A study was conducted to investigate, using a portion of Smith's Sequential Specificity Model, the relationship between social background, personality, and attitudinal factors and the participation of adult volunteers in the 4-H program in Ohio. Data were collected from a sample of 300 adult 4-H volunteers in Ohio through a mailed questionnaire; a response rate of 72 percent was achieved. The study found that the social background factors positively associated with continued participation were (1) having children in 4-H and (2) having a spouse as a leader. Previous experience as a 4-H member was negatively associated with continued participation. Age, length of residence in the community, and number of children under the age of 9 years were positively associated with a leader's length of service. Number of children ages 12-14 was negatively associated with length of service, suggesting that as a leader's children leave the program, the leader stops serving. Homemakers contributed more hours of service than persons in other categories. Several attitudinal factors, such as attractiveness of 4-H, perceived instrumental value of the leader, flexibility, and influence of significant others, were all positive for involvement in 4-H. Finally, the study determined that a leader's length of service increased if he/she were older, had a spouse as a leader, had children in 4-H, was not a laborer, and perceived 4-H as having something to offer the leader personally. The study recommended that further research be conducted on additional attitudinal and personality factors that may influence volunteering, and investigate why the relationships found in this study, such as previous members failing to volunteer, occur. (KC)
SCHOLAR BACKGROUND, PERSONALITY AND ATTITUDBAL FACTORS INFLUENCING THE DECISION TO VOLUNTEER AND LEVEL OF INVOLVEMENT AMONG ADULT 4-H LEADERS

FREDERICK R. ROHS AND J. ROBERT WARMBROD

INTRODUCTION

Volunteer and voluntary associations have been part of the American scene since the founding of the nation. Schindler-Rainman and Lippitt (1971) indicated that the trends and changes emerging in the world of volunteerism are exciting because they indicate that volunteerism is once again becoming one of the major means of providing human services. These researchers pointed out that as paid professional service declines, compared to the para-professional and volunteer service, more people will be needed in meaningful volunteer activity. The supply of volunteers is a concern of many agencies and institutions.
A Census Bureau survey conducted in April, 1974 indicated that approximately 37 million Americans over 14 years of age volunteered for some formal voluntary group or organization that year. Others estimate the figure to be as high as 50-70 million (Wilson, 1976). In spite of the vast numbers of the volunteer work force, Boyle and Doughlah (1964) and Coleman (1979) reported that most youth organizations express concern about the scarcity of volunteer youth leaders. One major key to the success of 4-H is volunteer leaders. (Weaver, 1975; Bruny, 1981, Lang, 1979).

To aid in the identification and recruitment of the 4-H volunteer leaders, a more thorough understanding of the factors associated with individual volunteer participation in the 4-H program is needed. Smith and Reddy (1971) have proposed that reasons for volunteering include not only social background factors such as age, sex and educational level, but also personality traits and attitudes conducive to volunteer participation.

Smith (1966) proposed a framework of the various factors that influence voluntary participation. Smith termed his framework the Sequential Specificity Model to link, in a causal and time sequence manner, the various factors identified in the research and literature as important independent variables for the prediction of organized voluntary activity.

Using a portion of Smith's Sequential Specificity Model, various personal factors such as social background, personality and attitudinal factors influencing voluntary participation in 4-H were investigated. A schematic sketch of the model in this study is presented in Figure 1.

The Sequential Specificity Model of Voluntary Action (Figure 1) hypothesizes social background factors influencing personality factors. Personality factors, in turn, influence various general and specific attitudinal factors. These various general and specific attitudinal factors directly influence the dependent variable voluntary participation.

PURPOSE AND OBJECTIVES

The purpose of this study was to investigate, using the classificatory scheme offered by Smith and Reddy (1971), the relationship between social background, personality and attitudinal factors and the participation of adult volunteers in the 4-H program in Ohio. Specific objectives were as follows:

1. To describe selected social background characteristics of adult 4-H volunteer leaders and their relationship to a person's level of involvement and decision to volunteer as a 4-H leader. The social background characteristics were age, sex, marital status, income, educational level, occupational status, length of time as a resident of the community, previous experience as a 4-H member, number of years of leadership in 4-H, number and ages of children and interpersonal roles within the family.
2. To describe the personality factor, level of individual flexibility, exhibited by adult 4-H volunteer leaders and its relationship to volunteering as a 4-H leader and the level of involvement as a 4-H leader.

3. To describe selected attitudinal characteristics of adult 4-H volunteer leaders and their relationship to volunteering as a 4-H leader and their level of involvement as a 4-H leader. Specifically, attitudes investigated included those relating to the instrumental value of the organization as seen by the volunteers, attractiveness of the organization and the role of significant others in influencing an individual to volunteer as a 4-H leader.

PROCEDURE

The data were obtained from 4-H leaders who served as 4-H club leaders in Ohio during the 1981 4-H year. Lists of Ohio 4-H leaders for the 1981 4-H year were obtained from a random sample of 30 Ohio counties. From these leader lists, a proportionate random sample was selected from the population. A total of 300 individuals was selected for the sample.

The questionnaire was constructed to collect information on the social background factors, the personality factor flexibility and the attitudinal factors pertaining to attractiveness, instrumental value, and the role of significant others in a person's decision to volunteer. Scales were constructed to measure a person's degree of attractiveness and instrumental value of 4-H. Instrumental value of 4-H and attractiveness were defined as follows:

Instrumental value of 4-H - the extent to which the 4-H organization is needed in society, what purpose does it serve, what benefits does society reap from the existence of this organization.

Attractiveness - what benefits does the individual volunteer leader reap from the 4-H organization, what is so special to the individual about this organization.

The California Psychological Inventory Flexibility Scale was used to measure the personality factor flexibility. Flexibility was defined as the adaptability of a person's thinking and social behavior; their liking for change and innovation and even their preference for things new and untried (Lake, Miles and Earle, 1973). Continued participation as a 4-H leader, length of service and level of involvement were the dependent variables in the study.

The instrument was field tested with 30 Ohio 4-H Adult Volunteer leaders. Cronbach's Alpha coefficients were computed for the three scales. The reliability coefficients for the scales were: Attractiveness of 4-H, .86; Instrumental value of 4-H, .90; and Flexibility, .73.
Data were collected by mail questionnaires. To increase the rate of response, follow-up mailings were administered to the non-respondents. This resulted in 72 percent of the leaders responding. The data were analyzed using the services of the Instruction and Research Computer Center of The Ohio State University.

Findings

Characteristics of Ohio 4-H Volunteer Leaders

The average age of the respondents was 39 years. Over 70 percent were female. Over 60 percent of these individuals participated in 4-H as a youth. Eighty-four percent of the respondents were married. Eighty-eight percent of the leaders had children. The number of children by leaders ranged from one to seven with an average number of children of three per family. Seventy-three percent of the leaders reported their children were in 4-H. Twenty-six percent of the leaders identified themselves as "home-makers," 24 percent were employed in some professional field, 24 percent in business, 10 percent in farming and the remaining leaders were either retired or college students.

Seventy-four percent of the leaders resided in a rural area and have lived in their present location for an average of 15.5 years. Fifty-nine percent of the leaders reported annual incomes at or above $20,000, 41 percent reported incomes below this level.

Forty-three percent of the leaders completed high school, 31 percent had some college education and 14 percent had completed college.

Eighty-one percent of the leaders indicated their parents had not been 4-H leaders. Forty-five percent of the leaders who were married indicated their spouses were also 4-H leaders.

Personality and Attitudinal Factors

To determine a person's level of flexibility, raw scores from the CPI Flexibility Scale were computed by summing the number of items answered correctly. The maximum score possible was 22; the lowest score possible was 0. The higher a person's score, the more flexibility an individual possesses. Data revealed that the mean raw score on the flexibility scale was 7.8. When compared to National norms (9.0), the respondents in this study were less flexible. Male respondents in the study scored slightly lower (mean raw score 6.5) than did female respondents (mean raw score 8.0).

Scores on the instrumental value and attractiveness scales were determined by summing the responses to the 21 items in each scale on a 5 point basis ranging from 1 (strongly disagree) to 5 (strongly agree). The data revealed 4-H volunteer leaders in this study had a favorable attitude relative to the instrumental value and attractiveness of 4-H with mean scores of 82.3 and 77.3, respectively (63 = mid point of each scale).
Leaders were also asked to indicate how much influence different people had on their decision to volunteer as a 4-H leader. The data indicated 4-H club advisors had the most influence on a person's decision to volunteer. Additional significant other categories in order of influence were "other 4-H leaders," "other 4-H'ers," "other parents," "neighbors," "community leaders," and "4-H agents," respectively.

Eighty-six percent of the respondents indicated they were continuing to serve as 4-H volunteer leaders in 1982. On the average, leaders had served 7.3 years. Leaders spent an average of 33.8 hours per month working at the local level as volunteers. Approximately one-half of this time was for participation with local 4-H members in meetings and activities. At the area and state levels, volunteer leaders worked an average of 78.8 hours per year of which 89 percent of the volunteer leaders' time was spent in participation at 4-H camps, fairs, achievement days, mall shows, and tours.

### Relationships Between Social Background, Personality and Attitudinal Factors and Continued Participation, Length of Service and Level of Involvement

In analyzing the relationships between social background, personality, attitudinal factors and continued participation, length of service and level of involvement, Pearson Product moment coefficients were calculated. Positive associations, significant at the .05 level, were found for the following factors:

1. Continued participation as a 4-H leader and having a spouse as a leader in the program ($r = .23$).
2. Continued participation as a 4-H leader and having children in the program ($r = .19$).
3. Length of service as a 4-H leader and length of residence in the community ($r = .49$).
4. Length of service as a 4-H leader and age of the leader ($r = .52$).
5. Length of service as a 4-H leader and number of children a leader had under age 9 ($r = .15$).
6. Total hours spent per month at the local level and the occupational status "homemaker" ($r = .17$).
7. Total hours spent per year at the area and state levels and the number of children a leader had in the 15-19 year age group ($r = .18$).
8. Total hours spent per year at the area and state levels and the influence of the 4-H agent ($r = .18$).
9. Total hours spent per year at the area and state levels and the influence of other parents ($r = .21$).

10. Total hours spent per month at the local level and the personality factor degree of flexibility ($r = .12$).

11. Length of service as a 4-H leader and the instrumental value of 4-H ($r = .19$).

12. Length of service as a 4-H leader and the influence of a leader's neighbors ($r = .12$).

13. Length of service as a 4-H leader and the influence of community leaders ($r = .14$).

14. Total hours spend per year at the area and state levels and the instrumental value of 4-H ($r = .16$).

Negative relationships, significant at the .05 level, existed between the following factors:

1. Continued participation as a 4-H leader and a leader's previous experience as a 4-H member ($r = -.15$).

2. Continued participation as a 4-H leader and a leader's attractiveness to 4-H ($r = -.17$).

3. Length of service as a 4-H leader and the number of children a leader had ages 12-14 ($r = -.19$).

4. Length of service as a 4-H leader and the influence of 4-H club leaders ($r = -.12$).

**Effects of Social Background, Personality and Attitudinal Factors on Continued Participation, Length of Service, and Level of Involvement**

A major objective of the study was to determine the magnitude of the effects of selected social background, personality and attitudinal factors on continued participation, length of service and level of involvement of 4-H leaders. Based on the Sequential Specificity Model proposed by Smith (1966), a causal model was constructed to depict the configuration of the sources of influence on the dependent variables (see Figure 2). The path analysis disclosed the following results:

1. Social background, personality and attitudinal factors were not significantly related to continued participation as a 4-H leader, the total hours spent per year at the area or state level or the total hours spent per month at the local level.

2. The more influence 4-H club advisors and other 4-H'ers had on a leader, the less years a person would serve as a volunteer 4-H leader (see Figure 3).
The more influence the significant other groups, other parents, neighbors, and 4-H agent, had on a leader, the longer would be the volunteer's length of service (see Figure 3).

4. The general attitudinal factor, instrumental value of 4-H, indirectly influences a leader's length of service. These effects were mediated primarily through the specific attitudinal factors of influence of other parents, influence of neighbors and influence of the 4-H agent (see Figure 3).

5. The personality factor (degree of flexibility) was not significantly related to the general attitudinal factor instrumental value of 4-H.

6. The social background factors were not significantly related to the personality factor degree of flexibility.

Analysis of the data indicates that only the general and specific attitudinal factors influenced the dependent variable length of service (Figure 3). For example, a one unit change in degree of influence of other 4-H'ers is associated with a -.342 change (expressed as a standardized path coefficient) in length of service (Figure 3). The general attitudinal factor instrumental value of 4-H indirectly influenced a leader's length of service through the specific attitudinal factors.

In Figure 3, a one unit change in the scale score for instrumental value of 4-H is associated with a .301 change in the degree of influence of neighbors. A one unit change in the degree of influence of neighbors was then associated with a .238 unit change in a leader's length of service.

The social background, personality and general attitudinal factors in the study may directly influence the dependent variable length of service, rather than influencing length of service indirectly through intervening personality and attitudinal factors. To investigate the existence of these direct relationships and isolate those predictor variables that influence the dependent variable, a step-wise regression analysis was used to determine the step-wise entry of the selected independent variables in the explanation of the variance in length of service.

Table 1 presents the summary statistics for the regression model. The step-wise regression analysis revealed that five variables explained approximately 65 percent of the variance in length of service of a 4-H volunteer leader. The variables in order of entrance were: age (34 percent of the variance explained), years as a 4-H member (added about 12 percent), whether children are in 4-H or not (added about 10 percent), attractiveness of 4-H (added about 5 percent), and occupational status of laborers (added about 4 percent). The R-squared value for the five variable model was .654, which means 65 percent of the variance in length of service was explained by the model. The remaining variables were insignificant in the reduction of the unexplained variance.

The regression analysis revealed that the variables age, years as a
4-H member, having children in 4-H, attractiveness of 4-H and the occupational status of laborer directly influenced the dependent variable length of service. Figure 4 represents a revised model whereby various social background and attitudinal factors directly influence length of service. Thus, persons who were not laborers, had children in 4-H, were older, more attracted to 4-H and served more years as a 4-H member, volunteered more years as a leader than did individuals who were laborers, did not have children in 4-H, were younger, less attracted to 4-H and were in 4-H as a youth for a shorter period of time.

**DISCUSSION AND CONCLUSIONS**

Several social background factors were associated with continued participation, length of service and level of involvement of 4-H volunteer leaders in this study. Bivariate correlations indicate the social background factors positively associated with continued participation were (1) having children in 4-H and (2) having a spouse as a leader. Previous experience as a 4-H member was negatively associated with continued participation. Age, length of residence in the community, and number of children under the age of 9 years are positively associated with a leader's length of service. Number of children ages 12-14 was negatively associated with length of service suggesting that as a leader's children leave the program the leader discontinues to serve as a 4-H leader. Individuals labeling themselves as homemakers were more likely to contribute more hours of leadership per month at the local level than were leaders in other occupations. The more children a leader had in the 15-19 age range the fewer the hours per year that were devoted to area and state events.

Bivariate correlations indicate that the more flexible leaders were, the more time they would devote to local club meetings and activities. The degree of flexibility was not found to be associated with any other measure of voluntary participation.

Several attitudinal factors were found to be associated with voluntary participation. The more benefits leaders perceive 4-H had to offer them personally (attractiveness of 4-H), the more likely they were to continue as 4-H volunteer leaders. As a leader's perceived instrumental value of the 4-H organization decreased so did their length of service and level of involvement at the area and state level. A leader's length of service and level of involvement were also associated with the influential role of significant others. As the influence of neighbors and community leaders increased, a leader's length of service increased. Length of service decreased as the influence of 4-H club advisors increased. Level of involvement in terms of hours spent per year at the area and state levels increased as the influence of 4-H agents and other parents increased.

The Sequential Specificity Model of Voluntary Action (Smith, 1972) was only partially supported by the findings. Path analysis revealed that only the attitudinal factors had direct or indirect effects on the dependent variable length of service (see Figure 3). A volunteer leader's length of service was directly affected by specific attitudinal factors. A volunteer leader's length of service increased as the influence of neighbors, other
parents and the 4-H agent increased. A volunteer leader's length of service was indirectly influenced by the general attitudinal factor instrumental value of 4-H. A leader's length of service increased as the instrumental value of 4-H increased. The remaining hypothesized paths between social background, personality and attitudinal factors were not observed.

Step-wise regression analysis revealed that the social background factors of age, years as a 4-H member, children in 4-H and the occupational status of laborers along with the specific attitudinal factor, attractiveness of 4-H, directly influenced a volunteer leader's length of service. Thus, a leader's length of service increased if he/she were older, participated more years as a 4-H member, had children in 4-H, were not laborers and were more attracted to 4-H.

**IMPLICATIONS**

Further research in 4-H voluntary action should examine additional personality and attitudinal factors which may help to explain why individuals volunteer. Since this study investigated only one personality factor, degree of flexibility, other personality factors may influence an individual's decision to volunteer in 4-H. Researchers should investigate the personality dimensions of social confidence, self-image and achievement motivation. Knowledge of the effects of such factors on volunteering can enhance understanding of why adults volunteer as 4-H leaders.

Since no assumptions were made concerning the directionality of relationships between significant other individuals in this study, research is needed to investigate the possible indirect effects these persons have on a volunteer leader's participation. Knowledge of the influential role of significant other networks may help to establish a volunteer management system and support network for volunteer leaders which may increase level of involvement and length of service.

Previous research in 4-H suggests that individuals who were in 4-H as a youth influences the decision to volunteer. This research is mainly descriptive. Four-H research employing statistical techniques measuring interrelationships, such as, (multiple regression, step-wise regression) will better explain relationships between interrelated variables and can account for the problem of interaction. Additional research is needed to ascertain why previous 4-H'ers are less likely to continue to volunteer their time and talents to the 4-H program. The investigation of such attitudinal factors as a volunteer's general obligation to participate in 4-H, anomia and the efficacy of 4-H to achieve its goals could provide some useful information as to the possible reasons why adults who were former 4-H members are less likely to continue to volunteer as 4-H leaders.

Additional research is also needed to investigate the negative influence of 4-H club advisors on a volunteer leader's length of service. Research efforts should be directed toward investigating various personality dimensions or attitudinal factors which affect the amount of influence 4-H club advisors have on a newer leader.
REFERENCES


Figure 1. Model of Individual Voluntary Participation and Level of Involvement

Social Background Factors
- Age, Sex, Marital Status,
- Income, Education, Occupational Status,
- Length of Residence in Community
- Number and Ages of Children
- Previous 4-H Member
- Interpersonal Roles

Personality Factors
- Individual Degree of Flexibility

Attitudinal Factors
- Value of the 4-H Organization
- Attractiveness of 4-H
- Influential Role of Significant Others

Participation in 4-H
- Continuing as a 4-H Leader
- Number of Years of Service
- Level of Involvement
Social Background Factors

X1 = Age
X2 = Years as a 4-H Member
X3 = Income
X4 = Marital Status
X5 = Level of Education
X6 = Parents were Leaders

Personality Factor

X7 = Degree of Flexibility

General Attitudinal Factor

X8 = Instrumental Value of 4-H

Specific Attitudinal Factors

X9 = Attractiveness of 4-H
X10 = Influence of Neighbors
X11 = Influence of 4-H Agents
X12 = Influence of 4-H Club Advisors
X13 = Influence of Other Parents

Dependent Variable

X14 = Measure of Voluntary Activity (i.e., length of service)

Note: Exogenous variables (X1 through X6) are intercorrelated.

Figure 2. Effects of Selected Variables on Continued Participation as a 4-H Volunteer Leader.
Influence of Other 4-H'ers

Instrumental Value of 4-H

Influence of 4-H Club Advisor

Influence of Neighbors

Influence of Other Parents

Influence of 4-H Agent

Length of Service

$\sqrt{1 - .12^+}$

$\sqrt{1 - .09^+}$

$\sqrt{1 - .24^+}$

$\sqrt{1 - .28^+}$

Note: Residual paths indicate the unexplained variance of factors outside the model.

Figure 3. Path Model Containing Significant Path Coefficients.
Table 1.

**Summary Statistics for Regression Model: Regression of Length of Service on Age, Years as a 4-H Member, Children in 4-H, Attractiveness of 4-H, and Occupational Status of Laborer**

<table>
<thead>
<tr>
<th>Regression Step</th>
<th>Variable Entering</th>
<th>R²</th>
<th>Standardized Path Coefficient</th>
<th>F Value (Total Regression)</th>
<th>F Value (Variable Regression)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(X₁) Age</td>
<td>.337</td>
<td>(X₁) .580</td>
<td>28.47</td>
<td>28.47</td>
</tr>
<tr>
<td>2</td>
<td>(X₂) Years as a 4-H member</td>
<td>.461</td>
<td>(X₁) .569 (X₂) .352</td>
<td>23.55</td>
<td>12.68</td>
</tr>
<tr>
<td>3</td>
<td>(X₃) Children in 4-H</td>
<td>.565</td>
<td>(X₁) .639 (X₂) .358 (X₃) .330</td>
<td>23.40</td>
<td>12.92</td>
</tr>
<tr>
<td>4</td>
<td>(X₄) Attractiveness if 4-H</td>
<td>.612</td>
<td>(X₁) .634 (X₂) .404 (X₃) .334 (X₄) .222</td>
<td>20.97</td>
<td>14.62</td>
</tr>
<tr>
<td>5</td>
<td>(X₅) Occupational Status of</td>
<td>.654</td>
<td>(X₁) .655 (X₂) .374 (X₃) .314 (X₄) .250 (X₅) .210</td>
<td>19.60</td>
<td>6.22</td>
</tr>
</tbody>
</table>
Figure 4. Five Variable Model Containing Significant Path Coefficients.
Many social programs rely upon volunteers for the delivery of their services. The youth program component of the Cooperative Extension Service is certainly among this group. Volunteers are principally responsible for the delivery of programs to 4-H youth. Even though millions serve in a voluntary capacity, more are needed and those currently serving need to be retained. Research such as this study may contribute to knowledge about the 4-H volunteer and enable recruitment/retention efforts to focus upon appropriate clientele.

The authors are recognized for their scholarship in preparing this summary. Dr. J. Robert Warmbrod is a Professor, Department of Agricultural Education, The Ohio State University. Mr. Rohs was a graduate student in the Department of Agricultural Education, The Ohio State University. Special appreciation is due to Robert A. Martin, Assistant Professor, Department of Agricultural Education, Iowa State University; Joy Cantrell, Assistant Professor, Department of Agriculture and Extension Education, The Pennsylvania State University; and Thomas M. Archer, County Extension Agent, 4-H, Shelby County, Ohio for their critical review of this manuscript prior to its publication.

Research has been an important function of the Department of Agricultural Education since it was established in 1917. Research conducted by the Department has generally been in the form of graduate theses, staff studies and funded research. The purpose of this series to make useful knowledge from such research available to practitioners in the profession. Individuals desiring additional information on this topic should examine the references cited.

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