference, democratic value orientation, and subjective competence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient b</th>
<th>Standardized Coefficient b*</th>
<th>Standard Error of b</th>
<th>R</th>
<th>R^2 Change</th>
<th>r</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Orientation</td>
<td>.13**</td>
<td>.13</td>
<td>.05</td>
<td>.213</td>
<td>.05</td>
<td>.21</td>
<td>5.3</td>
</tr>
<tr>
<td>Subject Orientation</td>
<td>-.27**</td>
<td>-.38</td>
<td>.04</td>
<td>.455</td>
<td>.20</td>
<td>-.43</td>
<td>43.8</td>
</tr>
<tr>
<td>Subjective Competence</td>
<td>.03</td>
<td>.04</td>
<td>.05</td>
<td>.460</td>
<td>.21</td>
<td>.08</td>
<td>.4</td>
</tr>
<tr>
<td>Strategy Preference</td>
<td>.20</td>
<td>.10</td>
<td>.12</td>
<td>.4712</td>
<td>.22</td>
<td>.22</td>
<td>2.7</td>
</tr>
<tr>
<td>Perception of Strategy Treatment</td>
<td>.02</td>
<td>.01</td>
<td>.11</td>
<td>.4714</td>
<td>.22</td>
<td>.12</td>
<td>.05</td>
</tr>
</tbody>
</table>

Set R = .47
Set R^2 = .22

Standard Error = 2.21

F for set = 14.4

** F test for b significant at .01.
F test for this set (F = 2.17) was not significant. As shown in Table 14, the three indicators of socioeconomic status account for only 4 percent of the variance in the dependent variable of involvement.

The standard error for the set (2.60) is large and the b*'s are relatively small. The F test of the beta coefficient for employment along with the standard error, and the fact that it explains 2.5 percent of the total variance, would suggest that within the set occupation is the most important predictor.

Table 15 summarizes the results of the regression analyses reported in this section. By themselves, and without taking into consideration the variables in other sets, the components of the model each account for a significant amount of variance in the dependent variable. The only exception is the socioeconomic status variable set. There was, however, a considerable range in the amount of variance accounted for by the different components. The analysis also indicated that there was a wide range in the ability of within-set variables to explain variance in the dependent variable.

Attention next is addressed to an assessment of which sets and which variables best predict involvement in an issue, given all other variables in the model. In essence, we are determining which variables should be eliminated.
Table 14. Results of multiple regression analysis with socioeconomic status indicators

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient b</th>
<th>Standardized Coefficient b*</th>
<th>Standard Error for b</th>
<th>R</th>
<th>R²</th>
<th>R² Change</th>
<th>r</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td>.14*</td>
<td>.17</td>
<td>.06</td>
<td>.15</td>
<td>.0254</td>
<td>.0254</td>
<td>.15</td>
<td>4.7</td>
</tr>
<tr>
<td>Education</td>
<td>.03</td>
<td>.01</td>
<td>.15</td>
<td>.16</td>
<td>.0258</td>
<td>.0003</td>
<td>.02</td>
<td>.05</td>
</tr>
<tr>
<td>Income</td>
<td>.25</td>
<td>.13</td>
<td>.15</td>
<td>.20</td>
<td>.0423</td>
<td>.016</td>
<td>.10</td>
<td>2.54</td>
</tr>
</tbody>
</table>

Set $R = .20$

Set $R^2 = .04$

Standard Error = 2.60

F for set = 2.17

*F test for b significant at .05 level.
Table 15. Summary of regressions on components of the model

<table>
<thead>
<tr>
<th>Variable (set)</th>
<th>Set R</th>
<th>Set $R^2$</th>
<th>F</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Reference Group Effects</td>
<td>.79</td>
<td>.63</td>
<td>117.3**</td>
<td>1.51</td>
</tr>
<tr>
<td>Specific Attitudes</td>
<td>.42</td>
<td>.17</td>
<td>55.2**</td>
<td>2.26</td>
</tr>
<tr>
<td>General Attitudes</td>
<td>.30</td>
<td>.09</td>
<td>25.9**</td>
<td>2.37</td>
</tr>
<tr>
<td>Awareness</td>
<td>.54</td>
<td>.30</td>
<td>110.5**</td>
<td>1.96</td>
</tr>
<tr>
<td>Strategy Preference, Perception of Treatment, Democratic Value Orientation, and Subjective Competence</td>
<td>.47</td>
<td>.22</td>
<td>14.4**</td>
<td>2.21</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.20</td>
<td>.04</td>
<td>2.1</td>
<td>2.60</td>
</tr>
</tbody>
</table>

**Significant at .01 level.

Stepwise regression

A stepwise regression procedure was used to assess which variables in the model (given all other variables) were making a significant contribution to predicting the dependent variable of issue involvement. Draper and Smith (1966) describe four major steps which characterize stepwise regression. First, the procedure starts with the simple correlation matrix (a matrix of r's) and enters into the regression equation the independent variable most highly correlated with the dependent variable. Second, using partial correlation, the procedure enters the independent variable into the equation where partial correlation with the dependent variable is the highest. Third, a partial F test is calculated for both in-
dependent variables as though they were the last variable to enter the regression equation. If the partial F for either independent variable is less than a pre-determined level of significance, the variable is removed from the equation. Fourth, the above procedure is continued until partial F tests for all variables not in the equation are nonsignificant. The exact routine for conducting the analysis was the SPSS (1970) subprogram stepwise regression.\footnote{Nie, Bent, and Hull (1970) describe the routine as follows: The method recursively constructs a prediction equation one independent variable at a time. The first step is to choose the single variable which is the best predictor. The second independent variable to be added is that which, in conjunction with the first variable, provides the best prediction. You then proceed in this recursive fashion, adding variables step-by-step until you have the desired number of independent variables or until no other variable will make a significant contribution to the prediction equation. At each step the optimum variable is selected, given the other variables in the equation. This procedure does not always yield the true optimum, but it usually does fairly well. Stepwise regression is based upon a common method of solving the system of linear equations in multiple regression; that is, Gauss elimination with row and column interchanges. It happens that this computational method provides the information necessary to select the next variable to be brought into the equation. There are two pieces of information which are used in this selection process. The first is the normalized regression-coefficient value $b$ that the prospective independent variable would have if it were brought into the equation on the next step. The significance of $b$ is measured by the F statistic. If $F$ is too small, there is little reason to add that independent variable to the prediction equation. The second piece of information used in the selection process is the pivot element which would be involved in bringing that variable into the equation. This value is known as the tolerance. If the tolerance is small, then that variable is nearly a linear combination of independent variables already in the equation. If it is really a linear combination of independent variables already in the equation, then the tolerance will (footnote continued on following page).}
Using this procedure, the required partial F test value had to meet or exceed the .01 level. The required level for tolerance was .001 or greater. Table 16 presents the results of the stepwise regression analysis. All variables in the model were entered for consideration. The variables are listed in the table in the order they were entered into the regression by the stepwise procedure. The results present a somewhat different picture than was obtained by the earlier regression analysis. While all variables, with the exception of the perceived reference group effects indicator for community, were included in the final equation, many of these variables were found to be contributing little to the explanation of the dependent variable. Together the model variables account for slightly more than 75 percent of the variance in the dependent variable of involvement. Consistent with the earlier analysis, two of the perceived reference group effects variables (spouse belong, and friends in organization) remain the best predictors. Together these two variables account for 63 percent of the explained variation, or about 85

(footnote continued from preceding page) be zero. A large tolerance indicates that a new "dimension" is being added to the prediction equation. The tolerance is never larger than 1. The amount of additional variance explained by adding the new variable is the product of the normalized regression coefficient \( b \) squared and the tolerance. Thus, even if the prospective \( b \) is large, a small tolerance value will negate the value of that variable being added to the equation. Consequently, stepwise regression never brings a variable into the equation if the tolerance is below a specified minimum level (p. 180).
<table>
<thead>
<tr>
<th>Variable Entered</th>
<th>Standard Error (for Regression)</th>
<th>Partial F</th>
<th>R</th>
<th>Cumulative R²</th>
<th>R² Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Reference Group Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse belong</td>
<td>1.66</td>
<td>167.18</td>
<td>.746</td>
<td>.556</td>
<td>-</td>
</tr>
<tr>
<td>Friends in Organization</td>
<td>1.52</td>
<td>113.82</td>
<td>.795</td>
<td>.632</td>
<td>.076</td>
</tr>
<tr>
<td>Awareness</td>
<td>1.48</td>
<td>82.51</td>
<td>.808</td>
<td>.653</td>
<td>.020</td>
</tr>
<tr>
<td>Specific Attitudes Toward Opportunities for Collective Involvement</td>
<td>1.35</td>
<td>80.87</td>
<td>.844</td>
<td>.713</td>
<td>.059</td>
</tr>
<tr>
<td>Education (S.E.S.)</td>
<td>1.32</td>
<td>68.37</td>
<td>.852</td>
<td>.726</td>
<td>.012</td>
</tr>
<tr>
<td>Subject Orientation</td>
<td>1.31</td>
<td>58.51</td>
<td>.856</td>
<td>.732</td>
<td>.006</td>
</tr>
<tr>
<td>Perception of Strategy Treatment</td>
<td>1.29</td>
<td>46.36</td>
<td>.863</td>
<td>.746</td>
<td>.013</td>
</tr>
<tr>
<td>General Attitudes Toward Collective Involvement</td>
<td>1.29</td>
<td>41.51</td>
<td>.865</td>
<td>.749</td>
<td>.002</td>
</tr>
<tr>
<td>Income (S.E.S.)</td>
<td>1.29</td>
<td>37.61</td>
<td>.867</td>
<td>.753</td>
<td>.002</td>
</tr>
<tr>
<td>Occupation (S.E.S.)</td>
<td>1.29</td>
<td>34.21</td>
<td>.868</td>
<td>.753</td>
<td>.001</td>
</tr>
<tr>
<td>Subjective Competence</td>
<td>1.29</td>
<td>28.90</td>
<td>.829</td>
<td>.756</td>
<td>.027</td>
</tr>
<tr>
<td>Action Strategy Preference</td>
<td>1.29</td>
<td>76.71</td>
<td>.8701</td>
<td>.7570</td>
<td>.0006</td>
</tr>
<tr>
<td>Participant Orientation</td>
<td>1.30</td>
<td>24.74</td>
<td>.87018</td>
<td>.7572</td>
<td>.0001</td>
</tr>
</tbody>
</table>
percent of the total variance explained by all variables in the equation. The eleven other variables together account for about 20 percent of the variance in the dependent variable, but only for 15 percent of the total variance explained by all variables in the model. Awareness, which when earlier entered into the analysis accounted for 30 percent of the variance in the dependent variable, now accounts for only 2 percent. This would seem to be consistent with the model in that being aware of opportunities for collective involvement is not sufficient reason for actual involvement.

Using the change in R² as a criteria, specific attitudes toward opportunities for collective involvement revealed to be the third most important variable by accounting for 5 percent of the variance in the dependent variable. It was earlier argued that this variable was the second to the last step in the model and in terms of the R² contribution it remains in that order. The earlier analyses would have eliminated education, but the stepwise regression analysis brought this socioeconomic status indicator back in, and in terms of R² it appears to be the fourth most important predictor of involvement. Subject orientation, while remaining in the equation, adds little to the amount of variance accounted for (.06%). Perception of strategy treatment accounts for 1.3 percent, or more than does subject orientation. The analysis indicates that general attitudes toward col-
lective involvement, while significant, becomes a relatively unimportant predictor accounting for only .02 percent of the variance explained. Out of the five remaining variables, subjective competence is the only variable which accounts for more than 1 percent of the variance ($R^2$ change = .027 or 2.7%). Income, occupation, action strategy preference, and participant orientation each contribute much less than 1 percent to the total $R^2$ and together account for only .037 percent of the total variance explained. Action strategy preference and participant orientation with $R^2$ changes of .0006 and .0001 respectively account for practically nothing in terms of total variance explained.

In summary, the two variable hypotheses have been tested and two types of regression analyses were made. Attention shall now be turned to a discussion of these findings in the final chapter.
DISCUSSION, SUMMARY, AND CONCLUSIONS

The procedure in this chapter is to review and assess research findings on each of the several objectives of the study.

A Model of Behavioral Involvement in Public Issues

As stated at the outset, a primary objective of this study was to develop and test a model sufficiently broad to cover behavior both at an individual and collective level. The focus was on involvement in public issues. It was necessary to this end to explore conceptually and empirically the nature of the dependent variable, issue involvement. It was proposed that by developing a model of alternative behavioral forms of involvement one might also have a model of involvement as intensity if behavioral form and behavioral intensity were related.

The Guttman analysis demonstrated that the dependent variable of involvement was cumulative in nature. The data indicated that all of the respondents who had joined one of the two voluntary associations dealt with in this study had also engaged in individual forms of involvement and that no purely collective form of involvement existed; only the noninvolvement, individual, and mixed forms obtained. The
absence of a pure collective form suggests that individuals who become collectively involved in issues are more intensely involved; that is, they commonly engage in a greater variety of involvement behaviors than do individuals who are only individually involved. The Guttman analysis indicated that certain behavior indicators which were considered individual in nature reflected more intensity than did joining an organization, which was considered a collective indicator. However, since the data is static in nature, it is not known whether talking to politicians and writing letters occurred before or after joining a voluntary association. It may be that letter writing and talking to politicians was a product of organizational activity. If this were the case, these two indicators are really collective in nature. In addition, joining an organization may work as an opportunity structure whereby organizational membership provides the individual with access to political officials.

It should be pointed out that the model has been only partially tested. First, hypothesized two-way relationships were examined, and then the variables in the model were analyzed in terms of their ability to predict involvement. Each of these analytical steps sheds some light on the utility of the model as developed in the theoretical chapter of this study. However, each analytical step has brought into question findings from previous steps.
The model in general, or at least certain variables, perform well in terms of the amount of variance accounted for in the dependent variable of involvement. As previously stated, the results of the stepwise regression indicate that about 75 percent of the variance in the dependent variable was explained by the independent variables. However, when the relative contribution of the several variables in the model were examined, a great deal of variation in the ability of the variables to predict involvement was noted. This variation ranged from .001 percent for participant orientation to 63 percent for the perceived reference group effects indicators.

Table 17 provides a summary of the results of the correlation and regression analyses. It should be noted that no relationship was hypothesized between socioeconomic status and involvement, subjective competence and involvement, and democratic value orientation and involvement. As a result of this, the three types of analysis are not entirely comparable. What the comparisons contained in the table indicate is that the model is supported only in that the independent variables are significantly related to the dependent variable of involvement. The results of the stepwise regression analysis suggest that if statistical significance were the only criteria, none of the independent variables should be excluded from the model. However, this inclusion of all independent
Table 17. Summary of three analyses of findings for variables in the involvement model

<table>
<thead>
<tr>
<th>Variable Relationship to Involvement</th>
<th>Type of Analysis</th>
<th>Correlation Support</th>
<th>Correlation Non-support</th>
<th>Set Regressions Support</th>
<th>Set Regressions Non-support</th>
<th>Stepwise Regression Support</th>
<th>Stepwise Regression Non-support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Structural Effects</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Attitudes</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Attitudes</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of Strategy Treatment</td>
<td></td>
<td>P</td>
<td>P</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Strategy Preference</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic Value Orientation</td>
<td></td>
<td>P</td>
<td>P</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Subjective Competence</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

P = partial support
variables in the model would have to be based largely on statistical significance rather than substantive significance (Kish, 1959), a point which will be dealt with later.

While the stepwise regression suggests that all variables be left in the model, the correlational analysis and set regressions lead to an alternative conclusion. Recalling the set regressions, it was found that the socioeconomic status set was the only one not making a significant contribution toward explaining the dependent variable of involvement. The set regressions were run independently of each other, and when subjected to stepwise regression it was found that all three indicators of socioeconomic status could be retained. The correlation analysis of hypothesized relationships indicated nonsignificant relationships between the socioeconomic status index and the variables of subject and participant orientation.

Perhaps what the results of these three different analyses indicate is that socioeconomic status is an important variable in explaining involvement in public issues, but that the explanation posited in the model is not the correct explanation. In other words, while it appears that socioeconomic status is related to involvement, the argument that socioeconomic status, operative through life experiences and socialization, produces a basic value orientation toward involvement does not appear to be supported by the study data.
Another deficiency in the model is centered upon the concept of democratic value orientation and its component parts, subject and participant value orientations. While both regression analyses indicate that the subject and participant orientation variables make significant contributions toward explaining involvement, the results of the correlational analysis would seem to indicate that relationships may not exist as posited in the model. It will be recalled that no relationship was found between socioeconomic status and the participant and subject orientations. In addition, only partial support exists for the hypothesized relationships between these variables and that of involvement strategy preference; respondents with high scores on the participant orientations would prefer collective involvement strategies over all others was not supported. Apparently the feeling that one should become involved in public issues has little to do with one's belief regarding the most acceptable forms of involvement.

This finding does not hold for persons with a subject orientation. The results show that persons with subject orientations not only had few preferences for individual or collective (mixed) strategies for involvement, but also preferred a strategy of noninvolvement. These findings could be interpreted to mean that individuals who feel they should become involved do not necessarily, in a situational
sense, have strong preferences for one type of involvement over others, whereas individuals who feel they shouldn't become involved, prefer not to be involved. Since the hypotheses on democratic value orientation are only partially supported, the model is inadequate at this point.

The model is deficient in another respect, that of the posited relationship between perception of strategy treatment and issue involvement. The hypothesized relationship between general favorability of perceptions of treatment and overall involvement was supported, with respondents holding favorable perceptions of strategy treatments being more likely to be involved. However, those who had favorable perceptions of treatment as a result of collective strategy were not disproportionately involved in collective forms. It may be that intervening variables in the model such as awareness, general and specific attitudes, and perceived reference group effects were in fact cancelling out the direct relationship between favorable treatment perception for a specific form and involvement in a specific form.

Despite the severe limitations placed upon conclusions because of the types of analyses that could be conducted, the model finds considerable support in these data. While several of the hypothesized relationships appear to be incorrect, most were supported. The regression analysis suggested that the model contains appropriate variables, but
that there was an inappropriate specification of relationship between variables in several cases.

There are other criteria for evaluating the model; one being how well the temporal specification in the model fit the data. Both Bohrnstedt (1966) and Rogers (1971) have used regression procedures to assess the temporal correctness of variable ordering in a model while using static cross-sectional data. Rogers (1971) probably presents the logic most directly when he states:

Rather than enter the least specific variables first... I entered the most specific ones first. This change in order was used to test the following assumption: If specific attitudes are considered antecedent to these, the data should show that general attitudes add little or nothing to the explanation of the variance in the dependent variable already given by measures of more specific attitudes. This should follow if the two groups of variables have a large amount of variance in common, where the most specific group subsumes the less specific one in terms of variance explained.

The argument is that as variables are entered into a model the amount of variance they account for in the dependent variable should be proportional to the temporal order. The variance explained should diminish as variables more temporally distant are entered in the model. The regression analysis on sets of variables provided an opportunity to examine the temporal correctness of the model. Table 18 presents a summary of this analysis.

The set regression analysis suggests that several variables are misordered in the model. Perceived reference
Table 18. Regression results and the temporal order of variables in the model

<table>
<thead>
<tr>
<th>Variable (set)</th>
<th>Moving Away From Dependent Variable</th>
<th>Set $R^2$</th>
<th>Temporal Correctness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Reference Group Effects</td>
<td>.63</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Specific Attitudes</td>
<td>.17</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>General Attitudes</td>
<td>.09</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Awareness</td>
<td>.30</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Strategy Preference, Perception of Treatment, Democratic Value Orientation, and Subjective Competence</td>
<td>.22</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.04</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Group effects, the independent variable closest to the dependent variable, accounts for the largest amount of variance (63 percent), followed by specific attitudes (17 percent) and general attitudes (9 percent). The variance explained by the awareness dimension ($R^2 = .30$) suggests it is out of order and should be placed ahead of specific attitudes. This placement, however, makes little theoretical sense in that it is impossible to have attitudes toward a specific object without being aware of that object. The set of variables containing strategy preference through subjective competence also is out of order. The $R^2$ for
this set (.22) suggests that this set is best located temporally somewhere between perceived reference group effects ($R^2 = .63$) and general attitudes ($R^2 = .09$). However, the fact that this set accounts for 22 percent of the variance, which is more than the 17 percent accounted for by specific attitudes, is quite possibly due to the fact that it contains four variables, while "specific attitudes" had only one. In other words, a portion of the 22 percent probably reflects the number of variables and not the temporal proximity with the dependent variable. The socio-economic status set, which has the smallest $R^2$ (.04) of all sets, is temporally farthest removed from the dependent variable. This seems consistent with the general ordering of variables in the model.

The stepwise regression provides an additional issue in regard to the temporal ordering of the model. In terms of $R^2$ (change), the stepwise regression ordered perceived reference group effects first ($R^2 = .63$), specific attitudes second ($R^2$ change = .059), with awareness ($R^2$ change = .02) occurring after specific attitudes, but before general attitudes ($R^2$ change = .002). However, the stepwise regression demonstrated that subjective competence accounted for more variance (2.7 percent) than did awareness (2 percent). Certainly this slight difference could be due to measurement error, and no firm empirical conclusion can be made about which should be
ordered first. Theoretically, however, it makes sense to order awareness as occurring after subjective competence, since it was used to refer to cognition of the existence of specific organizations.

It appears that regression analysis supports the temporal ordering of the model only to a point. The analysis, as well as the underlying theory, suggests that in terms of proximity to the dependent variable, the order is 1) perceived reference group effects, 2) specific attitudes, and 3) awareness. After this point the empirical evidence in regard to order is more difficult to assess. For example, in the stepwise regression education accounts for more variance than does general attitudes. However, general attitudes accounts for more than the two other socioeconomic status indicators of income and occupation. The regression analysis suggests that it may be best to order general attitudes toward collective involvement as occurring temporally prior to awareness. General attitudes toward collective involvement might best be considered as a pre-process variable, or as a cognitive orientation which is relatively enduring the static in nature and which exists prior to the involvement situation.

Still another means for evaluating the model would seem to be an examination of the predictions the model makes in terms of individuals dropping out of the process. It was
suggested that individuals could bypass subsequent steps and drop out of the process at six places in the model. Only a partial test of these bypasses can be made, and in essence the correlational analysis has really examined these bypasses. Table 19 presents the correlations ($r$) between these six points of bypass in the model and the dependent variable of involvement. With the exception of the correlation between the specific treatment scores and the involvement form score, there is a significant correlation between each bypass point and involvement. These correlations demonstrate that respondents with lower scores at each bypass have lower involvement scores, which could in turn be reflecting that respondents are in fact dropping out at these points. Interestingly, it appears that if the magnitudes of the correlation coefficients are indicative of the relative importance of the bypass point, then certain bypass points are more important than others. As one would expect, awareness ($r = .56$, $r = .54$) would appear to be an important bypass point. Respondents unaware of collective opportunities can hardly be expected to have become involved in collective forms. Additionally, both general attitudes ($r = .24$, $r = .30$) and specific attitudes ($r = .50$, $r = .42$) appear to be important bypass points. In general, the size of the correlation coefficients for the perceived reference group effects indicators suggests that this bypass is even
Table 19. Correlational examination of relationships between points of bypass and the dependent variable of involvement

<table>
<thead>
<tr>
<th>Bypass Point</th>
<th>Involvement for form score</th>
<th>Involvement for overall score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Preference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form Score</td>
<td>.20*</td>
<td>.30*</td>
</tr>
<tr>
<td>Perception of Strategy Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Treatment Score</td>
<td>.08</td>
<td>.12*</td>
</tr>
<tr>
<td>Awareness of Collective Forms</td>
<td>.56*</td>
<td>.54*</td>
</tr>
<tr>
<td>General Attitudes Toward Collective Involvement</td>
<td>.29*</td>
<td>.30*</td>
</tr>
<tr>
<td>Specific Attitudes Toward Opportunities for Involvement in a Collective Form</td>
<td>.50*</td>
<td>.42*</td>
</tr>
<tr>
<td>Perceived Reference Group Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>.74*</td>
<td>.74*</td>
</tr>
<tr>
<td>Friends</td>
<td>.66*</td>
<td>.65*</td>
</tr>
<tr>
<td>Community</td>
<td>.20*</td>
<td>.19*</td>
</tr>
</tbody>
</table>

*Significant at .05 level.

more important. This evaluation of correlations between bypass points and the dependent variable is only suggestive and does not truly test whether or not respondents are really dropping out of the process at these points. If the bypass points in the model are truly points where respondents drop out of the process, then it might be argued that these points should be more or less independent of one another. Table 20 was constructed in an attempt to gain some insight
Table 20. Correlations between bypass points in temporal order

<table>
<thead>
<tr>
<th>Bypass T₁</th>
<th>Bypass T₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Preference (with)</td>
<td>r = .05</td>
</tr>
<tr>
<td>Perception of Treatment (with)</td>
<td>r = .01</td>
</tr>
<tr>
<td>Awareness of Collective Forms (with)</td>
<td>r = .23</td>
</tr>
<tr>
<td>General Attitudes (with)</td>
<td>r = .22</td>
</tr>
</tbody>
</table>
| Specific Attitudes (with) | a. r = .35  
| | b. r = .10  
| | c. r = .58 |
| Perceived Reference Group Effects | a. Spouse  
| | b. Friends  
| | c. Community |

into the extent of independence between bypass points.

As indicated in Table 20, some of the bypass points appear to be independent of one another, while others do not. It should be noted that the bypass points are ordered in terms consistent with the temporal dimension portrayed in the model. The low correlation coefficient
(r = .05) between strategy preference and perception of treatment would seem to suggest independence between these two bypass points. The same would appear for the bypass points of perception of treatment and awareness of collective forms (r = .01). The analysis indicates, however, that the other bypass points are correlated. Awareness and general attitudes appear not to be independent of one another (r = .23). The same can be said for the relationships between general attitudes and specific attitudes (r = .22) and for specific attitudes and perceived reference group effects (r's = .35, .10, and .58). These last two relationships are especially interesting and deserve some special attention.

The analysis indicates that general and specific attitudes toward collective involvement are related, while the model suggested that individuals with unfavorable general attitudes toward collective involvement should drop out of the process. The data, however, do not support this idea. There are at least two possible explanation of this relationship. First, it may be an artifact resulting from the use of cross-sectional data. That is, respondents who had joined an organization may develop favorable general attitudes toward collective forms due to educational processes resulting from membership. A second explanation is that individuals who have favorable general attitudes will always evaluate specific collective opportunities for involvement.
more favorably than will individuals with unfavorable general attitudes. Even though they evaluate all specific opportunities more favorably, these evaluations may not be favorable enough to assure becoming involved in that specific collective opportunity.

The generally large correlation coefficients between attitudes toward specific involvement opportunities and perceived reference group effects indicate a lack of independence between these two variables. In reality there are probably feedback loops between the variables. If one's spouse, friends, and community are important determinants of one's actual behavior (involvement) they are also probably important as socialization agents in shaping one's attitudes toward specific behavioral opportunities. This line of reasoning is consistent with reference group writers (Kelley, 1952; Sherif, 1968) who argue that reference groups are important determinants of individuals' attitudes.

Once again the data suggest that the purported bypass points in the model are partially correct. However, no firm conclusions can be reached on this matter given the type of data which the analysis is based. A definitive analysis requires longitudinal, rather than cross-sectional, data.

Finally, there would appear to be at least one other basis upon which to evaluate the model of involvement in public issues. This basis is that of substantive versus
Ill

statistical significance. Kish (1959) makes a distinction between the two forms of significance as follows:

..."significance" is often confused with or substituted for substantive significance. There are instances of research results presented in terms of probability values of "statistical significance" alone, without noting the magnitude and importance of the relationships found. These attempts to use the probability levels of significance as measures of the strength of relationships are very common and very mistaken. The function of statistical tests is merely to answer: Is the variation great enough for us to place some confidence in the result; or contrarily, may the latter be merely a happenstance of the specific sample on which the test was made? This question is interesting but surely it is secondary, auxiliary, to the main which is of substantive interest because of its nature and its magnitude...

To this point the discussion of the study findings regarding the evaluation of the model has been based almost entirely on statistical significance. But what about substantive significance?

If examination of substantive significance is based on "magnitude" of relationships, it appears that the variables which make up the model appear to explain the dependent variable quite well, since 76 percent of the variance in the dependent variable is explained. However, it is felt that the issue of substantive significance becomes paramount when one asks how many of the variables in the model are making an important contribution to this reduction in unexplained variation. As pointed out earlier, two variables, perceived reference group effects and awareness, account for 65 percent
of the variation in the dependent variable and specific attitudes for 6 percent; this means that the three most important variables in the model (in terms of contribution to $R^2$) account for 71 percent out of the total 76 percent variance explained by the model. The other nine variables in the model taken together account for only an additional 4 to 5 percent. In this case the question becomes, "Where does statistical significance end and substantive significance begin?" If one uses the extremely liberal criterion that a substantively significant relationship is one that explains at least 1 percent of the variance in the dependent variable, then five of the relationships between the independent variables and dependent variable are substantively significant. On this basis the variables, perceived reference group effects, attitudes toward specific opportunities for involvement, awareness, education, and action strategy preference should continue to be included in the model. However, if the criterion were raised from 1 percent to 2 percent, only three variables would remain (perceived reference group effects, awareness, and attitudes toward specific opportunities for collective involvement). Clearly, either criterion of substantive significance is quite arbitrary. I believe that future research might best concentrate on models using the five variables that meet the 1 percent criterion and exclude those which explain less than 1 percent. Quite
possibly, reduction in measurement error in the five independent variables could increase their importance substantially beyond the 1 percent criterion.

Socioeconomic Status and Membership in Voluntary Association

Another objective of this study as stated in Chapter I was to provide a more detailed explanation of the relationship between socioeconomic status and membership in voluntary associations than is available in the literature. Essentially, this explanation made up the first part of the model. It was suggested that socioeconomic status most directly affected membership in voluntary association being a basic determinant of democratic value orientation and subjective competence. The correlational analysis using the socioeconomic index supported the hypothesized relationship with subjective competence, but not with democratic value orientation. It appeared that socioeconomic status played a part in determining the individual's feelings of whether or not he can effectively influence decision making by larger social systems. At the same time, the data do not support the idea that socioeconomic status determines one's basic political value orientations (participant or subject). The explanation of the relationship between socioeconomic status and membership in voluntary associations is thus not
fully supported. However, before rejecting the utility of incorporating socioeconomic status, several additional observations are pertinent.

Basically the findings of this research demonstrated no important relationship between socioeconomic status and membership in voluntary associations ($r = .07$). These correlations for the several components of the socioeconomic status index were .05 for income, .03 for education, and .15 for occupation. Only the relationship between education and involvement ($r = .15$) was significant. The set regression for the three socioeconomic status indicators indicated they explained only 4 percent of the variance in issue involvement. The stepwise regression indicated only one indicator, education, was accounting for more than 1 percent of the variance in involvement. These results are similar to Smith's findings (1966) which revealed that socioeconomic variables, in comparison to general and specific attitudes toward organizations, were not good predictors of group membership. The results also are consistent with Rogers' findings (1971) that social background characteristics accounted for only 3.7 percent of the variance in his dependent variable of behavioral involvement in voluntary associations. It is suggested, then, that the variables in the model proposed in this study, for all practical purposes, explains away the relationship between socioeconomic status and membership
in voluntary associations.

An Elaboration of Existing Models of Membership in Voluntary Associations

Another objective of this study was to elaborate and build upon existing models of membership in voluntary associations. The elaboration occurred through the addition of these variables: democratic value orientation, subjective competence, involvement strategy preference, perception of strategy treatment, and awareness. In addition, perceived reference group effects was included. In part, the issue became one of determining to what extent the inclusion of these concepts improved upon existing models. If amount of variation explained in the dependent variable is used as a criterion, the inclusion would appear fruitful. For example, the model developed by Rogers (1971) accounted for 38 percent of the behavioral involvement in organizations, and Bohrnstedt (1966) explained about 54 percent of the variance in joining a college fraternity. To the extent that the model developed in this study has resulted in an increase in $R^2$, it represents an improvement over other models. The assessment of $R^2$ is certainly not the only criterion for elaboration. It is my feeling that the conceptualization of the dependent variable of involvement is indeed a conceptual extension. Unlike existing models of membership in voluntary
associations which have largely used member versus nonmember, or active member versus inactive member, as dependent variables, my conceptualization dealt with forms of behavior other than just organizational behavior. This significantly increased the scope of the model.

The inclusion of perceived reference group effects also represents a major conceptual extension. It will be recalled that the two perceived reference group effects indicators, spouse belongs to and friends are members, explained 63 percent of the variance in the dependent variable of involvement, and were by far the best predictors of involvement. This finding would seem to dramatically point out that reference groups and reference persons are important sources of support for behavioral involvement, a point which is typically overlooked in research on voluntary associations. The best predictor of involvement in an organization in this study was whether or not the respondent's spouse belonged to the organization. While spouse's membership is not appropriate for predicting membership in all voluntary associations, it is appropriate for many. Even if one were concerned with a "male" voluntary association, exploring the support for the husband's membership provided by the wife would seem to be possibly rewarding grounds for future research.

The data in this study does not indicate how perceived reference group effects operate. Future research in this
area should explore the dynamics of persuasion, coercion, and recruitment processes as possible explanations of the operation of reference group effects.

Finally, it is felt that inclusion of the variable of awareness has brought an extension of existing models. If models of voluntary association membership applying to general populations are desired, then including the simple notion of awareness of voluntary associations would seem to be useful in explaining membership. It is clear that future research should consider not only awareness of voluntary associations in general, but of voluntary associations that are compatible with the individual's interests and/or position on community and societal issues.

The Problem of Noninvolvement

The findings of this study suggest several dimensions related to noninvolvement in public issues. It was found that respondents who scored high on the subject orientation scale tended not to become involved. The subject value orientation should not be confused with political apathy; rather, it is more of an individual dictate that defines a citizen's duty as noninvolvement. In other words, some individuals stay uninvolved in local issues because they feel it their civic duty to remain uninvolved, perhaps feeling these issues are best decided by experts.
The findings also address themselves to noninvolvement in collective forms and suggest that individuals who have attitudinal positions on issues may fail to become involved for several reasons. First, it may be a simple matter of not being aware of opportunities for collective involvement. While this study treated awareness as a dichotomous variable, it may be that awareness is best conceptualized in terms of the amount of information that individuals possess about collective involvement opportunities. Second, noninvolvement in collective forms may be the result of unfavorable attitudinal evaluations of specific opportunities for collective involvement. Future research should address what aspects of voluntary associations must be evaluated favorably if potential members are to become actual members. Third, the data suggest that noninvolvement in collective forms may be a result of a lack of perceived reference group support for membership behavior. The findings indicate that respondents who were not collectively involved tended to be individuals whose spouse and friends also were not so involved.

Implications for Practitioners

It can be argued that any variable that is significantly related to involvement in public issues has implications for practitioners seeking to secure greater involvement of the general citizenry in public issues. An important issue,
however, is how well that variable can be manipulated. The findings of this study have two major implications in this regard. First, it would appear that awareness is a variable that can be manipulated, and that part of involving citizens in public issues is making them better aware of the need and the opportunities for involvement. The second major implication which the study demonstrates is the role of reference groups in affecting issue-related behavior. It is always tempting to tell practitioners that they should educate or re-educate their target audiences. The findings of this study indicate that not only must individuals be educated (regarding involvement), but also that social support for such involvement must be secured if they are not to remain passive. An appropriate target group, thus, might be reference groups rather than individuals.

Summary and conclusions

In this study a model of alternative forms of behavioral involvement in public issues has been developed and tested. Data are reported on a sample of 259 respondents residing in portions of a three-county area near the proposed Jefferson Reservoir. The dependent variable was basically conceptualized in terms of form, or the style of involvement.

The Guttman scale analysis was used to assess the relationship between involvement as form and involvement as intensity or the amount of different behaviors directed toward
affecting decision-making. This analysis indicated that the dependent variable can generally be considered as cumulative in nature. The analysis also indicated that in general the collective form of involvement represents a greater degree of behavioral intensity (number of behavior enactments) than does individual issue involvement. Most of the respondents who were collectively involved were also individually involved, and in the conceptual terms of the model were enacting a mixed involvement strategy. One conclusion that can be drawn from this is that future research consider a broad continuum of behavioral involvement rather than just considering membership and participation in voluntary organizations.

The hypothesized relationships between socioeconomic status and democratic value orientation was not supported by the data. Support was maintained for the hypothesis that respondents from lower socioeconomic groups would have low subjective competence scores. Additional analysis demonstrated weak relationships between socioeconomic status and the dependent variable of involvement. A similar relationship was demonstrated between democratic value orientation and involvement. One conclusion here is that while these variables are significantly related to involvement, the relationships probably do not exist as ordered in the model.

Only partial support for relationships hypothesized
between democratic value orientation and involvement strategy preference existed. Respondents scoring high on the participant orientation scale tended to have greater preferences for all forms of involvement strategies than did respondents scoring low on participant orientation. However, the respondents who scored high on the participant orientation scale did not disproportionately prefer collective strategies over other types of strategy. Respondents scoring high on the subject orientation demonstrated little preference for individual, collective, or mixed strategies, but instead preferred to be noninvolved.

The hypothesized relationship between perceptions of treatment and involvement was partially supported. Respondents holding favorable perceptions of treatments were likely to be involved but no correspondence between favorable perceptions of treatments for involvement in collective strategies and actual collective involvement was demonstrated.

The relationships hypothesized between awareness, general and specific attitudes toward collective involvement, and perceived reference group effects with the dependent variable of involvement were supported.

Regression analyses indicated that the most important predictors of involvement in the Jefferson Reservoir issue were 1) perceived reference group effects, 2) specific attitudes toward opportunities for collective involvement,
and 3) awareness. Together, these three variables accounted for 71 percent of the total 76 percent of variance explained by the independent variable. The other nine variables in the model accounted for 4 to 5 percent. The variable of perceived reference group effects was by far the best predictor and accounted for 63 percent of the variance explained. The study data were not adequate to actually explore the way in which perceived reference group effects were working.

The general conclusions to be drawn from this study are that 1) the variables contained in the model make up a reasonably good set of predictors of involvement in public issues \( (R^2 = .76) \); 2) the variables contained in the model are in certain places probably misordered, both temporally and causally; 3) involvement in public issues can be adequately conceptualized in terms of individual and collective behaviors; and 4) while perceived reference group effects was an outstanding predictor of involvement, it is not clear how this variable actually operates.

**Recommendations for Future Research**

I believe that future researchers would do well to continue attempts at expanding the various dimensions of public involvement, both conceptually and operationally. Also, while the sociological literature has often mentioned the relationship between ideas drawn from reference group
theory and involvement, little research has actually been
done in this area. This study found some of these relation­
ships to be extremely important; however, the study data is
inadequate to explain the relationship. It is suggested,
then that additional research should be directed toward
exploring these ideas. This leads to another point: the
problem of studying processes with static, cross-sectional
data. In order to adequately study and understand involve­
ment behavior longitudinal data seem necessary. Such data
would permit an adequate temporal assessment of processual
ideas. In addition, such data would be truly appropriate
for analysis by sophisticated forms of causal analysis. This
study, as with previous studies, has isolated a number of
important variables related to involvement. Researchers
should utilize these substantively significant variables in
longitudinal research designs to continue to build and im­
prove explanation of behavioral involvement.
REFERENCES

Almond, Gabriel A. and Sidney Verba  

Axelrod, M.  

Bach, M.  

Beal, George M.  
1956 "Additional hypotheses in participation research". Rural Sociology 21 (September-December): 249-256.

Bell, Wendell  
1955 "Anomie, social isolation and class structure". Sociometry 20 (June): 105-116.

Bell, Wendell and M. Boat  

Bell, Wendell and M. Force  
1956 "Social structure and participation in different types of formal associations". Social Forces 34: 345-350.

Black, Therel R.  

Bohrnstedt, George W.  

Brown, E.  
Campbell, Ernest Q. and C. Norman Alexander

Copp, James H. and Robert C. Clark
1956 "Factors associated with re-enrollment in 4-H clubs". Wisconsin Agricultural Experiment Station Bulletin, Madison, Wisconsin.

Dean, Dwight

De Tocqueville, Alexis

Deveraux, Edward C., Jr.

Dotson, F.
1951 "Patterns of voluntary association among urban working-class families". American Sociological Review 16: 687-693.

Downing, Joseph
1957 "Factors affecting the selective use of a social club for the aged". Journal of Gerontology 12 (January): 81-84.

Draper, N. R. and H. Smith

Erbe, William

Fishbein, M.

Flinn, William L.
Foskett, J.

Freeman, Howard, Edwin Novak and Leo Reeder

Guttman, L.

Hagedorn, Robert and Sanford Labovitz

Harp, John

Hausknecht, M.

Hodge, Robert W. and David J. Treiman

Jacoby, Arthur P.
1966  "Personal influence and primary relationships: their effect on associational membership". Sociological Quarterly 7: 76-84.

Jesser, Clinton
1967  "Community satisfaction patterns of professionals in rural areas". Rural Sociology 32 (March): 56-69.

Kelley, Harold

Kish, Leslie
1959  "Some statistical problems in research design". American Sociological Review 24, 3 (June): 328-338.


Merton, R.  

Milbrath, Lester W.  

Milbrath, L. W. and W. Klein  

Moore, Wilbert E.  

Morton, L. and M. Siegel  

Mulford, Charles L. and Gerald E. Klonglan  

Mussen, P. and A. Wyszynski  

Nelson, Joel I.  


Nie, N. H., D. H. Bent and C. H. Hull  

Nunnally, Jim C.  

Olson, Marvin E.  
Olson, Mancur, Jr.

Orum, Anthony M.

Rogers, David L.

Rose, Arnold M.

Rose, Arnold M.

Rose, Arnold M.

Rosenberg, M.

Schwirian, Kent P. and Margaret L. Helfrich

Scott, J., Jr.

Sherif, M.
Sills, D. L.  

Smith, David H.  

Spinard, William  

Srole, Leo  

Tannenbaum, Arnold S. and Jerald G. Backman  

Walker, Helen M. and Joseph Lev  

Warner, W. Keith  

Warner, W. and P. Lunt  
1941  The Social Life of a Modern Community. New York: Yale University.

Warren, Richard D., Gerald Klonglan and Medhat M. Sabri  
"The certainty method: its application and usefulness in developing empirical measures in social sciences". Report 82, Department of Sociology, Iowa State University.

Williams, Margaret A.  
Wilson, Everett K.

Wirth, L.

Wright, Charles and Herbert Hyman

Zald, Mayer and Roberta Asch
ACKNOWLEDGMENTS

My sincere appreciation is extended to the many individuals who have contributed to this dissertation and my educational experiences at Iowa State University. I am most grateful to Dr. Gordon Bultena my major professor for his patience and advice throughout my program. My gratitude is also extended to Drs. Dwight Dean, Arnold Kahn, Gerald Klonglan, and Richard Warren who have served on my program of studies committee.

Steffany Lennard and Liz Porter who aided in preparing rough drafts of this manuscript deserve my special thanks which is also extended to Pat Gunnells who typed the final draft.

Finally, I express my deepest appreciation to my wife Marilee for the moral support she has provided me over the past three years. I am also appreciative of the support and faith demonstrated by my own parents and by Marilee's parents.
APPENDIX A

A List of Questions Asked in the Study with Scoring Codes
General Attitudes Toward Collective Involvement:

Here are some statements made about organized groups. Please tell me, in light of your past experience in groups, how you feel. We realize that individual groups differ; we just want your opinions about groups in general.

1. Forming a group generally offers an effective way of tackling a local problem. Do you strongly agree, agree, are you undecided, disagree, or strongly disagree with this statement?

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Most community groups are more interested in having a good time than in solving local problems.

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. Organized groups tend to be cliquish.

<table>
<thead>
<tr>
<th>SA</th>
<th>S</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Most community groups are not very democratic in the way they are run.

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Leaders of organized groups usually are important people in the community.

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

6. Leaders of most organized groups have a way of using group members for their own selfish purposes.

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
7. One problem with organized groups is that usually a few members have most of the say about what the organization does.

   SA     A     U     D     SD
   1     2     3     4     5

8. Members of organized groups can, through their leadership, have an effective voice in local affairs.

   SA     A     U     D     SD
   5     4     3     2     1

9. Organized groups usually have a great deal of influence in local affairs.

   SA     A     U     D     SD
   5     4     3     2     1

10. For the most part, community groups truly reflect the views of their individual members.

    SA     A     U     D     SD
    5     4     3     2     1

**Action Strategy Preference:**

What would you be likely to do if a government agency was proposing a program in this area which you strongly opposed? Do you think you would be likely to:

1. Write your elected officials?
   ___ 1  Yes 0  No

2. Write officials in the agency responsible for the program?
   ___ 1  Yes 0  No

3. Try to meet with agency officials working on the program?
   ___ 1  Yes 0  No

4. Join a group which was organized to fight the program?
   ___ 1  Yes 0  No
Perception of Treatment:

Now could we talk about what happens when people oppose a government program. Would you tell me what you think would happen if you took one of these actions?

1. If you wrote elected officials:
   - 0 they probably would just send back a form letter and pay no real attention to your letter
   - 1 your letter probably would receive their careful consideration and might well influence their decision making

2. Writing officials in government agencies:
   - 0 is a waste of time since they're not really interested in what you have to say
   - 1 probably will be helpful since they want to know how the public feels about their programs

3. Public meetings held by government officials:
   - 1 offer an excellent opportunity for local people to influence how a government program will be developed
   - 0 are just a way of making local people think they are important, without giving them any real say in decision making

4. Starting up a group to fight a government program:
   - 0 is a waste of time since the group probably won't be listened to anyway
   - 1 offers one of the best ways of influencing government decisions
Subjective Competence:

How do you feel about these statements? Do you strongly agree, agree, are you undecided, disagree, or strongly disagree?

1. Public officials don't really care about what people like me think.
   SA   A   U   D   SD
   5  4  3  2  1

2. Voting is the only way that people like me can really influence government programs.
   SA   A   U   D   SD
   5  4  3  2  1

3. Sometimes politics and government seem so complicated that I can't really understand what is going on.
   SA   A   U   D   DS
   5  4  3  2  1

4. People like me don't have any real say in what the government does.
   SA   A   U   D   SD
   5  4  3  2  1

Awareness:

Several local groups have spoken out on the Jefferson Reservoir. Are you aware of a group called:

   _0-1_ a) Citizens United to Save the Valley?

   _0-1_ b) Raccoon Valley Lake Authority?
Individual Involvement:

We are interested in learning how you have made your feelings known to others about the Jefferson Reservoir.

1. At any time have you discussed the proposed reservoir with other members of your family?
   
   1 Yes 0 No

2. Have you ever discussed the reservoir with any of your neighbors or friends?
   
   1 Yes 0 No

3. Have you ever personally talked to any politicians or government officials about the reservoir?
   
   1 Yes 0 No

4. Have you ever attended any public discussions or educational programs which have dealt with the proposed reservoir?
   
   1 Yes 0 No

5. Have you written any letters to express your opinions on this project?
   
   1 Yes 0 No

6. Have you signed any petitions either supporting or opposing the Jefferson Reservoir?
   
   1 Yes 0 No

Collective Involvement:

1. Do you belong to any of the groups that we have been talking about?
   
   1 Yes 0 No

2. Do you attend most of the meetings, some of the meetings, or few of the meetings of 3-2-1?
3. Do you personally take part in the discussions and business of 3-2-1 all the time, some of the time, or hardly ever?

4. Are you an officer of 1-0?

5. Are you on any committees in 1-0?

Perceived Reference Group Effects:

1. Does your husband/wife belong to any of these organizations?
   
   0 No
   
   1 Yes - to what organizations does he/she belong?

2. Would you say that most, some, few, or none of your friends belong to 4-3-2-1?

3. How would you describe public sentiment in this community? Is there a great deal of importance, some importance, or little importance put on people joining community groups?
   
   3 Great deal of importance
   
   2 Some importance
   
   1 Little importance

Specific Attitudes Toward Opportunities for Collective Involvement:

Next, I would like to ask you about two groups in this area that have been especially active in the Jefferson Reservoir issue: the Faccoon Valley Lake Authority and Citizens United to Save the Valley. First, let's talk about the Raccoon Valley Lake Authority.
1. How successful do you think the ______ has been in recruiting members from this area - very successful, successful, or not too successful?

4 ___ Very successful
3 ___ Successful
1 ___ Not too successful
2 ___ (Unsure)

2. Would you say that ______ has had a great deal of influence, some influence, or no influence on governmental decisions that have been made about the Jefferson Reservoir?

4 ___ Great deal of influence
3 ___ Some influence
1 ___ No influence
2 ___ (Unsure)

3. Do you think the way ______ operates can best be described as very democratic, somewhat democratic, or not at all democratic?

4 ___ Very democratic
3 ___ Somewhat democratic
1 ___ Not at all democratic
2 ___ (Unsure)

4. How would you describe the tactics used by ______ for influencing the decisions on the Jefferson Reservoir? Are they proper, or improper?

3 ___ Proper
1 ___ Improper
2 ___ (Unsure)
5. Do you think that ______ has too many members, about enough members, or too few members to be an effective organization?

2 _____ Too many members ____
4 _____ Enough ____
1 _____ Too few ____
3 _____ (Unsure) ____

6. In your opinion, have members of ______ put a great deal of pressure, some pressure, or no pressure on other people to join their organization?

4 _____ Great deal of pressure ____
3 _____ Some ____
1 _____ None ____
2 _____ (Unsure) ____

7. How accurately would you say ______ reflects the views of its individual members? Would you say very accurately, accurately, or not too accurately?

4 _____ Very accurately ____
3 _____ Accurately ____
1 _____ Not too accurately ____
2 _____ (Unsure) ____

8. How well thought of is ______ in this community? Is it very well thought of, well thought of, or not too well thought of?

4 _____ Very well thought of ____
3 _____ Well thought of ____
1 _____ Not too well thought of ____
2 _____ (Unsure) ____
Participant Orientation:

Please tell me how you feel about these statements concerning the role of public participation in government programs.

1. Democracy, to work, requires the active participation of every citizen. Do you strongly agree, agree, are undecided, disagree, or strongly disagree?

SA A U D SD
5 4 3 2 1

2. Residents in the vicinity of the Jefferson Reservoir should make their views known on this

SA A U D SD
5 4 3 2 1

3. Residents in the Raccoon Valley area are better qualified to decide about the desirability of building the Jefferson Reservoir than is an agency in Washington.

SA A U D SD
5 4 3 2 1

4. The public should keep itself informed about the use of public monies.

SA A U D SD
5 4 3 2 1

5. Responsibility for all public programs ultimately should rest with the public.

SA A U D SD
5 4 3 2 1

6. Responsibility for suggesting alternative ways for developing the Raccoon River Valley rests with the public.

SA A U D SD
5 4 3 2 1
Subject Orientation:

Please tell me how you feel about these statements concerning the role of public participation in government programs.

1. Our government employs experts who make decisions for the good of the public.

   SA  A  U  D  SD
   5  4  3  2  1

2. It is not necessary for the government to consult the local population to make a correct decision with regard to building the Jefferson Reservoir.

   SA  A  U  D  SD
   5  4  3  2  1

3. Administrators in government agencies are better qualified to decide on what projects are needed than is the general public.

   SA  A  U  D  SD
   5  4  3  2  1

4. Residents in this area should not expect to participate in the decision making activities of federal agencies.

   SA  A  U  D  SD
   5  4  3  2  1

5. Instead of criticizing the Army Corps of Engineers, the public should be thankful for their help in getting the reservoir built.

   SA  A  U  D  SD
   5  4  3  2  1

6. A citizen's obligation to participate in decision making by government agencies largely ends once he has voted.

   SA  A  U  D  SD
   5  4  3  2  1
Socioeconomic Status:

1. How many years of education have you completed?
   _1_ 8 years or less
   _2_ 9-11 years
   _3_ Completed high school
   _4_ Completed 4-year college program (B.A. or B.S. degree)
   _5_ Some graduate or professional work
   _6_ Other (SPECIFY)

2. Please tell me which letter best corresponds to your total family income last year.
   _1_ A
   _2_ B
   _3_ C
   _4_ D
   _5_ E
   _6_ F
   _7_ G
   ___ Other (SPECIFY)

3. Are you presently employed?
   ____ Not employed
   ____ Employed
   What is the nature of your work?
APPENDIX B

Interitem Correlations Used in Scale Construction
General attitudes toward collective involvement:

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.24</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.23</td>
<td>.42</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.24</td>
<td>.33</td>
<td>.36</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.01</td>
<td>.16</td>
<td>.14</td>
<td>.16</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.31</td>
<td>.40</td>
<td>.36</td>
<td>.41</td>
<td>.07</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.23</td>
<td>.31</td>
<td>.39</td>
<td>.32</td>
<td>.11</td>
<td>.42</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.29</td>
<td>.03</td>
<td>.03</td>
<td>.05</td>
<td>.08</td>
<td>.16</td>
<td>.11</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.11</td>
<td>.02</td>
<td>.06</td>
<td>.03</td>
<td>.03</td>
<td>.10</td>
<td>.15</td>
<td>.29</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.05</td>
<td>.11</td>
<td>.19</td>
<td>.16</td>
<td>.19</td>
<td>.20</td>
<td>.18</td>
<td>.15</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Subjective competence:

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.39</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.23</td>
<td>.18</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.51</td>
<td>.29</td>
<td>.31</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Specific attitudes toward opportunities for collective involvement:

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.54</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.54</td>
<td>.48</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.44</td>
<td>.27</td>
<td>.48</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.28</td>
<td>.36</td>
<td>.09</td>
<td>.08</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.05</td>
<td>.02</td>
<td>.12</td>
<td>.15</td>
<td>.04</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.50</td>
<td>.41</td>
<td>.54</td>
<td>.37</td>
<td>.18</td>
<td>.02</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.52</td>
<td>.40</td>
<td>.53</td>
<td>.42</td>
<td>.14</td>
<td>.02</td>
<td>.60</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Participant orientation:

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.19</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.50</td>
<td>.11</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.52</td>
<td>.24</td>
<td>.39</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.15</td>
<td>.08</td>
<td>.18</td>
<td>.11</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.15</td>
<td>.15</td>
<td>.18</td>
<td>.13</td>
<td>.07</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Subject orientation:

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.45</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.34</td>
<td>.49</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.26</td>
<td>.37</td>
<td>.44</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.29</td>
<td>.46</td>
<td>.59</td>
<td>.40</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.14</td>
<td>.34</td>
<td>.34</td>
<td>.20</td>
<td>.34</td>
<td>1.00</td>
</tr>
</tbody>
</table>
APPENDIX C

Frequency Distributions for Major Scales
General Attitudes Toward Collective Involvement:

1. Forming a group generally offers an effective way of tackling a local problem. Do you strongly agree, agree, are you undecided, disagree, or strongly disagree with this statement?

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>0</th>
<th>9</th>
<th>10</th>
<th>210</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>81</td>
<td>12</td>
</tr>
</tbody>
</table>

2. Most community groups are more interested in having a good time than in solving local problems.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>4</th>
<th>62</th>
<th>21</th>
<th>164</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>2</td>
<td>24</td>
<td>8</td>
<td>63</td>
<td>3</td>
</tr>
</tbody>
</table>

3. Organized groups tend to be cliquish.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>4</th>
<th>121</th>
<th>34</th>
<th>95</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>2</td>
<td>47</td>
<td>13</td>
<td>37</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Most community groups are not very democratic in the way they are run.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>1</th>
<th>52</th>
<th>46</th>
<th>154</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>1</td>
<td>20</td>
<td>18</td>
<td>60</td>
<td>2</td>
</tr>
</tbody>
</table>

5. Leaders of organized groups usually are important people in the community.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>2</th>
<th>40</th>
<th>23</th>
<th>189</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>1</td>
<td>15</td>
<td>9</td>
<td>173</td>
<td>2</td>
</tr>
</tbody>
</table>
6. Leaders of most organized groups have a way of using group members for their own selfish purposes.

   N   1   58   36   156   8
   SA  A   U   D   SD
   %   1   22   14   60   3

7. One problem with organized groups is that usually a few members have most of the say about what the organization does.

   N   6   5   142   21   86
   SA  A   U   D   SD
   %   3   2   55   8   32

8. Members of organized groups can, through their leadership, have an effective voice in local affairs.

   N   80   6   11   223   19
   SA  A   U   D   SD
   %   0   3   4   86   7

9. Organized groups usually have a great deal of influence in local affairs.

   N   0   25   33   193   8
   SA  A   U   D   SD
   %   0  10  13   75   3

10. For the most part, community groups truly reflect the views of their individual members.

    N   0   14   25   209   11
    SA  A   U   D   SD
    %   0   5  10   81   4
Action Strategy Preference:

What would you be likely to do if a government agency was proposing a program in this area which you strongly opposed? Do you think you would be likely to:

1. Write your elected officials?
   
   N 195 Yes 64 No
   % 75 25

2. Write officials in the agency responsible for the program?
   
   N 175 Yes 84 No
   % 68 32

3. Try to meet with agency officials working on the program?
   
   N 180 Yes 79 No
   % 70 30

4. Join a group which was organized to fight the program?
   
   N 212 Yes 47 No
   % 82 18

Perception of Treatment:

Now could we talk about what happens when people oppose a government program. Would you tell me what you think would happen if you took one of these actions?

1. If you wrote elected officials:
   
   N 101 they probably would just send back a form letter
   % 39 and pay no real attention to your letter
   or

   N 158 your letter probably would receive their careful
   % 61 consideration and might well influence their decision making
2. Writing officials in government agencies:

N 46 is a waste of time since they're not really interested in what you have to say

or

N 213 probably will be helpful since they want to know how the public feels about their programs

3. Public meetings held by government officials:

N 88 offer an excellent opportunity for local people to influence how a government program will be developed

or

N 171 are just a way of making local people think they are important, without giving them any real say in decision making

4. Starting up a group to fight a government program:

N 39 is a waste of time since the group probably won't be listened to anyway

or

N 120 offers one of the best ways of influencing government decisions

Subjective Competence:

How do you feel about these statements? Do you strongly agree, agree, are you undecided, disagree, or strongly disagree?

1. Public officials don't really care about what people like me think.

N 8 134 28 79 10

SA A U D SD

% 3 52 10 31 4
2. Voting is the only way that people like me can really influence government programs.

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>94</th>
<th>13</th>
<th>146</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>36</td>
<td>5</td>
<td>56</td>
<td>2</td>
</tr>
</tbody>
</table>

3. Sometimes politics and government seem so complicated that I can't really understand what is going on.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>43</th>
<th>9</th>
<th>162</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>16</td>
<td>4</td>
<td>63</td>
<td>16</td>
</tr>
</tbody>
</table>

4. People like me don't have any real say in what the government does.

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>139</th>
<th>16</th>
<th>95</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>54</td>
<td>6</td>
<td>37</td>
<td>2</td>
</tr>
</tbody>
</table>

Participant Orientation:

Please tell me how you feel about these statements concerning the role of public participation in government programs.

1. Democracy, to work, requires the active participation of every citizen. Do you strongly agree, agree, are undecided, disagree, or strongly disagree?

<table>
<thead>
<tr>
<th></th>
<th>46</th>
<th>191</th>
<th>9</th>
<th>13</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>17</td>
<td>74</td>
<td>4</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>
2. Residents in the vicinity of the Jefferson Reservoir should make their views known on this project.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>73</td>
<td>182</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>27</td>
<td>71</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

3. Residents in the Raccoon Valley area are better qualified to decide about the desirability of building the Jefferson Reservoir than is an agency in Washington.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>59</td>
<td>150</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>21</td>
<td>61</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

4. The public should keep itself informed about the use of public monies.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>74</td>
<td>184</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>28</td>
<td>71</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

5. Responsibility for all public programs ultimately should rest with the public.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>9</td>
<td>182</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>4</td>
<td>70</td>
<td>12</td>
<td>13</td>
</tr>
</tbody>
</table>

6. Responsibility for suggesting alternative ways for developing the Raccoon River Valley rests with the public.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>10</td>
<td>168</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>4</td>
<td>65</td>
<td>12</td>
<td>17</td>
</tr>
</tbody>
</table>
Subject Orientation:

Please tell me how you feel about these statements concerning the role of public participation in government programs.

1. Our government employs experts who make decisions for the good of the public.
   
<table>
<thead>
<tr>
<th>N</th>
<th>7</th>
<th>94</th>
<th>73</th>
<th>75</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>3</td>
<td>36</td>
<td>27</td>
<td>30</td>
<td>4</td>
</tr>
</tbody>
</table>

2. It is not necessary for the government to consult the local population to make a correct decision with regard to building the Jefferson Reservoir.
   
<table>
<thead>
<tr>
<th>N</th>
<th>2</th>
<th>24</th>
<th>5</th>
<th>168</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>65</td>
<td>23</td>
</tr>
</tbody>
</table>

3. Administrators in government agencies are better qualified to decide on what projects are needed than is the general public.
   
<table>
<thead>
<tr>
<th>N</th>
<th>2</th>
<th>52</th>
<th>39</th>
<th>148</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>21</td>
<td>15</td>
<td>57</td>
<td>6</td>
</tr>
</tbody>
</table>

4. Residents in this area should not expect to participate in the decision making activities of federal agencies.
   
<table>
<thead>
<tr>
<th>N</th>
<th>9</th>
<th>15</th>
<th>201</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td>A</td>
<td>U</td>
<td>D</td>
</tr>
<tr>
<td>%</td>
<td>4</td>
<td>6</td>
<td>78</td>
<td>12</td>
</tr>
</tbody>
</table>
5. Instead of criticizing the Army Corps of Engineers, the public should be thankful for their help in getting the reservoir built.

<table>
<thead>
<tr>
<th>N</th>
<th>3</th>
<th>87</th>
<th>48</th>
<th>88</th>
<th>28</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>34</td>
<td>19</td>
<td>35</td>
<td>11</td>
</tr>
</tbody>
</table>

6. A citizen's obligation to participate in decision making by government agencies largely ends once he has voted.

<table>
<thead>
<tr>
<th>N</th>
<th>2</th>
<th>80</th>
<th>23</th>
<th>145</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>31</td>
<td>9</td>
<td>56</td>
<td>3</td>
</tr>
</tbody>
</table>
APPENDIX D

Additional Statistics for Variables in the Model
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>3.2</td>
<td>1.4</td>
<td>.09</td>
<td>6</td>
</tr>
<tr>
<td>Income</td>
<td>4.7</td>
<td>1.5</td>
<td>.09</td>
<td>6</td>
</tr>
<tr>
<td>Occupation</td>
<td>4.2</td>
<td>3.2</td>
<td>.26</td>
<td>7</td>
</tr>
<tr>
<td>Subjective Competence</td>
<td>11.3</td>
<td>2.8</td>
<td>.17</td>
<td>13</td>
</tr>
<tr>
<td>Participant Orientation</td>
<td>23.9</td>
<td>2.4</td>
<td>.15</td>
<td>17</td>
</tr>
<tr>
<td>Subject Orientation</td>
<td>15.6</td>
<td>3.4</td>
<td>.21</td>
<td>23</td>
</tr>
<tr>
<td>Involvement Strategy Preference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Form)</td>
<td>2.3</td>
<td>1.0</td>
<td>.06</td>
<td>3</td>
</tr>
<tr>
<td>(Overall)</td>
<td>5.3</td>
<td>1.2</td>
<td>.07</td>
<td>5</td>
</tr>
<tr>
<td>Perception of Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Form)</td>
<td>.4</td>
<td>.4</td>
<td>.03</td>
<td>2</td>
</tr>
<tr>
<td>(Overall)</td>
<td>.7</td>
<td>1.4</td>
<td>.08</td>
<td>9</td>
</tr>
<tr>
<td>General Attitudes toward Collective Involvement</td>
<td>35.3</td>
<td>4.2</td>
<td>.26</td>
<td>37</td>
</tr>
<tr>
<td>Specific Attitudes toward Opportunities for Collective Involvement</td>
<td>36.2</td>
<td>20.0</td>
<td>1.2</td>
<td>63</td>
</tr>
<tr>
<td>Perceived Reference Group Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Friends)</td>
<td>3.1</td>
<td>1.3</td>
<td>.09</td>
<td>4</td>
</tr>
<tr>
<td>(Spouse)</td>
<td>1.1</td>
<td>.41</td>
<td>.02</td>
<td>2</td>
</tr>
<tr>
<td>(Community)</td>
<td>2.3</td>
<td>.91</td>
<td>.05</td>
<td>4</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(form)</td>
<td>1.2</td>
<td>1.0</td>
<td>.06</td>
<td>3</td>
</tr>
<tr>
<td>(Intensity)</td>
<td>5.2</td>
<td>2.4</td>
<td>.15</td>
<td>16</td>
</tr>
</tbody>
</table>
Table E-1. Inter variable correlations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.0</td>
<td>.40</td>
<td>.29</td>
<td>.63</td>
<td>.37</td>
<td>.09</td>
<td>.17</td>
<td>.23</td>
<td>.39</td>
<td>.16</td>
<td>.26</td>
<td>.29</td>
<td>.01</td>
<td>.20</td>
<td>.23</td>
<td>.54</td>
<td>.57</td>
</tr>
<tr>
<td>2</td>
<td>.40</td>
<td>1.0</td>
<td>.12</td>
<td>.63</td>
<td>.37</td>
<td>.09</td>
<td>.17</td>
<td>.23</td>
<td>.39</td>
<td>.16</td>
<td>.26</td>
<td>.29</td>
<td>.01</td>
<td>.20</td>
<td>.23</td>
<td>.54</td>
<td>.57</td>
</tr>
<tr>
<td>3</td>
<td>.12</td>
<td>.19</td>
<td>1.0</td>
<td>.57</td>
<td>.13</td>
<td>.05</td>
<td>.12</td>
<td>.17</td>
<td>.34</td>
<td>.19</td>
<td>.24</td>
<td>.18</td>
<td>.07</td>
<td>.04</td>
<td>.09</td>
<td>.19</td>
<td>.38</td>
</tr>
<tr>
<td>4</td>
<td>.29</td>
<td>.63</td>
<td>.29</td>
<td>1.0</td>
<td>.08</td>
<td>.13</td>
<td>.04</td>
<td>.03</td>
<td>.04</td>
<td>.23</td>
<td>.27</td>
<td>.15</td>
<td>.02</td>
<td>.00</td>
<td>.08</td>
<td>.12</td>
<td>.03</td>
</tr>
<tr>
<td>5</td>
<td>.29</td>
<td>.37</td>
<td>.08</td>
<td>.09</td>
<td>1.0</td>
<td>.04</td>
<td>.12</td>
<td>.12</td>
<td>.05</td>
<td>.12</td>
<td>.13</td>
<td>.12</td>
<td>.10</td>
<td>.09</td>
<td>.08</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>6</td>
<td>.09</td>
<td>.09</td>
<td>.12</td>
<td>.17</td>
<td>.23</td>
<td>1.0</td>
<td>.16</td>
<td>.10</td>
<td>.34</td>
<td>.16</td>
<td>.26</td>
<td>.15</td>
<td>.07</td>
<td>.07</td>
<td>.04</td>
<td>.17</td>
<td>.18</td>
</tr>
<tr>
<td>7</td>
<td>.17</td>
<td>.12</td>
<td>.14</td>
<td>.12</td>
<td>.12</td>
<td>.16</td>
<td>1.0</td>
<td>.05</td>
<td>.21</td>
<td>.19</td>
<td>.19</td>
<td>.19</td>
<td>.05</td>
<td>.05</td>
<td>.01</td>
<td>.09</td>
<td>.03</td>
</tr>
<tr>
<td>9</td>
<td>.23</td>
<td>.17</td>
<td>.12</td>
<td>.14</td>
<td>.12</td>
<td>.16</td>
<td>.16</td>
<td>1.0</td>
<td>.16</td>
<td>.14</td>
<td>.25</td>
<td>.27</td>
<td>.13</td>
<td>.09</td>
<td>.12</td>
<td>.05</td>
<td>.02</td>
</tr>
<tr>
<td>10</td>
<td>.09</td>
<td>.09</td>
<td>.25</td>
<td>.27</td>
<td>.13</td>
<td>.09</td>
<td>.12</td>
<td>.13</td>
<td>1.0</td>
<td>.26</td>
<td>.27</td>
<td>.14</td>
<td>.10</td>
<td>.24</td>
<td>.05</td>
<td>.22</td>
<td>.15</td>
</tr>
<tr>
<td>11</td>
<td>.05</td>
<td>.04</td>
<td>.27</td>
<td>.24</td>
<td>.10</td>
<td>.24</td>
<td>.14</td>
<td>.12</td>
<td>.25</td>
<td>1.0</td>
<td>.29</td>
<td>.18</td>
<td>.15</td>
<td>.05</td>
<td>.19</td>
<td>.22</td>
<td>.57</td>
</tr>
<tr>
<td>12</td>
<td>.03</td>
<td>.06</td>
<td>.03</td>
<td>.02</td>
<td>.09</td>
<td>.04</td>
<td>.04</td>
<td>.08</td>
<td>.08</td>
<td>.05</td>
<td>1.0</td>
<td>.29</td>
<td>.18</td>
<td>.05</td>
<td>.12</td>
<td>.30</td>
<td>.25</td>
</tr>
<tr>
<td>13</td>
<td>.03</td>
<td>.04</td>
<td>.05</td>
<td>.02</td>
<td>.09</td>
<td>.04</td>
<td>.04</td>
<td>.08</td>
<td>.01</td>
<td>.20</td>
<td>.05</td>
<td>1.0</td>
<td>.29</td>
<td>.18</td>
<td>.05</td>
<td>.12</td>
<td>.30</td>
</tr>
<tr>
<td>14</td>
<td>.02</td>
<td>.04</td>
<td>.03</td>
<td>.02</td>
<td>.09</td>
<td>.04</td>
<td>.04</td>
<td>.08</td>
<td>.01</td>
<td>.20</td>
<td>.05</td>
<td>.09</td>
<td>1.0</td>
<td>.29</td>
<td>.18</td>
<td>.05</td>
<td>.12</td>
</tr>
<tr>
<td>15</td>
<td>.02</td>
<td>.04</td>
<td>.03</td>
<td>.02</td>
<td>.09</td>
<td>.04</td>
<td>.04</td>
<td>.08</td>
<td>.01</td>
<td>.20</td>
<td>.05</td>
<td>.09</td>
<td>.09</td>
<td>1.0</td>
<td>.29</td>
<td>.18</td>
<td>.05</td>
</tr>
<tr>
<td>16</td>
<td>.02</td>
<td>.04</td>
<td>.03</td>
<td>.02</td>
<td>.09</td>
<td>.04</td>
<td>.04</td>
<td>.08</td>
<td>.01</td>
<td>.20</td>
<td>.05</td>
<td>.09</td>
<td>.09</td>
<td>.09</td>
<td>1.0</td>
<td>.29</td>
<td>.18</td>
</tr>
<tr>
<td>17</td>
<td>.02</td>
<td>.04</td>
<td>.03</td>
<td>.02</td>
<td>.09</td>
<td>.04</td>
<td>.04</td>
<td>.08</td>
<td>.01</td>
<td>.20</td>
<td>.05</td>
<td>.09</td>
<td>.09</td>
<td>.09</td>
<td>.09</td>
<td>1.0</td>
<td>.29</td>
</tr>
</tbody>
</table>