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ASSESSMENT OF THE FACTORS RELATED TO READINESS FOR PROGRAM CHANGE OF PROFESSIONAL NON-FACULTY 4-H FIELD STAFF OF THE VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY EXTENSION DIVISION

The Ohio State University PH.D. 1979

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ASSESSMENT OF THE FACTORS RELATED TO READINESS FOR PROGRAM CHANGE OF PROFESSIONAL NON-FACULTY 4-H FIELD STAFF OF THE VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY EXTENSION DIVISION

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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*****

The Ohio State University

1979

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. THE PROBLEM AND ITS SETTING</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>Significance of the Problem</td>
<td>4</td>
</tr>
<tr>
<td>The Objectives</td>
<td>7</td>
</tr>
<tr>
<td>Hypotheses Tested</td>
<td>8</td>
</tr>
<tr>
<td>II. RELATED SCIENCE AND PRACTICE</td>
<td>14</td>
</tr>
<tr>
<td>The Virginia Extension Division</td>
<td>14</td>
</tr>
<tr>
<td>Readiness for Program Change</td>
<td>17</td>
</tr>
<tr>
<td>The Researcher-Practitioner Gap</td>
<td>18</td>
</tr>
<tr>
<td>The Need for Program Change</td>
<td>21</td>
</tr>
<tr>
<td>Innovation Diffusion and Adoption</td>
<td>31</td>
</tr>
<tr>
<td>Factors Affecting Organization Change</td>
<td>36</td>
</tr>
<tr>
<td>Demographic Variables Related to Readiness</td>
<td>41</td>
</tr>
<tr>
<td>for Program Change</td>
<td></td>
</tr>
<tr>
<td>III. METHODOLOGY</td>
<td>48</td>
</tr>
<tr>
<td>Population and Sample</td>
<td>48</td>
</tr>
<tr>
<td>Design and Instrumentation</td>
<td>50</td>
</tr>
<tr>
<td>Analysis of Scales</td>
<td>53</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>65</td>
</tr>
<tr>
<td>IV. FINDINGS</td>
<td>66</td>
</tr>
<tr>
<td>Introduction</td>
<td>66</td>
</tr>
<tr>
<td>Characteristics of Respondents</td>
<td>67</td>
</tr>
</tbody>
</table>
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Factors Influencing the Likelihood of Adoption or Adoption of a Seemingly Promising Innovation By an Organization: Integrated Findings</td>
<td>39</td>
</tr>
<tr>
<td>2. Distribution of Population</td>
<td>50</td>
</tr>
<tr>
<td>3. Distribution of Returned Questionnaires</td>
<td>53</td>
</tr>
<tr>
<td>4. Comparison of Internal Consistency Reliabilities of the &quot;Readiness for Program Change Survey Scales&quot; in Initial Instrument and The Researcher's Study</td>
<td>59</td>
</tr>
<tr>
<td>5. Factor Structure of &quot;Readiness for Program Change Survey Scales&quot;</td>
<td>61</td>
</tr>
<tr>
<td>6. Distribution of Merit Rating Scores</td>
<td>71</td>
</tr>
<tr>
<td>7. Analysis of Variance of Mean Scores On &quot;the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change&quot; By Sex of Extension Agents</td>
<td>73</td>
</tr>
<tr>
<td>8. Pearson Product-Moment Correlation Coefficient Between Age and &quot;the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change&quot;</td>
<td>74</td>
</tr>
<tr>
<td>9. Pearson Product-Moment Correlation Coefficient Between Length of Tenure and &quot;the Variables Contributing to an Agency's Openness and Skill In Effecting Program Change&quot;</td>
<td>75</td>
</tr>
</tbody>
</table>
10. Spearman Correlation Coefficient Between Level of Education and "the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change" .............. 76

11. Spearman Correlation Coefficient Between Performance Rating and the Level of Response to "the Variables Contributing to an Agency's Openness and Skill In Effecting Program Change" .............. 78

12. Spearman Correlation Coefficient Between Job Classification and "the Variables Contributing To An Agency's Openness and Skill In Effecting Program Change" .............. 79

13. Pearson Product-Moment Correlation Coefficient Between Total 4-H Staff in a Unit and "the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change" .............. 80

14. Analysis of Variance of Mean Scores on "the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change" by Extension District .............. 81

15. Analysis of Variance of Mean Scores on "the Variables Contributing to an Agency's Openness and Skill In Effecting Program Change" by Place of Residence of the Extension Unit's 4-H Members ......................... 83

16. Analysis of Variance of Mean Scores On "the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change" By Status As a Former 4-H Member ......................... 84
17. Analysis of Variance of Mean Scores On "the Criteria Used in Evaluating A Program" By Sex of Extension Agents .................. 85

18. Pearson Product-Moment Correlation Coefficient Between Age and "the Criteria Used in Evaluating a Program" ..................... 86

19. Pearson Product-Moment Correlation Between Length of Tenure and "the Criteria Used in Evaluating a Program" ..................... 87

20. Spearman Correlation Coefficient Between Level of Education and "the Criteria Used In Evaluating a Program" ..................... 88

21. Spearman Correlation Coefficient Between Performance Rating and "the Criteria Used in Evaluating a Program" ..................... 89

22. Spearman Correlation Coefficient Between Job Classification and "the Criteria Used In Evaluating a Program" ..................... 90

23. Pearson Product-Moment Correlation Coefficient Between Size of 4-H Staff and "the Criteria Used In Evaluating a Program" .......... 91

24. Analysis of Variance of Mean Scores On "the Criteria Used In Evaluating A Program" by Extension District ......................... 92

25. Analysis of Variance of Mean Scores On "the Criteria Used In Evaluating A Program" By Place of Residence of the Extension Unit's 4-H Members .......................... 94
26. Analysis of Variance of Mean Scores on "the Criteria Used in Evaluating a Program" by Former and Non-Former 4-H Members ........................................... 95

27. Analysis of Variance of Mean Scores on "the Variables Contributing to Resistances to Program Change" by Male and Female Extension Agents .................. 96

28. Pearson Product-Moment Correlation Coefficient Between Age and "the Variables Contributing to Resistances To Program Change" ............................ 97

29. Pearson Product-Moment Correlation Coefficient Between Length of Tenure and "the Variables Contributing to Resistances To Program Change" ..................... 98

30. Spearman Correlation Coefficient Between Educational Level and "the Variables Contributing To Resistance to Program Change" ............................ 99

31. Spearman Correlation Coefficient Between Performance Rating and "the Variables Contributing to Resistances to Program Change" .......................... 100

32. Spearman Correlation Coefficient Between Job Classification and "the Variables Contributing to Resistances to Program Change" .......................... 101

33. Pearson Product-Moment Correlation Coefficient Between Size of 4-H Staff and "the Variables Contributing to the Resistances to Program Change" .............. 102

34. Analysis of Variance of Mean Scores On "the Variables Contributing to the Resistances To Program Change" by Extension District..... 104
35. Analysis of Variance of Mean Scores On "the Variables Contributing to the Resistances To Program Change" by Place of Residence of The Extension Unit's 4-H Members.......................... 105

36. Analysis of Variance of Mean Scores On "the Variables Contributing to the Resistances to Program Change" by Former and Non-Former 4-H Members....................... 106

37. Cronbach Alpha Scale Reliabilities Obtained For the "Readiness for Program Change Survey Scales" In This Study............................... 116
LIST OF FIGURES

Figure                                               Page

1. Respondents by Highest Level of Formal Education              69
2. Respondents by District                                       70
CHAPTER I

THE PROBLEM AND ITS SETTING

Introduction

The introduction of program changes into an educational organization should be a continuing process throughout the life of the organization. Such changes should not occur simply for the sake of change. The introduction of program change should be for the purpose of better meeting the educational needs of the organization's clientele. Saunders and Maunder (1966) point out the dynamic nature of the educational needs of Extension's clients. Educational needs expand and change and are not static.

Educational research is continually bringing to practice innovative and improved procedures to aid educators in the more effective completion of their responsibilities. However, there exists a researcher-practitioner gap or time lag in the field of education. As a result of this gap, innovative programs, developed and shown to be worthwhile through research, frequently remain unknown and unused by the practitioner 4-H Extension agent.

Employees of the Virginia Polytechnic Institute and State University Extension Division having a major
responsibility for 4-H programming rely, to a great extent, on area and state level 4-H personnel for information relative to research based program innovations. By virtue of their position in the organization and their expertise in 4-H programming, program leaders, Extension specialists and other state level leadership have greater access to educational innovations that could result in improved county and city 4-H programs if effectively utilized by local unit 4-H staff personnel.

The adoption or adaptation of program innovations by unit 4-H staff is affected by several factors. Search Institute (1978) identified three factors containing eighteen dimensions that affect an agent's readiness or propensity for program change when faced with a program innovation. These factors are: "the variables contributing to an agency's openness and skill in effecting program change"; "the criteria used in evaluating a program"; and "the variables contributing to resistances to program change."

Knowledge of the factors affecting the Virginia 4-H organization's readiness for program change is needed by the Virginia Polytechnic Institute and State University Extension Division. An understanding of such factors and their relationship to an overall assessment of the 4-H organizational readiness for program change would aid organizational leadership in the development of appropriate
strategies prior to the introduction of an innovation. Strategies planned prior to an innovation's introduction would improve the likelihood of use of the innovation by unit 4-H staff personnel.

**Statement of the Problem**

The specific problem investigated in this study may be stated as follows:

**What is the relationship between "the variables contributing to an agency's openness and skill in effecting program change," "the criteria used in evaluating a program," "the variables contributing to resistances to program change," and selected demographic factors of Extension agents of the Virginia Polytechnic Institute and State University Extension Division having a major responsibility for 4-H programming?**

Search Institute (1978) identified nine variables that contribute to an agency's openness and skill in affecting program change, six variables used in evaluating a program, and three variables contributing to resistances to program change. These eighteen dimensions affecting readiness for program change were assessed in this study by modified "Readiness For Program Change Survey Scales" developed by Search Institute (1978).¹

¹"Readiness For Program Change Survey Scales" were used with written permission of Dr. Merton P. Strommen, President of Search Institute.
The relationships between each of the factors identified as affecting readiness for program change and selected demographic variables of Virginia Extension agents having a major responsibility for 4-H programming were studied. Demographic variables investigated included, age of subjects, sex, job position in the organization, educational level, years of service to the organization, total number of staff assigned to the unit with 4-H responsibilities, geographic location as determined by Extension district, performance rating score, whether or not subjects were former 4-H members and whether the local unit's 4-H members resided in urban or rural areas.

Significance of the Problem

The concept of educational program change is of concern to each individual within an organization. Extension professionals are always concerned with assessing when program change is too fast, too slow, too great, or too small. Thus, the introduction of a program change into the 4-H organization is likely to be met with varying responses from the individual staff members providing major leadership for local unit 4-H programming.

In the Virginia 4-H organization, state and area level leadership have a major responsibility for the introduction of program changes and innovations to the local unit 4-H staff. The state and area leadership represent a primary
link between research based program information and the county and city (local unit) 4-H staff.

Program changes and innovations introduced by state and area 4-H leadership will be utilized to varying degrees by the unit Extension agents. Adoption of research based innovations by local unit 4-H staff is dependent upon a variety of organizational, environmental, and personological variables. Studies by Davis, Glaser, Zaltman and Havelock identified from eight to twenty factors that affect the likelihood of adoption or adaption of a seemingly promising innovation (Ward, 1978).

Maximization of the likelihood that a program change would be accepted by county and city 4-H staff personnel requires a strategy for the introduction of such a change. Appropriate strategies for the introduction of program innovations should be based on an analysis of the factors affecting the likelihood of adoption of a promising innovation. In other words, there is a distinct need for an assessment of the factors that affect the 4-H organization's readiness for program change prior to the start of the utilization process. Emrick and Peterson (1978) in their synthesis of findings across five studies in educational dissemination indicated that innovation utilization must be approached as a process, not an event.

4-H organizational leadership at the state and area levels needs an assessment of factors affecting readiness
for program change within the organization, prior to the introduction of an innovation, if the utilization process is to be effective. With prior assessment of the factors affecting an organization's readiness for program change, organizational leadership will be better prepared to conduct a directed utilization of any necessary program innovation. Provided these variables contributing to readiness for program change are manipulable, procedures for altering the organization's level of readiness for change can be planned.

The Virginia 4-H organization did not have a procedure by which organizational readiness for program change could be assessed. There was no existing means of assessing the factors that contributed to readiness for program change. Research of this nature had never been conducted in Virginia. Assessment of the organizational readiness for program change is a necessary first step toward reduction of the lag time between the development and subsequent use of research based program innovations. The Virginia Polytechnic Institute and State University Extension Division must continue to provide for the educational needs of the citizens of the state. These needs will expand and change over time. Various innovations in programs will insure that the citizens' needs are met. There is a need to know more about the readiness of the Virginia 4-H organization to change programs when such change is warranted.
The Objectives

The following objectives were developed to guide the study and to serve as the basis for the research design:

1. To describe professional non-faculty 4-H field staff of the Virginia Polytechnic Institute and State University in terms of their:
   a. sex
   b. age
   c. position classification
   d. educational level
   e. years of service to the organization
   f. unit's total number of staff with major 4-H programming responsibilities
   g. geographic location as determined by district
   h. performance rating score
   i. status as a former or non-former 4-H member
   j. unit 4-H members' place of residence

2. To explain the relationship between selected demographic variables and "the variables contributing to an agency's openness and skill in effecting program change."

3. To explain the relationship between selected demographic variables and "the criteria used in evaluating a program."

4. To explain the relationship between selected demographic variables and "the variables contributing to resistance to program change."
Hypotheses Tested

The following hypotheses were formulated for testing relative to the objectives of the study. They were based on a review of related literature, personal observations and consultations with members of the Extension staffs of The Ohio State University and Virginia Polytechnic Institute and State University. The hypotheses were:

**Hypothesis 1.** The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by female agents will be different than that of male agents.

**Hypothesis 2.** The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will increase with an increase in an agent's age.

**Hypothesis 3.** The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will increase with an increase in an agent's length of tenure.

**Hypothesis 4.** There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's educational level.
Hypothesis 5. There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's performance rating.

Hypothesis 6. There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's job classification.

Hypothesis 7. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will be positively related to the size of 4-H staff.

Hypothesis 8. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by agents in some Extension districts will exceed that of agents in other districts.

Hypothesis 9. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban or rural setting.

Hypothesis 10. The level of response to "the variables contributing to an agency's openness and skill in effecting
program change" by agents who were former 4-H members will be different than that of agents who were not former 4-H members.

Hypothesis 11. The level of response to "the criteria used in evaluating a program" by female agents will be different than that of male agents.

Hypothesis 12. The level of response to "the criteria used in evaluating a program" will increase with an increase in the age of an agent.

Hypothesis 13. The level of response to "the criteria used in evaluating a program" will increase with an increase in the length of tenure of an agent.

Hypothesis 14. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's level of education.

Hypothesis 15. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's performance rating.

Hypothesis 16. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's job classification.
Hypothesis 17. The level of response to "the criteria used in evaluating a program" will be positively related to the size of 4-H staff.

Hypothesis 18. The level of response to "the criteria used in evaluating a program" by agents in some Extension districts will exceed that of agents in other districts.

Hypothesis 19. The level of response to "the criteria used in evaluating a program" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban or rural setting.

Hypothesis 20. The level of response to "the criteria used in evaluating a program" by agents who are former 4-H members will be different than that of agents who were not former 4-H members.

Hypothesis 21. The level of response to "the variables contributing to resistances to program change" by female agents will be different than that of male agents.

Hypothesis 22. There will be a positive relationship between "the variables contributing to resistances to program change" and the age of an agent.

Hypothesis 23. There will be a positive relationship between "the variables contributing to resistances to program change" and the length of tenure of an agent.
Hypothesis 24. The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's education.

Hypothesis 25. The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's performance rating.

Hypothesis 26. The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's job classification.

Hypothesis 27. The level of response to "the variables contributing to resistances to program change" will be negatively related to size of unit 4-H staff.

Hypothesis 28. The level of response to "the variables contributing to resistances to program change" by agents in some Extension districts will exceed that of agents in other districts.

Hypothesis 29. The level of response to "the variables contributing to resistances to program change" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban or rural areas.
Hypothesis 30. The level of response to "the variables contributing to resistances to program change" by agents who are former 4-H members will be different than those of agents who were not former 4-H members.
CHAPTER II

RELATED SCIENCE AND PRACTICE

The Virginia Extension Division

Virginia Polytechnic Institute and State University was established as a land-grant institution at Blacksburg, Virginia in 1872. The Morrill Act of 1862 was the legislation that provided for a land-grant college to be established in each state. An additional land-grant institution was established at Petersburg, Virginia in 1890 by a supplemental Morrill Act. The second institution was named Virginia State College.

The Smith-Lever Acts provided for cooperative agreements between the land-grant institution and the United States Department of Agriculture. In 1962 the Smith-Lever Act was amended. The Virginia Extension Division Administrative Handbook (1970) stated the mission of Cooperative Extension as it was detailed in the amended Smith-Lever Act of 1962:

Cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics and subjects relating thereto to persons not attending or resident in said colleges in the several communities, and imparting information on said subjects through demonstrations,
publications, and otherwise and for the necessary printing and distribution of information in connection with the foregoing . . . (p. III-4).

Shortly after the original Smith-Lever Act, the General Assembly of Virginia authorized Extension work in cooperation with the United States Department of Agriculture. Until 1966, little change occurred in the operation of the Extension organization in Virginia. During 1966 the Virginia Polytechnic Institute and State University Extension Division was created by the General Assembly of Virginia. The significance of this legislation was far-reaching. The scope of Extension efforts was greatly expanded to permit dissemination of any educational information available through the land-grant universities to all of Virginia's citizens.

Under the Agricultural Extension Service, and prior to the 1966 legislation, Extension agents were primarily responsible for specific subject matter areas. Agents were responsible for the development of educational programs in these subject matter areas. Extension agents had specific responsibilities for program development in 4-H, agriculture, home economics and related areas. By virtue of the 1966 legislation, local unit Extension agents came to occupy the role of resource persons associated with the entire educational resources of the two universities. For Extension agents with major responsibility for 4-H programming, this
resulted in a myriad of changes in program subject matter orientation and subsequently changes in the 4-H educational programs.

The increase in diversity of program subject matter responsibilities did not bring a concomitant link with research based institutions related to 4-H programming beyond existing linkage to agriculture and home economics. Ties with agricultural experiment stations were retained. The link to research stations and the Colleges of Agriculture and Home Economics continued to provide the program areas of agriculture and family resources with strong ties to research-based information. A comparable research linkage for the new subject matter areas of the 4-H program did not exist. Therefore, the potential gap between the educational researcher and the Extension agent with major responsibility for 4-H programming was greater than the gap between the researchers and the Extension agents with a major responsibility in the areas of agriculture and family resources.

Virginia Extension agents with major responsibilities for 4-H programming found themselves confronted with an increasing number of program changes. State and area level 4-H leaders found themselves introducing increasing numbers of program innovations to the county and city 4-H staffs. The result was uncertainty as to how ready county and city
(local unit) 4-H staffs were to adopt or adapt introduced program innovations.

**Readiness For Program Change**

Few studies have been conducted concerning the assessment of an organization's readiness or propensity for program change. Studies that cite the introduction of program innovations based upon a prior assessment of the organization's readiness for accepting program innovations are not cited in the literature. The *Catalog of Extension-Related Problem Reports, Theses, and Dissertations* (1975), published by the United States Department of Agriculture, has over 1,300 citations. However, there were no citations dealing with the assessment of readiness for program change or related topics.

Many studies and articles have been written citing the Extension agent's role in the diffusion of innovations. Rogers and Shoemaker (1971) listed over 1,500 studies dealing with the diffusion of innovations. Many of these studies involved Extension or field agents in the diffusion of innovations. However, none involved the study of the Extension agent as the adopter of innovations. Likewise, no studies were reported that measured the readiness for program change of Extension agents when faced with a seemingly promising program innovation.
The Researcher-Practitioner Gap

Many articles cited the gap that has existed in education between the knowledge producer and the knowledge user. The Cooperative Extension organization, as part of the educational system in America, is likewise affected by this producer-user gap. The 4-H program of Cooperative Extension also has need for concern regarding the gap between educational research and the use of such research by 4-H Extension agent-practitioners in their youth education programs. The Extension Committee on Policy Subcommittee on 4-H reported in 4-H In Century III (ECOP, 1977) that:

To be prepared for Century III in our country and the world, youth must have access to the latest information available. 4-H must compliment formal education by helping youth develop skills of finding and using information with today's and tomorrow's decisions (p. 5).

The reported gap between researchers and practitioners such as 4-H Extension agents works counter to the thought of providing youth with access to or information about the latest available information. If the 4-H Extension agent is viewed as the adopter of innovations, Rogers and Svenning's (1969) comments concerning lack of communication between knowledge producers and knowledge users help place the researcher-practitioner gap in perspective. They stated:

Since the invention process often takes place apart from the units in the system that will eventually adopt the innovation, communication between the inventor and the potential adopter is vital. New ideas can have no effect if they are not made known to potential users (p. 22).
The implication is that if 4-H Extension agents do not receive the latest innovations concerning more effective educational programming, they cannot change the program to bring about the desired improvement. Oscarson (1977) pointed out that writers have indicated for many years that quite often the results of on-going research conducted at colleges and universities is not disseminated to those involved with utilizing this information. Stank (1978) indicated that there has been a long-term trend in which a major gap has existed in education between the producers of educational knowledge and the practitioner of such information. She pointed out that one of the charges that society gives to the educational system is that of preparing youth to cope with a rapidly changing world. Stank (1978) indicated that the only way in which the educational system can meet this charge is to reduce the researcher-practitioner gap in the knowledge network. She emphasized that if this chasm between researcher and practitioner is to be eliminated, or at least narrowed, the process must be identified to facilitate the utilization of research outcomes by practitioners.

The necessity of research for educational efforts such as 4-H programming was not questioned in the literature. Galloway (1974) listed one of the major challenges facing youth organizations as the challenge of research. He saw
this as a challenge of keeping pace with the changing social scene. Keeping pace with the changing social scene will require continuing research into the behavior and needs of youth on the part of agencies working with youth. New findings that would be beneficial to educational efforts through 4-H programs must be made known to and adopted by the 4-H Extension agent. If such a communications linkage is not established and used, the youth that society has given the 4-H organization the charge of preparing will be cheated.

Roberts and Larson (1971) indicated that there is an effective way to link research and practice. They found the single source of variance that could be manipulated to increase information utilization was personal interaction. Once the factors affecting an organization's readiness for program change has been assessed, the groundwork will have been laid to provide direction for delivering worthwhile research findings through the method of personal interaction, the method utilized by 4-H organizational leadership. Utilization of such a process could increase the use of innovative programs that have been developed and shown worthwhile through research, but remain unknown and unused by the 4-H practitioner for whom they were developed. This study was a necessary first step toward the resolution of the researcher-practitioner gap affecting 4-H educational programming in Virginia.
The Need for Program Change

Program change was viewed by the researcher as purposeful change. Blanzey (1974) stated:

... the changes that are being considered should be worthwhile as well as being new. Change is to be measured by its social value and effectiveness as well as its novelty (p. 45).

Closely related to the concept of change is innovation. According to Barnett (1953) an innovation is to be viewed as any thought, behavior or thing that is new because it is qualitatively different from existing forms or practices.

Preparing for change is becoming a cliche in the educational community. Phrases of "accountability," "creativity" and the like have been passed over, under, around and through without making a noticeable lasting impact on the education world. At the present time, many of the catchwords have been replaced by a deluge of commentary on "managing for change." Is this latest craze desirable (Blanzey, 1974, p. 45)?

Blanzey (1974) raised a most interesting question. If this "latest craze" is in fact desirable, then a helpful tool at the disposal of the 4-H organizational leadership in Virginia would be an instrument that would give them an assessment of the factors affecting their organization's readiness for any desired program change, as well as prior information to aid in the development of strategies to best introduce the innovation. Blanzey (1974) continued by answering his own question concerning the desirability of managing for change. He indicated that managing for change is a necessary but not sufficient condition to assure that
future ideas in education become more than passing fads that have little impact upon educational practice and educational effort.

Westwood (1973) stated that if 4-H and other youth organizations plan to develop programs appropriate to the needs of youth, such as those of the inner city, extensive organizational renewal is necessary. He indicated that to identify a new audience with unique needs, establish new objectives and to continue the "same old program methods" is dishonest. To do so, he contended, would be placing the requirements of an institutional program before human needs. Westwood (1973) indicated that real organizational renewal is the process of initiating, creating, and confronting needed changes to make it possible for organizations to become or remain viable, adapt to new conditions, solve problems, learn from experiences, and move toward greater organizational maturity.

Galloway (1974) listed as a major challenge before youth organizations such as 4-H, the challenge of innovation. He stated that technological advances of American society have not been matched by social adjustments, all of which lag far behind. Galloway (1974) pointed out that agencies serving youth find it difficult to relinquish the structures, methods and programs that have proven successful in the past, but are no longer applicable. He asserted that to
keep an active and growing membership, youth serving organizations must be pliable and innovative in facing new conditions. Galloway (1974) stated that organizations, programs, and organizational leadership must change if they are to meet the needs of people and be relevant to the times. Thus, the implication is that the 4-H organization must institute innovative program changes when they are called for. 4-H leadership must assure that appropriate innovations are correctly directed to those local unit 4-H Extension agents developing educational programs for youth.

Parsons (1976) also stressed the need for change within the Extension organization. He stated that all Extension staff members need to understand that the ultimate purpose of their work is to help people grow and develop to become more capable human beings. The contention made by Parsons (1976) is that if agents understood and worked toward this objective, their work would take on a different meaning and their approaches to programs would be different.

The literature indicated that program change in Cooperative Extension efforts should only take place when the need for such change exists. Barnett (1953) illustrated a similar belief as to the purpose for change when he stated:

Contrary to popular belief, change for the sake of change is a relatively infrequent motivation for innovation. . . . a large number of wants call for satisfactions that require change if they are to be realized, but the primary desire is not to alter existing conditions. The aim is not newness, freshness,
or modification. The impetus is neither a liking for a novelty nor a dislike of the prosaic. The initiating want has other orientations; and if it can be satisfied without disrupting or changing anything, that would be enough (p. 152).

The implication of Barnett's (1953) comments and those of other authors cited is that changing Extension programs simply to change, or for the newness is not a viable reason for change. Rather, change should occur when clientele needs can be satisfied by the introduction of an appropriate program change.

Brack (1975) indicated that considerable pressure was being exerted on educational agencies to meet increasing and varied demands. He cited new client groups, increasing interest in continuing education and new educational technology as some of the factors causing the pressure being applied to educational agencies. Brack (1975) added that no longer can we rely on the tried and true approaches for all instances. He saw greater experimentation becoming the rule rather than the exception. The implication for Extension 4-H programs is to introduce those innovations having been shown to be effective with new client groups and which are based upon sound educational techniques.

Weeks (1976) indicated that program change within Cooperative Extension is warranted in meeting needs of new audiences. He made the plea that Cooperative Extension see clearly what their education commitment should be, not what
it has been. Weeks (1976) believed that Extension personnel should be educators and not advocates. He stated that:

My conviction is that the genius of the Cooperative Extension Service lies not in its clientele but in its organizational structure. The idea of free and informal education to adults is itself a great achievement. Further, to have it done as a project of the land-grant university, and then to have rooted it in a local community by the use of resident staff and citizen committees, has changed this invention from merely a great idea to a stroke of genius (p. 21).

Weeks (1976) indicated that in spite of the structure of Extension education he saw the demise of the power of the Cooperative Extension Service if it continued to narrowly define its mission and failed to respond to the urgent calls Extension receives from new audiences. Weeks (1976) believed that if Extension program efforts do not rise to the call of these new audiences, not only will Cooperative Extension have been derelict in its duty, but some other agency will reinvent them. Weeks' (1976) comments indicated the urgency of correctly identifying those educational innovations to bring about the desired organizational and program changes to respond to the needs of new audiences.

Udell (1976) set forth additional reasons that supported the potential need for program changes within the Cooperative Extension Service. He indicated that the golden age of academia in the 1950's and 1960's, created by postwar affluence and the baby boom, helped many established universities double and triple enrollment. Udell (1976) indicated that
former colleges of teacher education and county normal institutions, both public and private, grew rapidly. He added that times have changed, the gilt has worn thin and the golden age seems to have passed. Udell (1976) stated:

The public response to the zero population movement; the end of the draft; the end of U.S. involvement in Viet Nam; the rise in vocational technical schools; the development of high paying jobs for skilled, non-college workers; disruptions on campus; and taxpayer's revolts have all contributed to the tarnishing of the golden era. Academia now finds itself overbuilt; overstaffed, and lacking enough students to sustain growth. Lower admission standards, more aggressive recruitment tactics, and faculty layoffs are indicators that hard time are here (p. 23).

Udell (1976) indicated that under such conditions, as cited above, educators are beginning to look for new clientele groups. He added that during recent years a new vocabulary has invaded the halls of academia—the vocabulary of Cooperative Extension. He stated:

Terms like "change agent," "adult learners," "programming," "community development," and "outreach" are being heard in planning sessions. More universities are offering vocationally oriented two year degrees. Undergraduate and graduate degrees are being awarded on a part time basis. In brief, it appears that academia is beginning to extend the "Wisconsin Idea" that . . . the boundaries of the state are the boundaries of the university (pp. 24-24).

The case was built by Udell (1976) that the possible outreach of the university can take place when faculty begins to recognize that Cooperative Extension can help create new opportunities and rewarding challenges in higher education, and when university administration emphatically
supports off-campus activities. Extension is seen as best helping by aiding academia in understanding the nature of Extension education, the ability to communicate with clientele, and the Extension agent. A potential collaborative effort of this nature would transcend all program areas and include 4-H programs as well. An arrangement of this type would call for many innovative practices to be introduced into the Extension organization.

In exploring social trends, Lippitt (1973) indicated the role of education will be dramatically different in the future. He indicated that there is much agreement among studies of the future that education will become less and less a matter of transmission of accumulated knowledge and more and more concerned with developing the processes, values and skills that prepare individuals for change and actively initiate change. Meyerholz (1974) likewise called for education to be future oriented, preparing individuals to accept change when in fact change is desirable.

Lippitt (1973) presented a future social trend that has the potential to require program change within all program areas of Cooperative Extension. He stated:

There will be a growing need for every citizen, young and old, to contribute voluntary time and energy toward the maintenance and improvement of the quality of life of the community. The needs for social science and for education, medical, child care, family life, recreational, and cultural services will far outstrip the funds and professional womanpower and manpower available. Trained volunteers will be the basis for
much of our coping with what one study calls the "social perfectability." The new national prominence being given to "volunteerism" is one clue to what we can expect (pp. 5-6).

Volunteer usage of the level proposed by Lippitt (1973) would create the need for program changes within 4-H as well as other program areas of Cooperative Extension. The need for increasing usage of volunteers is also noted in 4-H in Century III (ECOP, 1977). Their report stated that:

Over the past ten years the number of volunteer leaders serving in the 4-H program has doubled, resulting in an increase in both the number of youth reached by the 4-H program and the quality of their experience. Thus a highly desirable goal for the next decade of Century III would be to double the number of volunteer leaders serving 4-H (p. 6).

Concerning volunteers, as one area where program changes will be needed, Winiecki and Winiecki (1978) proposed a type of volunteer usage likely to require 4-H program changes if adopted. They indicated that the future professional 4-H Extension agent will want to become more well-versed in the development and operation of inter-agency volunteer exchange systems. They stated:

The implication here is that 4-H and its agents instigate with other agencies the sharing of volunteers and their experience rather than merely preach a doctrine of toleration of other organizations (p. 11).

The willingness to change program procedures when change is warranted is also tied to individual professionalism. Swanson (1975) proposed that one professional standard of the Extension agent should be willingness to
change methods of job procedure when new information based on research is received. Galloway (1974) indicated that the new youth program professional is a continuing student, having the newest information about the growth of persons at the ages with whom they are working, in their cultural setting and in the way they learn. The implication for 4-H Extension agents is one of being up-to-date on current research and of implementing educational innovations to bring about the necessary change in 4-H educational programs.

The literature reviewed indicated that there was need for program change within programs offered by Cooperative Extension. The literature also revealed that program change for the sake of change is not warranted. Many of the specific examples set forth by the authors may ultimately result in 4-H program change, others may have no effect. The point remains that at many times and for various reasons, in an organization such as the Virginia 4-H organization, certain innovations will be introduced to Extension agents by the state and area 4-H organizational leadership. The 4-H organizational leadership is more closely tied to research-based innovations that could provide improved programming if adopted by local unit 4-H Extension agents. Changes in local 4-H programs will occur through subsequent adoption of the advocated educational
innovation, only if the innovation is adopted by the local unit 4-H Extension staff. Hall (1976) stated:

We live in a time of change. In the midst of all this change we have lost the perspective of what change means and what (who) changes. Few seem to recognize that change is only accomplished in fact when the individuals who are to use the things change (p. 22).

The implication from Hall's statement is that it is change in the 4-H Extension agent that brings about new program procedures. Emrick and Peterson (1978) found, in a synthesis of five studies dealing with change in educational organizations, that utilization of an innovation must be approached as a process, not an event. They noted:

... administrators occupy a crucial role in establishing change orientation, in creating incentives for participation, and in supporting implementation efforts by appropriate staff. ... Utilization does not tend to occur in the presence of administrative opposition (pp. 2-3).

Since the change must occur in the 4-H Extension agent, 4-H organizational leadership needs to consider the process to employ in affecting utilization by the 4-H Extension agents. Dwyer (1976) pointed out that if change is to occur, it will be because those actively engaged in the educational process want change, expect change and are rewarded by the change that takes place. Thus, to correctly guide the process of 4-H Extension agent utilization of program innovations, 4-H organizational leadership needs a prior assessment of the factors affecting readiness for program change within their organization.
Innovation Diffusion and Adoption

Previous discussion of the literature indicated that the success of organizational program change is related to individual 4-H Extension agent acceptance of innovations proposed by organizational leadership. The literature indicated that the Extension agent has a history of being involved with the diffusion of innovations. However, virtually no studies have focused upon the Extension agent as the adopter or adapter of innovations. In discussing Extension agents' history with the diffusion of innovations, Waddel (1976) stated:

When Extension was started in 1914 clientele needs were best met by teaching basic skills related to agriculture and home economics. Extension personnel, teaching skills that filled a "real" immediate need helped establish Extension as a change agent (p. 5).

Rogers and Shoemaker (1971) defined a change agent as a professional who influences innovation decisions in a direction deemed desirable by a change agency. They added that in most cases these change agents sought to secure the adoption of new ideas. Rogers and Shoemaker (1971) indicated that the change agent functions as a communication link between two or more social systems. It is through the change agent that innovations flow to the clients from the change agency.

Goddu (1976) stated that the change agent operated on the edge of organizations. The agent is said to be neither
of or in an organization. As a linker the agent carries information, experiences, results, processes and products from one point to another. Extension agents in their linking role play a key part in the diffusion of an innovation to clients who are potential adopters. Eichholz and Rogers (1964) gave the following elements in the diffusion process by which innovations spread:

1. The innovation, defined as an idea is perceived as new by the individual.

2. The communication of the innovation from one individual to another.

3. The innovation diffuses through a social system.

4. Diffusion occurs over time. Not all individuals adopt an innovation at the same time.

5. The time differential in adoption or rejection can be explained in part by the forms and stages of adoption-rejection (pp. 312-313).

Traditionally, the Extension agents in all program areas have aided with the process described above. Extensive literature is available concerning the above elements in the diffusion process, and the role of the Extension change agent in the process. Many studies were detailed by Rogers and Shoemaker (1971), where the Extension agent, serving as a change agent, was viewed as a linker. In Rogers and Shoemakers' work and the work of many other rural sociologists the "typical" research study usually involved the individual farmer as the unit of analysis. Eichholz and Rogers (1964) pointed out that one of the important
differences between "typical" research studies in rural sociology and the "typical" investigation in education lay in the unit of analysis. They indicated that more research with the unit of analysis being the teacher (or agent) was needed. Oscarson (1977) also pointed out that few studies have focused on the teacher (agent) as the adoption unit, despite their importance in the decision making process to adopt proposed organizational changes.

Farmers, as a typical unit of analysis in rural sociology studies, were studied in regard to their innovativeness, which is the degree to which an individual is relatively early in adopting new ideas as compared to other members of their social system. There have been many attempts to measure teachers' innovativeness based upon respondent's scores on adoption scales designed to measure the approximate time of adoption of specific innovations. Review of the literature has failed to locate specific similar studies with 4-H Extension agents. However, the role played by the teacher and the 4-H Extension agent are comparable from the standpoint of their adoption of innovations introduced by their respective organizations. Efforts by Christiansen (1965), Williams and Hull (1968), Parker (1969), and Hensel and Johnson (1969) were typical of studies designed to measure teacher innovativeness.
These studies, designed to measure innovativeness, failed to provide a strong basis for predicting teacher implementation of major change in their educational programs. Russell (1971) indicated that the most telling weakness of adoption scales for measuring innovativeness is the general finding that the most "innovative" teachers are older and have more years of teaching experience than their peers. Rogers and Shoemaker (1971) indicated that the literature on innovation diffusion overwhelmingly showed that innovative persons were generally younger than their peers.

Presser (1969) cast considerable doubt on the use of adoption scales to measure innovativeness. He stated:

> There has been very few attempts to develop innovativeness scales: most of the research work has been done with adoption scales. There is a tendency to think of those adoption scales as innovativeness scales . . . . One needs to be wary of calling adoption scales "innovativeness scales" (pp. 517-518).

Lin, Lew, Rogers, and Schwartz (1966) described a different approach to studying innovativeness. They indicated that:

> Teacher attitudes toward change in general and attitudes toward a specific innovation were found to be significantly correlated with a number of variables identified as being important in innovation diffusion. Attitudes toward the specific innovation were found to be exceedingly important to its acceptance (p. 82).
The approach of studying 4-H Extension agent attitudes toward an innovation was the focus of the researcher's study. Attitudes of individual 4-H Extension agents in Virginia when viewed collectively constituted an assessment of the organizational attitude toward the factors affecting readiness for program change.

Lin et al. (1966) affirmed the importance of initiating programs through educators most predisposed toward change. They stated:

An instrument designed to measure an individual's change orientation would provide vital information for planning the introduction of an innovation into a system. It could be utilized before an innovation is introduced, providing information about the member's receptivity to change and the likelihood of successful introduction of the innovation into the system. And by learning what factors might be related to a teacher's change orientation, procedures for altering the level of change orientation could be initiated providing the factors were manipulable (p. 67).

The literature indicated that the effective measure of change orientation involved measuring attitudes of individual 4-H Extension agents. Lionberger (1961) stated that an attitude may be thought of as a predisposition to act, perceive, think and feel in relation to something. Although attitude is far from being the sole determinant of behavior, the importance of attitude in the actions of individuals is of major importance.

Halloran (1967) emphasized the need for determining individual attitudes and understanding their relation to behavior. He stated:
If we know something about an individual's attitudes, then not only do we have a brief summary of what has gone before in the individual's experience that may affect his behavior, but we may also be able to say something about why, along the way he deals as he does with a great variety of social objects, and values. In short, despite its limitations, it is a step in the right direction of reducing the complex to the simple, it helps to make sense and give meaning to individual behavior and in all probability it is the best basis for prediction yet devised (p. 28).

Factors Affecting Organizational Change

Individual 4-H Extension agent attitudes will be important in the adoption of an innovation relative to program change. However, measurement of readiness for program change requires consideration of the individual and organizational variables that affect the 4-H Extension agent's attitudes. Darkenwald (1977) stated that until recently most of the literature on the adoption of innovations has focused on the characteristics of the innovation itself and the individual adopter. He indicated that organizational variables affecting innovation adoption have been given little attention. Fabisoff and Ely (1974) concluded after analyzing literature on innovation users that behavior indicative of those more likely to adopt an innovation is affected by both individual and organizational related variables.

The implication from the literature is that effective use of research based information by 4-H organizations to bring about needed change in 4-H programs, is affected by variables related to both the individual 4-H Extension
agent and the 4-H organization. The literature indicated that the potential determinants of the likelihood of adoption of a program innovation by 4-H Extension agents apply to characteristics of many variables. Ward (1978) indicated that the potential determinants may apply to the characteristics of the innovation, the organization, the community, or the situation in which the desired improvement would be expected to take root. Other potential determinants listed by Ward (1978) are the personal characteristics of the information transfer process and the personal characteristics of those involved in adoption of the change.

Several authors have studied the characteristics of organizational change. Davis (1973) listed eight factors he considered necessary in influencing the use of an innovation to bring about organizational change. Glaser (1971) listed twenty factors characteristic of a research finding that may affect its adoption by individuals in an organization. Zaltman (1972) listed nineteen attributes that are relevant to describing, explaining, and predicting response to a proposed innovation. Havelock (1973) proposed ten factors that make up a rating schema for diagnosing problems in the communication of new knowledge or innovations from any sender to a receiver. Ward (1978) indicated that the factors set forth by Glaser, Zaltman and Havelock grouped into eight categories comparable to those suggested by Davis.
(1973). The grouping of factors as shown by Ward (1978) is depicted in Table 1.

Although considerable effort has gone into the identification of factors affecting organizational adoption of an innovation, the researcher was able to find only one instrument designed specifically to measure readiness for program change based upon the factors identified as influencing the likelihood of adoption of an innovation. The specific instrument used in this research study was a modified version of the "Readiness for Program Change Survey Scales" developed by Search Institute (1978). This instrument was based upon a model developed by Davis (1973). The instrument was specifically designed to assess the factors affecting readiness for program change of youth serving organizations such as 4-H.

The literature review indicated that program change is desirable in many instances and that much can be gained by measuring the readiness for such change prior to the introduction of an innovation. Assessment of the factors affecting readiness for program change will allow 4-H organizational leadership to provide guidance for the personal interaction of the state and area 4-H leadership in their strategies to promote program innovation adoption by local unit 4-H Extension agents.
Table 1

FACTORS INFLUENCING THE LIKELIHOOD OF ADOPTION OR ADAPTION OF A SEEMINGLY PROMISING INNOVATION BY AN ORGANIZATION: INTEGRATED FINDINGS

<table>
<thead>
<tr>
<th>H. Davis (8 factors)</th>
<th>E.M. Glaser (20 factors)</th>
<th>G. Zaltman et al. (Condensation of 19 factors)</th>
<th>R. Havelock et al. (10 factors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to carry out the change</td>
<td>Capability and resources</td>
<td>Financial and social costs</td>
<td>Structuring Capacity</td>
</tr>
<tr>
<td>Values or self-expectancy</td>
<td>Compatibility</td>
<td>Compatibility</td>
<td>Homophily</td>
</tr>
<tr>
<td>Idea or information about the qualities of the innovations</td>
<td>Credibility</td>
<td>Communicability</td>
<td>Openness</td>
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<td></td>
<td>Ease in understanding and installation</td>
<td>Divisibility</td>
<td>Reversibility</td>
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<td></td>
<td>Observability</td>
<td>Complexity of concept implementation</td>
<td></td>
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<td></td>
<td>Trialability</td>
<td>Susceptibility to successive modifications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divisibility</td>
<td>Scientific status</td>
<td></td>
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<tr>
<td></td>
<td>Reversibility</td>
<td>Point of origin</td>
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<td></td>
<td></td>
<td>Terminusity</td>
<td></td>
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<tr>
<td>Circumstances which prevail at the time</td>
<td>Willingness to entertain challenge</td>
<td></td>
<td>Proximity</td>
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<td></td>
<td>A climate of trust</td>
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<td></td>
<td>Structural reorganization</td>
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<tr>
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<td>(20 factors)</td>
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<td>(10 factors)</td>
</tr>
<tr>
<td>Timing or readiness for consideration of the idea</td>
<td>Sensitivity to context factors</td>
<td>Early involvement of potential users</td>
<td>Suitable timing</td>
</tr>
<tr>
<td>Obligation, or felt need to deal with a particular problem</td>
<td>Relevance</td>
<td>Widespread felt need to correct undesirable conditions</td>
<td>Shared interest in solving recognized problems</td>
</tr>
<tr>
<td>Resistance or inhibiting factors</td>
<td>Skill in working through resistances</td>
<td>Risk or uncertainty of various kinds</td>
<td>Number of gatekeepers or approval channels</td>
</tr>
<tr>
<td>Yield, or perceived prospect of payoff for adoption</td>
<td>Relative advantage</td>
<td>Efficiency of innovation</td>
<td>Reward</td>
</tr>
<tr>
<td></td>
<td>An incentive system</td>
<td>Perceived relative advantage</td>
<td>Gateway to other innovations</td>
</tr>
</tbody>
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<tr>
<th>Table 1 (continued)</th>
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Demographic Variables Related to Readiness for Program Change

The review of literature has located no evidence of studies that have attempted to explain relationships between various demographic variables and the factors affecting an assessment of organizational or individual readiness for program change. Rogers' and Shoemaker's (1971) inventory of over 1,500 studies relative to the diffusion and adoption of innovations cited no studies relative to 4-H Extension agents readiness to adopt promising program innovations. The United States Department of Agriculture (1975) listed more than 1,300 citations dealing with Cooperative Extension-related problem reports, theses and dissertations. There were no citations relative to readiness for program change on any of these Extension-related studies. Support for selection of the specific demographic variables used in the study came from a variety of subject matter areas, the researcher's knowledge of the Virginia Extension Division and discussions with the Extension staffs of The Ohio State University and Virginia Polytechnic Institute and State University.

The literature indicated that the place of residence of 4-H Extension agents could be related to their readiness for program change. Warren's (1978) discussion of differentiation of interests and associations indicated that due to the changing nature of American communities there is
a growing differentiation of interests among people in the localities and differential association based on the respective interests. Although differentiation of interests and association is occurring in both rural and urban communities, it is generally more differentiated in the more urban areas. Therefore, it is likely that 4-H Extension agents whose 4-H members reside in rural areas will see less need for innovative program efforts than those Extension agents whose 4-H members reside in urban areas. Generally speaking, Virginia 4-H has used more innovative approaches to educational programming in the urban areas. The difference in the nature of programming could be a reflection of the need for differing programs based on the greater differentiation of interests and associations found to be more differentiated in urban areas.

Foster (1962) stated that cultural innovations of urban areas have prestige attached to them. In Virginia there is a wide variance in the degree of "rural-ness" or "urban-ness" in regard to where 4-H members reside. Unlike many states, Virginia has a major 4-H program effort in both urban and rural areas. Ward (1978) indicated that a potential determinant of readiness for change is the characteristics of the community in which 4-H members live.

Rogers and Shoemaker (1971) indicated that social systems with more modern norms are more change oriented.
The implication is that to the extent urban areas display more modern norms than rural areas, 4-H members residing in urban areas would request more change oriented educational programs. 4-H Extension agents in urban areas would likely be more willing to accept program changes if they believed such changes were expected by their clients.

Performance rating is implied by several sources as being related to readiness for program change. Havelock (1971) indicated that by having confidence in certain of our abilities we will tend to take risks. He stated that individuals who have considerable confidence in their abilities would be more prone to try innovations or more willing to evaluate new knowledge. To the extent that high performance as indicated by performance rating is related to an individual's confidence, performance rating could be related to an Extension agent's readiness for program change.

House (1974) indicated that one of the few tangible rewards for working on an innovative project is the increased chance of promotion. To the extent that promotion is coupled with performance rating, it would be expected that Extension agents receiving high performance rating would exhibit a greater readiness for program change.

Gross, Giacquinta, and Bernstein (1971) indicated that many educational innovations cannot be tried on a small
scale and cannot be implemented unless they have the cooperation and support of their colleagues. In the Virginia 4-H organization, Extension agents and 4-H technicians approach programming from a "team" perspective. The implication from Gross, Giacquinta, and Bernstein (1971) was that larger 4-H staffs would be more likely to exhibit greater readiness for program change when faced with a promising program innovation. Katz, Levin and Hamilton (1972) stated that the units of adoption are important in the consideration of innovation adoption. They indicated that some innovations are intended for and indeed require groups to adopt them. Ward (1978) indicated that an organizational variable such as size of staff could be related to adoption of a program innovation.

Doob (1972) reported that people are likely to accept a proposed change when it is not in conflict with traditional beliefs and values which are proving satisfactory. Since both former 4-H and non-former 4-H members make up the staff of the Virginia 4-H organization, influences based upon "traditional" program methods employed while a 4-H member could be related to an Extension agent's readiness for program change.

There are six Extension districts in the Virginia Extension Division. These districts differ considerably by staff size and population characteristics of both staff and
clientele. Keffer (1976) in a study of job satisfaction of field staff of the Virginia Extension Division found significant differences in employee satisfaction by district. Darkenwald (1977) implied that more organizational variables need to be considered as variables affecting innovation adoption.

Rogers and Shoemaker (1971) concluded from their studies that earlier adopters of innovations are no different from later adopters in age. There is a considerable range in the ages of 4-H Extension agents in the Virginia 4-H organization. Keffer's (1976) study of Virginia Extension staff found significant differences by age groups on employee satisfaction of Extension agents.

Rogers and Shoemaker (1971) indicated that an individual's integration into a social system is related to their attitude toward adopting innovations. Hinckley (1978) pointed out that many people in an organization view change as a threat to their status. The implication is that the years of tenure an Extension agent has in the organization will affect their readiness for program change.

There is considerable variation present in the Virginia Extension Division in the level of formal education of Extension agents with major responsibility for 4-H programming. Rogers and Shoemaker (1971) reported that earlier knowers of innovations have more education than
later knowers. The researcher's perception from experience in the Virginia Extension Division indicated that Extension agents in Virginia may exhibit differential readiness for program change depending upon their level of formal education.

Ward (1978), Darkenwald (1977), and Fabisoff and Ely (1974) concluded that organizational variables should be considered when attempting to determine an individual's readiness to adopt a program change. The Virginia Extension Division Extension agents do not hold faculty status at the land-grant institutions as is the situation in many states. Currently, different salary scales exist for the positions Extension Agent "A," Extension Agent "B" and Extension Agent "C," with the "C" position having the highest salary scale. There are a substantial number of Extension agents with responsibility for 4-H programming that occupy Extension Agent "B" positions. The literature would imply that this organizational variable of different salary scales could affect readiness for program change.

Unlike the Virginia Extension program areas of agriculture and family resources, 4-H has approximately equal number of male and female Extension agents. The employment of both male and female agents is an organizational characteristic unique to the 4-H organization of the Extension Division. Darkenwald (1977), Fabisoff and Ely (1974), and
Ward (1978) indicated that organizational characteristics, such as a unique mix of male and female agents, may affect the likelihood of adoption of program innovations.

Based on the review of the literature, personal experience and discussions with Extension personnel of The Ohio State University and Virginia Polytechnic and State University, the researcher studied the following demographic variables as they related to readiness for program change:

1. Sex
2. Age
3. Position classification
4. Educational level
5. Years of service to the organization
6. Local unit's total number of staff with a major 4-H programming responsibility
7. Geographic location as determined by district
8. Performance rating score
9. Status as a former or non-former 4-H member
10. Unit 4-H members' place of residence
CHAPTER III

METHODOLOGY

Population and Sample

Virginia has 112 local units of the Virginia Polytechnic Institute and State University Extension Division. A local Extension unit can be defined as either a county or city, served by an Extension staff of the Virginia Polytechnic Institute and State University Extension Division. These units are divided into six Extension administrative districts, staffed by a district administrator and program leaders for each program area of work.

Extension agents in Virginia are not designated by title according to a specific program of work. For example, there is no designation "4-H Agent" or "Extension Agent, 4-H." Agents do have major responsibilities in one program area, but they also have responsibility to the other programs of the unit. The official list of Virginia Extension agents does not list agents according to a specific program area of responsibility. The population frame was established with the assistance of the six Program Leaders, 4-H. Program Leaders, 4-H identified those fulltime Extension agents in their district having a major responsibility for the
local unit's 4-H programming. The Program Leaders, 4-H identified a population of 183 Extension agents that have a major responsibility for local unit 4-H programming. Extension agents were alphabetically listed by their appropriate Extension districts. A twenty percent sample of agents was drawn for the purpose of field testing the instrument used in the study. Stratification by district was necessary to assure representation from each district. There was considerable variation in staff sizes in each district. Other population characteristics also made it desirable to study the districts separately. A census of all agents in the population, not involved in the field test of the instrument, was used for this study. A total of 146 Extension agents were involved in the study.

A distribution of study subjects by district is shown in Table 2. Official permission to conduct the study in Virginia was obtained from Dr. Kenneth E. Dawson, Director, 4-H. Dr. Dawson made all necessary arrangements with other state Extension administrators and District Program Leaders, 4-H.
Table 2
Distribution of Population

<table>
<thead>
<tr>
<th>Extension District</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Central</td>
<td>38</td>
</tr>
<tr>
<td>Northeast</td>
<td>23</td>
</tr>
<tr>
<td>Northern</td>
<td>17</td>
</tr>
<tr>
<td>Southeast</td>
<td>18</td>
</tr>
<tr>
<td>Southwest</td>
<td>17</td>
</tr>
<tr>
<td>West Central</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
</tr>
</tbody>
</table>

Design and Instrumentation

The design for this study was a combination of survey and correlation research. The primary intent was to utilize the data obtained in the survey portion for a study of relationships.

There were three major dependent variables in the study. They were: "the variables contributing to an agency's openness and skill in effecting program change"; "the criteria used in evaluating a program"; and "the variables contributing to resistances to program change." The three dependent variables were measured by a modified version of the "Readiness for Program Change Survey Scales" developed by Search Institute (1978). Ten demographic variables were considered as independent variables. The independent variables were: sex; age; position classification; level of formal education; length of service in Extension; total
number of 4-H staff; staff in the unit; district; performance rating; former versus non-former 4-H member; and rural versus urban place of residence of unit 4-H members.

Data were collected by mail questionnaire sent to each subject on June 22, 1979. The questionnaires were divided into two parts. Part I of the questionnaire consisted of a modified 124 item "Readiness for Program Change Survey Scales" developed by Search Institute (1978). These scales were primarily developed for the purpose of measuring readiness for program change in youth serving organizations such as 4-H. Minor modifications were made in the scales based upon the field test of the instrument. Changes were for the purpose of making the instrument more applicable to Virginia Extension agents.

Part II of the instrument sought data on ten different demographic variables. The demographic variables were selected based on the review of literature and factors relevant to the Virginia Polytechnic Institute and State University Extension Division.

Three graduate students in the Department of Agricultural Education of The Ohio State University and state administrative personnel of the Virginia Polytechnic Institute and State University Extension Division reviewed the questionnaire and instructions for clarity and ease of response. Initial changes were made prior to mailing test
questionnaires on April 30, 1979. Upon return of test questionnaires to the researcher, responses and comments of respondents were reviewed. Further minor changes were made prior to development of the final questionnaire.

A coded instrument was mailed to each study subject along with a letter from the primary researcher. A letter from Dr. Kenneth E. Dawson, Director, 4-H, accompanied the researcher's letter. Dr. Dawson's letter indicated that the study had the approval and support of the Extension Division administration. Also included was a pre-addressed, stamped return envelope in which the respondent was to return the completed questionnaire.

Subjects were asked to return their completed questionnaire by July 6, 1979. On July 13, 1979, a follow-up letter was mailed to 28 individuals from whom responses had not been received. The 28 subjects were asked to return their completed questionnaire by July 27, 1979. The letter indicated that processing of questionnaires would stop on July 27, 1979. One hundred thirty-eight of the 146 sample subjects responded to the questionnaire. All responses were usable by the researcher. The rate of return amounted to 94.5 percent. The distribution of returns is shown in Table 3.
Table 3
Distribution of Returned Questionnaires

<table>
<thead>
<tr>
<th>Extension District</th>
<th>Population</th>
<th>Number Returned</th>
<th>Percent Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Central</td>
<td>38</td>
<td>34</td>
<td>89.5</td>
</tr>
<tr>
<td>Northeast</td>
<td>23</td>
<td>23</td>
<td>100.0</td>
</tr>
<tr>
<td>Northern</td>
<td>17</td>
<td>17</td>
<td>100.0</td>
</tr>
<tr>
<td>Southeast</td>
<td>18</td>
<td>15</td>
<td>83.3</td>
</tr>
<tr>
<td>Southwest</td>
<td>17</td>
<td>16</td>
<td>94.1</td>
</tr>
<tr>
<td>West Central</td>
<td>33</td>
<td>33</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>138</td>
<td>94.5</td>
</tr>
</tbody>
</table>

Individual questionnaires were identified by a code number to facilitate follow-up and allow for subject confidentiality. Respondents were not required to place their name on the questionnaire. Individual confidentiality was assured for each subject. Copies of the questionnaire, instructions, accompanying letters, and follow-up letter are located in the Appendix.

Analysis of Scales

The "Readiness for Program Change Survey Scales" was developed by Search Institute (1978) primarily to assess the factors that influence a youth serving agency's adoption or non-adoption of an innovation. The Davis A VICTORY model (1973) provided initial definition of the domain to be covered by Search Institute's survey. The acronymn A VICTORY is formed from the first letter of each factor in
Davis' (1973) model. These factors are: ability; values; idea; circumstances; timing; obligation; resistances; and yield.

Development of the instrument began with a series of six group interviews to provide assistance in generating the item pool. Group interviews with representatives of five national youth-serving organizations proved helpful in gaining insight into how members of the various organizations serving youth perceive issues related to change. The organizations involved in the first phase of generating the item pool were: (1) Camp Fire Girls, Inc.; (2) 4-H Clubs/Federal Extension Service; (3) National Catholic Educational Association; (4) Youth Ministry Departments of the United Methodist Church; and (5) the American Lutheran Church.

Search Institute found that few instruments for measuring variables related to planned change existed. However, the Kiresuk and Mayer (1976) "Organizational Readiness to Accept Program Evaluation" instrument and "Social Climate Scales" by Rudolph Moos (1974) provided items for the item pool being generated by Search Institute.

Items generated from the Moos (1974) and Kiresuk and Mayer (1976) scales, the group interviews and items generated from relevant literature were organized by variables in the Davis A VICTORY model. Search Institute (1978) then
developed tentative definitions of the domain within each A VICTORY variable.

The field test version of the survey instrument, organized by the variables in the Davis (1973) A VICTORY model was 187 items in length. The field test version was administered in 22 local groups affiliated with the five participating organizations. Respondents completed the survey, critiqued individual items and added other items that made the survey more complete and meaningful for their local group. Each respondent was specifically asked to identify those items which they thought were: unclear or hard to understand; very important, and for definite inclusion in the final instrument; in need of a change in the wording; unnecessary, to be deleted; or potentially offensive to some.

Search Institute's (1978) analysis of the 187 item field test version included: (1) tallying the critiques noted for each item; (2) evaluating the distribution of responses for each item (e.g., mean, standard deviation, and skewness); and (3) evaluating the item's potential contribution to a scale. Several analyses were made across items to explore their interrelationships, in addition to the investigation of individual items. Search Institute (1978) indicated that a factor analysis (principal components followed by a varimax rotation) was computed across all of the 187 items
in the survey. A separate factor analysis was also computed on the items within each of the domain areas. Analysis of the total item set resulted in factors which resembled the domain categories in the A VICTORY model. However, Search Institute (1978) indicated that the analysis of items within each domain area resulted in several smaller factors. Specifically, the analysis resulted in three factors.

Each set of factors was then submitted to scaling analysis to evaluate the potential of reliable scales emerging from the final survey instrument. Although the field test sample size was only 218, internal consistency reliabilities for the item sets (potential scales) ranged from .60 to .90 prior to any efforts to maximize scaling qualities. Search Institute (1978) indicated that the individual item analysis identified some items to be eliminated and others which needed final editing. They further reported that the factor and scaling analyses confirmed that the items did group into meaningful patterns and possessed stable scale characteristics. Acting on the basis of this information, Search Institute (1978) established a final item pool composed of 153 items.

The final item pool was completed by 2,261 respondents from 191 local youth serving groups (616 of which were 4-H staff and volunteers). The primary purposes of analysis of the 2,261 responses to the 153 item survey was: (1) to
identify scales and standardize the instrument so it could serve as a useful diagnostic device to assess readiness for program change and (2) to evaluate the relevance of the A VICTORY factors to program change within youth-serving organizations (Search Institute, 1978). Specifically, the analysis was designed to identify structure, determine the reliability of scales derived from the structure and to investigate the factor structure of the scales.

Search Institute (1978) used factor analysis to group individual items into potential scale sets in addition to providing a check on whether items hypothesized to be aspects of the A VICTORY areas would empirically group together. Specifically, Search Institute (1978) conducted the following analyses:

1. A principal components analysis, followed by orthogonal rotation (varimax) was made on the responses of the entire sample population of 2,261 across all 153 items in the questionnaire.

2. Using the identical procedure, five other principal components analyses were computed on the responses from persons within each of the five participating youth-serving organizations. Items were grouped into factors on the basis of these separate analyses (one total group analysis and five sub-group analyses).
This analysis resulted in eighteen interpretable factors which were then evaluated for scale properties. Search Institute (1978) stated that the item sets were submitted to the method of reciprocal averaging (Hoyt, 1941) to determine the linearity of items within the scales, the appropriateness of the values assigned to the response categories, and the internal consistency reliability of the item sets. They further reported that all items which reduced the internal consistency reliability of the scales were dropped. This analysis resulted in a series of 18 scales with internal consistency reliabilities of .70 or greater on total group responses. Table 4 depicts the internal consistency reliabilities for the 18 scales in Search Institute's (1978) initial instrument as well as those obtained in the researcher's study. In comparison with the reliabilities of the initial instrument, the reliabilities obtained in the researcher's study were satisfactory even with the much smaller population of 136 Virginia 4-H Extension agents. The fact that several internal consistency reliabilities were higher in the researcher's study is, most likely, indicative of modifications in the wording of items based on the instrument pre-test. These scales are comprised of 124 items that resulted from the development procedure utilized by Search Institute (1978) and which made up Part I of the questionnaire used in the researcher's study.
Table 4

Comparison of Internal Consistency Reliabilities of the "Readiness for Program Change Survey Scales" in Initial Instrument and The Researcher's Study

<table>
<thead>
<tr>
<th>Profile Scale No.</th>
<th>Search Institute's Total Group n = 2261</th>
<th>Search Institute's 4-H Respondents n = 616</th>
<th>Virginia 4-H Extension Agents n = 136</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.81</td>
<td>.78</td>
<td>.82</td>
</tr>
<tr>
<td>2</td>
<td>.81</td>
<td>.78</td>
<td>.82</td>
</tr>
<tr>
<td>3</td>
<td>.75</td>
<td>.70</td>
<td>.78</td>
</tr>
<tr>
<td>4</td>
<td>.74</td>
<td>.71</td>
<td>.76</td>
</tr>
<tr>
<td>5</td>
<td>.72</td>
<td>.70</td>
<td>.75</td>
</tr>
<tr>
<td>6</td>
<td>.75</td>
<td>.72</td>
<td>.80</td>
</tr>
<tr>
<td>7</td>
<td>.65</td>
<td>.55</td>
<td>.54</td>
</tr>
<tr>
<td>8</td>
<td>.74</td>
<td>.72</td>
<td>.75</td>
</tr>
<tr>
<td>9</td>
<td>.69</td>
<td>.59</td>
<td>.64</td>
</tr>
<tr>
<td>10</td>
<td>.72</td>
<td>.70</td>
<td>.67</td>
</tr>
<tr>
<td>11</td>
<td>.73</td>
<td>.71</td>
<td>.73</td>
</tr>
<tr>
<td>12</td>
<td>.78</td>
<td>.77</td>
<td>.74</td>
</tr>
<tr>
<td>13</td>
<td>.73</td>
<td>.70</td>
<td>.68</td>
</tr>
<tr>
<td>14</td>
<td>.77</td>
<td>.75</td>
<td>.75</td>
</tr>
<tr>
<td>15</td>
<td>.85</td>
<td>.85</td>
<td>.84</td>
</tr>
<tr>
<td>16</td>
<td>.75</td>
<td>.75</td>
<td>.73</td>
</tr>
<tr>
<td>17</td>
<td>.82</td>
<td>.82</td>
<td>.79</td>
</tr>
<tr>
<td>18</td>
<td>.75</td>
<td>.75</td>
<td>.78</td>
</tr>
</tbody>
</table>

Once scales were finalized by Search Institute, the scale scores were computed for each of the 2,261 respondents in the total group sample. A principal components factor analysis was then computed on the 18 scale scores. This factor analysis followed the same multiple approach previously outlined. A factor set was established for scales that factored together in the total group analysis, and at least three of the five sub-groups analyses. Search
Institute (1978) then took the resulting factors as a meaningful estimate of the factor structure of the 18 scales. This factor structure is summarized in Table 5.
Table 5  
Factor Structure of  
"Readiness for Program Change Survey Scales"  

FACTOR I  

VARIABLES CONTRIBUTING TO AN AGENCY'S OPENNESS  
AND SKILL IN EFFECTING PROGRAM CHANGE  

<table>
<thead>
<tr>
<th>Scale Numbers</th>
<th>Scale Title</th>
<th>Scale Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Listening Stance</td>
<td>Degree to which staff listens to what youth and parents say, both about their programs and their program needs.</td>
</tr>
<tr>
<td>2</td>
<td>Sensitivity to Timing</td>
<td>Degree to which a group does the detailed long-range planning which sensitively anticipates what is needed to assure the adoption of a new program.</td>
</tr>
<tr>
<td>3</td>
<td>Sharing Information</td>
<td>Degree to which information is shared in ways that gain the support and cooperation of one's constituency.</td>
</tr>
<tr>
<td>4</td>
<td>Flexibility in Programming</td>
<td>Degree to which the programming approach is flexible enough to consider new program options germane to the needs being served.</td>
</tr>
</tbody>
</table>
Table 5 (continued)

<table>
<thead>
<tr>
<th>Scale Numbers</th>
<th>Scale Title</th>
<th>Scale Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Organizational Pride</td>
<td>Degree to which staff and volunteers take pride in their work and the image they have created.</td>
</tr>
<tr>
<td>6</td>
<td>High Morale</td>
<td>Degree to which leaders feel a sense of team and satisfaction with the way things are going.</td>
</tr>
<tr>
<td>7</td>
<td>Interest in New Ideas</td>
<td>Degree to which new ideas are sought by individuals and the staff of one's agency.</td>
</tr>
<tr>
<td>8</td>
<td>Supportive Leadership</td>
<td>Degree to which supervisors are encouraging, supportive, and affirming in their treatment of personnel.</td>
</tr>
<tr>
<td>9</td>
<td>Innovative Atmosphere</td>
<td>Degree to which the atmosphere and policy of one's organization encourage innovativeness.</td>
</tr>
</tbody>
</table>
Table 5 (continued)

**FACTOR II**

**CRITERIA USED IN EVALUATING A PROGRAM**

<table>
<thead>
<tr>
<th>Scale Numbers</th>
<th>Scale Title</th>
<th>Scale Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Evidence of Quality</td>
<td>Degree to which adoption of a program is contingent on its quality as evaluated by professionals.</td>
</tr>
<tr>
<td>11</td>
<td>Need for Convincing Information</td>
<td>Degree to which one's adoption of a new program is contingent on being solidly convinced of its being successful, if tried.</td>
</tr>
<tr>
<td>12</td>
<td>Need to Meet Goals</td>
<td>Degree to which adopting a program is contingent on the likelihood of its achieving a desired goal.</td>
</tr>
<tr>
<td>13</td>
<td>Potential for Growth</td>
<td>Degree to which adoption of a program is contingent on its potential for effecting enthusiasm and organizational growth (survival).</td>
</tr>
<tr>
<td>14</td>
<td>Potential Worth</td>
<td>Degree to which something new is evaluated carefully.</td>
</tr>
<tr>
<td>15</td>
<td>Sense of Need</td>
<td>Degree of expressed concern over what is happening to the youth and their parents, and not happening through current youth programs.</td>
</tr>
</tbody>
</table>
Table 5 (continued)

FACTOR III

RESISTANCES

<table>
<thead>
<tr>
<th>Scale Numbers</th>
<th>Scale Title</th>
<th>Scale Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Preference for Status Quo</td>
<td>Degree to which attitudes of resistance to anything new characterize the decision-making group.</td>
</tr>
<tr>
<td>17</td>
<td>Internal Tension</td>
<td>Degree to which tension, power struggles, conflict, and ambiguity of goals hinder innovativeness.</td>
</tr>
<tr>
<td>18</td>
<td>Enhancing Status</td>
<td>Degree to which adoption of a program is contingent on its likelihood of enhancing one's status or that of one's group.</td>
</tr>
</tbody>
</table>
Statistical Analysis

Data from both parts of the questionnaire were coded and transferred to data processing cards. The resources of the Instruction and Research Computer Center of The Ohio State University were utilized to analyze the data and to test the study hypotheses. The Statistical Package For the Social Sciences by Nie et al. (1975) was utilized. Data concerning frequencies, measures of central tendency, measures of relationship and measures of variability were developed. The major statistical techniques and their use in the study are discussed in Chapter IV. The .05 level of significance was utilized for testing all hypotheses in this study.
CHAPTER IV

FINDINGS

Introduction

This chapter presents the findings of the study. The findings are outlined in terms of the study's objectives and hypotheses. The chapter is divided into two major areas: characteristics of respondents and results of testing the study's null hypotheses. Prior to discussion of the findings a brief review of the research design is presented.

A combination of survey and correlation research was used in the study. One hundred forty-six Extension agents with major responsibility for 4-H programming were mailed a two part questionnaire. Part I of the questionnaire consisted of the 124 item "Readiness for Program Change Survey Scales" developed by Search Institute (1978). An individual's score on the 124 items was parceled into the three factors which served as dependent variables for the study. The score on scales one through nine comprised the individual's score on the factor called "the variables
contributing to an agency's openness and skill in effecting program change." The scores on scales ten through fourteen comprised the individual's score on the factor, "the criteria used in evaluating a program." The score on scales fifteen through eighteen comprised the individual's score on the factor, "the variables contributing to resistances to program change." Since the eighteen scales varied in the number of items per scale, the raw score responses were converted to standard scores (z scores). Factor scores were then obtained by adding z scores of those scales making up the factor. Three factor scores were obtained. These three factor scores represented the three dependent variables used in the study.

Part II of the questionnaire was used to gather information on ten demographic variables. The demographic variables were used as independent variables in the study.

Characteristics of Respondents

Demographic information obtained in Part II of the questionnaire included information on the variables, sex, age, position classification, educational level, years of service, total number of unit 4-H staff, district, performance rating score, unit 4-H members' place of residence and whether or not the agent was a former 4-H member.

Information on the ten demographic variables was needed to test hypotheses related to an Extension agent's level of response on the three factors used to assess readiness for
program change. Demographic data were also used to provide general descriptions of the respondents. The following discussion and tables present these descriptions.

Age
The mean age of all respondents was 34.0 years, with a range of 38 years. The youngest respondent was 22 years of age and the oldest was 60 years of age.

Sex
Of the 138 Extension agents who were subjects in this study, 54 percent were female and 46 percent were male. The respondents included 75 females and 63 males.

Position Classification
Extension agents in Virginia are classified from an entry level position of Extension agent, "A," to the highest level, Extension agent, "C." In this study there were only three individuals classified as Extension agent, "A." The modal group was the Extension agent, "C," classification, with 51 percent of the study respondents. The Extension agent, "B," classification contained 47 percent of the study respondents.

Level of Formal Education
All respondents had at least a Bachelor's degree. Over 59 percent of the respondents had not obtained an advanced degree. Master's or higher degrees were held by 41 percent
of the subjects. Figure 1 shows the distribution of the study subjects by highest level of formal education.

Degree:

<table>
<thead>
<tr>
<th>Degree</th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>31.2%</td>
<td>43</td>
</tr>
<tr>
<td>Bachelor's plus</td>
<td>28.2%</td>
<td>39</td>
</tr>
<tr>
<td>Master's</td>
<td>31.2%</td>
<td>43</td>
</tr>
<tr>
<td>Master's plus</td>
<td>8.7%</td>
<td>12</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0.7%</td>
<td>1</td>
</tr>
</tbody>
</table>

0 10 20 30 40 50 60
Frequencies

Figure 1. Respondents by Highest Level of Formal Education

Years of Tenure in the Organization

The mean length of tenure was 7.6 years with the maximum being 28 years and the minimum being one year of service.

Number of 4-H Staff Assigned to Unit

Data gathered on this variable included all professional and technician staff members having a major responsibility for 4-H programming. The mean 4-H staff size was 2.9 members per staff. The range was from a 4-H staff size of one to a 4-H staff size of 13.
District

Earlier note was made of the distribution by district of the 138 Extension agents involved in the study. The data in Figure 2 shows this distribution.

District:

<table>
<thead>
<tr>
<th>District</th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Central</td>
<td>24.6%</td>
<td>(34)</td>
</tr>
<tr>
<td>Northeast</td>
<td>16.7%</td>
<td>(23)</td>
</tr>
<tr>
<td>Northern</td>
<td>12.3%</td>
<td>(17)</td>
</tr>
<tr>
<td>Southeast</td>
<td>10.9%</td>
<td>(15)</td>
</tr>
<tr>
<td>Southwest</td>
<td>11.6%</td>
<td>(16)</td>
</tr>
<tr>
<td>West Central</td>
<td>23.9%</td>
<td>(33)</td>
</tr>
</tbody>
</table>

Figure 2. Respondents by District

Performance Rating

One hundred twenty-nine Extension agents provided information relative to their most recent performance or merit rating score. The median fell slightly above the 84-85 score category. The distribution of Extension agents by merit rating scores is summarized in Table 6.
Table 6
Distribution of Merit Rating Scores

<table>
<thead>
<tr>
<th>Scores</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>76-77</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>80-81</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>82-83</td>
<td>21</td>
<td>16.3</td>
</tr>
<tr>
<td>84-85</td>
<td>28</td>
<td>21.7</td>
</tr>
<tr>
<td>86-87</td>
<td>29</td>
<td>22.5</td>
</tr>
<tr>
<td>88-89</td>
<td>22</td>
<td>17.1</td>
</tr>
<tr>
<td>90-91</td>
<td>15</td>
<td>11.6</td>
</tr>
<tr>
<td>92-93</td>
<td>9</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Status As a Former 4-H Member

One hundred thirty-seven respondents provided information concerning their status as a former 4-H member. The data reveal that 54 percent of the subjects were former 4-H members and 46 percent had not been 4-H members. There were 74 former and 63 non-former 4-H members.

Extension Unit 4-H Members' Place of Residence

The instrument contained three classifications for unit 4-H member place of residence. The data revealed that 72 percent of the study subjects indicated that a majority of their 4-H members resided in a rural area. Twenty-one percent of the subjects indicated that a majority of their 4-H members resided in urban areas. Only 7 percent of the subjects indicated that their unit's 4-H members were about equally divided between rural and urban residence.
Results of Testing Hypotheses

This section presents a discussion of the findings with respect to the hypotheses tested in the study. Discussion will focus on the statistical tests used, the results of these tests, and the interpretation of the findings. Hypotheses were tested in their null or statistical form rather than in the research form.

Hypothesis 1

The research hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by female agents will be different than that of male agents.

The null hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by males and females will not differ significantly.

Table 7 shows the one-way analysis of variance conducted to determine the difference between male and female groups on the level of response to "the variables contributing to an agency's openness and skill in effecting program change." The calculated F ratio .487 was not significant at the .05 level of significance. Therefore, the null hypothesis could not be rejected. The researcher had expected differences
in levels of response relative to the sex of Extension agents. The findings did not support the research hypothesis.

Table 7

Analysis of Variance of Mean Scores
On "the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change"
By Sex of Extension Agents

<table>
<thead>
<tr>
<th>Source</th>
<th>Males</th>
<th>Females</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>23.44</td>
<td>1</td>
<td>23.44</td>
<td></td>
<td>.487</td>
<td>.486</td>
</tr>
<tr>
<td>Within Groups</td>
<td>136</td>
<td>6545.78</td>
<td></td>
<td>48.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>6569.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Hypothesis 2

The research hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will increase with an increase in an agent's age.

The null hypothesis. There will be no significant relationship between the age of an Extension agent and the level of response to "the variables contributing to an agency's openness and skill in affecting program change."

Since both variables, age and "the variables contributing to an agency's openness and skill in effecting program change," are measured as interval level data, a Pearson
product-moment correlation coefficient was calculated. Table 8 depicts the findings.

Table 8

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>136</td>
<td>.275</td>
<td>.001</td>
</tr>
</tbody>
</table>

The correlation coefficient was significant at the .05 level of significance. Therefore, the null hypothesis was rejected. The data did support the research hypothesis. The probability associated with the correlation coefficient indicates that the level of response to "the variables contributing to an agency's openness and skill in effecting program change" does increase with an increase in the age of an Extension agent, as was expected. Although the correlation coefficient was significant at the .05 level of significance, the degree of association represented was low. The low degree of association did indicate a trend but was not viewed as a strong level of association.

Hypothesis 3

The research hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will increase with an increase in an agent's length of tenure.
The null hypothesis. There will be no significant relationship between the length of an Extension agent's tenure and the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

The relationship between the interval variables, length of tenure and "the variables contributing to an agency's openness and skill in effecting program change" was tested with a Pearson correlation coefficient. Table 9 shows the results of this test.

Table 9

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>.114</td>
<td>.091</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis. It was expected that those agents with greater lengths of tenure would have a higher level of response to "the variables contributing to an agency's openness and skill in effecting program change." The data did not confirm this expectation.
Hypothesis 4

The research hypothesis. There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's educational level.

The null hypothesis. There will be no significant relationship between an Extension agent's educational level and the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

Table 10 shows the degree of association found using the Spearman correlation coefficient to test the relationship between level of education and "the variables contributing to an agency's openness and skill in effecting program change."

Table 10

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>-.022</td>
<td>.399</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. It was expected that as the educational level of an Extension agent increased, the level of response to "the variables contributing to an agency's openness and skill in
effecting program change" would also increase. The findings did not support this hypothesized relationship.

**Hypothesis 5**

The research hypothesis. There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's performance rating.

The null hypothesis. There will be no significant relationship between an Extension agent's performance rating and the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

Table 11 shows the degree of association found between performance rating and level of response to "the variables contributing to an agency's openness and skill in effecting program change." The Spearman correlation coefficient of .078 was not significant at the .05 level of significance. The null hypothesis could not be rejected. The writer had hypothesized that as an Extension agent's performance rating increased, the level of response to "the variables contributing to an agency's openness and skill in effecting program change" would also increase. The findings did not support this hypothesis.
Table 11

Spearman Correlation Coefficient Between Performance Rating and the Level of Response to "the Variables Contributing to an Agency's Openness and Skill In Effecting Program Change"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>.078</td>
<td>.191</td>
</tr>
</tbody>
</table>

Hypothesis 6

The research hypothesis. There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's job classification.

The null hypothesis. There will be no significant relationship between an Extension agent's job classification and the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

A Spearman correlation coefficient was used to determine the relationship between an Extension agent's job classification and "the variables contributing to an agency's openness and skill in effecting program change." Table 12 shows the degree of association found. The correlation coefficient of -.028 was not significant at the .05 level of significance. Therefore, the null hypothesis could not be rejected.
Table 12

Spearman Correlation Coefficient Between Job Classification and "the Variables Contributing To an Agency's Openness and Skill In Effecting Program Change"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>-0.028</td>
<td>.383</td>
</tr>
</tbody>
</table>

It had been hypothesized that Extension agents at higher job classifications would exhibit a higher level of response to "the variables contributing to an agency's openness and skill in effecting program change." The findings did not confirm the research hypothesis.

**Hypothesis 7**

The research hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will be positively related to the size of 4-H staff.

The null hypothesis. There will be no significant relationship between the size of an Extension agent's unit 4-H staff and the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

Since the variables, size of 4-H staff and "the variables contributing to an agency's openness and skill in effecting program change" are interval in nature, the Pearson product-moment correlation coefficient was used to
determine the relationship. The degree of association found is shown in Table 13. The correlation coefficient of .227 was significant at the .05 level of significance. The null hypothesis was rejected. The findings confirm that the level of an Extension agent's response to "the variables contributing to an agency's openness and skill in effecting program change" increases with an increase in the number of 4-H staff in the unit. Although the correlation coefficient was significant at the .05 level of significance, the degree of association represented was low. The degree of association did indicate a trend but was not viewed as a strong level of association.

Table 13

Pearson Product-Moment Correlation Coefficient
Between Total 4-H Staff in a Unit and
"the Variables Contributing to an Agency's Openness
and Skill in Effecting Program Change"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>.227</td>
<td>.004</td>
</tr>
</tbody>
</table>

Hypothesis 8

The research hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by agents in some Extension districts will exceed that of agents in other districts.

The null hypothesis. There will be no significant difference between Extension district of respondents and the
level of response to "the variables contributing to an agency's openness and skill in effecting program change."

Analysis of variance of mean scores of "the variables contributing to an agency's openness and skill in effecting program change" by Extension district was tested. There are six Extension districts in Virginia. The researcher had hypothesized that there would be differences in mean scores by Extension districts on "the variables contributing to an agency's openness and skill in effecting program change." Table 14 shows the results of the test. The F ratio indicates there is no significant difference in mean scores by Extension district for "the variables contributing to an agency's openness and skill in effecting program change." The null hypothesis could not be rejected at the .05 level of significance. The hypothesized difference in mean scores was not supported by the findings.

Table 14

Analysis of Variance of Mean Scores on "the Variables Contributing to an Agency's Openness and Skill in Effecting Program Change" by Extension District

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5</td>
<td>168.91</td>
<td>33.78</td>
<td>.697</td>
<td>.627</td>
</tr>
<tr>
<td>Within Groups</td>
<td>132</td>
<td>6400.20</td>
<td>48.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>6569.11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format
**Hypothesis 9**

The **research hypothesis**. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban and a rural setting.

The **null hypothesis**. There will be no significant difference between the place of residence of an Extension agent's 4-H members and the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

Analysis of variance was computed for mean scores of "the variables contributing to an agency's openness and skill in effecting program change" by place of residence of the Extension unit's 4-H members. Three categories of residence were considered. The researcher had hypothesized that there would be differences in the level of response, by agents, to "the variables contributing to an agency's openness and skill in effecting program change" for different categories of 4-H member residence. Table 15 shows the findings of the test. The F ratio indicates that a significant difference did not exist at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis.
Table 15

Analysis of Variance of Mean Scores on "the Variables Contributing to an Agency's Openness and Skill In Effecting Program Change" by Place of Residence of the Extension Unit's 4-H Members

<table>
<thead>
<tr>
<th></th>
<th>Rural Area</th>
<th>Urban Area</th>
<th>Approximately Equal Distribution of Rural and Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>99</td>
<td>29</td>
<td>10</td>
</tr>
<tr>
<td>Mean</td>
<td>.18a</td>
<td>-1.28</td>
<td>1.89</td>
</tr>
<tr>
<td>SD</td>
<td>6.82</td>
<td>7.41</td>
<td>6.59</td>
</tr>
<tr>
<td>Source</td>
<td>df ss ms F Ratio</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>2 86.45 43.22 .900</td>
<td>.409</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>135 6482.66 48.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137 6569.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format

Hypothesis 10

The research hypothesis. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by agents who were former 4-H members will be different than that of agents who were not former 4-H members.

The null hypothesis. There will be no significant difference between Extension agents who were former 4-H members and Extension agents who were not former 4-H members on the level of response to "the variables contributing to an agency's openness and skill in effecting program change."

A one-way analysis of variance was conducted to determine if differences existed between Extension agents who were former 4-H members and Extension agents who were not former 4-H member on the level of response to "the
variables contributing to an agency's openness and skill in
 effecting program change." Table 16 depicts the results of
 the test. The calculated F Ratio was not significant at the
 .05 level of significance. The null hypothesis could not be
 rejected. The findings did not support the research
 hypothesis.

### Table 16

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>8.19</td>
<td>8.19</td>
<td>.169</td>
<td>.681</td>
</tr>
<tr>
<td>Within Groups</td>
<td>135</td>
<td>6531.32</td>
<td>48.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>6539.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* a = Mean expressed in z score format.

**Hypothesis 11**

The research hypothesis. The level of response to "the
criteria used in evaluating a program" by female agents will
be different than that of male agents.

The null hypothesis. There will be no significant dif-
ference between the sex of an Extension agent and the level
of response to "the criteria used in evaluating a program."

A one-way analysis of variance was conducted to deter-
mine the difference between male and female Extension agents
on the level of response to "the criteria used in evaluating a program." Table 17 gives the result of the test. The calculated F ratio was not significant at the .05 level of significance. The null hypothesis could not be rejected. The research hypothesis was not supported by the findings.

Table 17

Analysis of Variance of Mean Scores
On "the Criteria Used in Evaluating A Program"
By Sex of Extension Agents

<table>
<thead>
<tr>
<th>Source</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>df</td>
<td>ss</td>
</tr>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>23.44</td>
</tr>
<tr>
<td>Within Groups</td>
<td>136</td>
<td>6545.78</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>6569.22</td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Hypothesis 12

The research hypothesis. The level of response to "the criteria used in evaluating a program" will increase with an increase in the age of an agent.

The null hypothesis. There will be no significant relationship between the age of an Extension agent and the level of response to "the criteria used in evaluating a program."

The interval variables, age and "the criteria used in evaluating a program," were tested for degree of association
with the Pearson product-moment correlation coefficient. 
Table 18 shows the results of the test.

Table 18

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>136</td>
<td>.026</td>
<td>.383</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. The expected relationship stated in the research hypothesis was not supported by the findings.

**Hypothesis 13**

**The research hypothesis.** The level of response to "the criteria used in evaluating a program" will increase with an increase in the length of tenure of an agent.

**The null hypothesis.** There will be no significant relationship between the length of tenure of an Extension agent and the level of response to "the criteria used in evaluating a program."

A Pearson product-moment correlation coefficient was calculated to determine the relationship between the two interval variables. Table 19 shows the results of the correlation between length of tenure and "the criteria used in evaluating a program."
Table 19
Pearson Product-Moment Correlation Between Length of Tenure and "the Criteria Used in Evaluating a Program"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>-.068</td>
<td>.212</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis was not rejected. The findings did not support the relationship between length of tenure and "the criteria used in evaluating a program" suggested in the research hypothesis.

Hypothesis 14

The research hypothesis. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's level of education.

The null hypothesis. There will be no significant relationship between the level of education of an Extension agent and the level of response to "the criteria used in evaluating a program."

A Spearman correlation coefficient was calculated to determine the relationship between the variables. Table 20 gives the correlation coefficient between the two variables.
Table 20

Spearman Correlation Coefficient Between Level of Education and "the Criteria Used In Evaluating a Program"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>-.065</td>
<td>.225</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. An expected positive relationship between the two variables was not supported by the findings.

Hypothesis 15

The research hypothesis. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's performance rating.

The null hypothesis. There will be no significant relationship between the performance rating of an Extension agent and the level of response to "the criteria used in evaluating a program."

A Spearman correlation coefficient was calculated to determine the relationship between performance rating and "the criteria used in evaluating a program." Table 21 shows the correlation coefficient.
Table 21

Spearman Correlation Coefficient Between Performance Rating and "the Criteria Used in Evaluating a Program"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>-.067</td>
<td>.226</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The researcher failed to reject the null hypothesis. The relationship hypothesized to exist was not supported by the findings.

Hypothesis 16

The research hypothesis. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's job classification.

The null hypothesis. There will be no significant relationship between the job classification of an Extension agent and the level of response to "the criteria used in evaluating a program."

A Spearman correlation coefficient was calculated to determine the relationship between job classification and "the criteria used in evaluating a program." Table 22 shows the degree of association that was obtained.
Table 22

Spearman Correlation Coefficient Between Job Classification and "the Criteria Used In Evaluating a Program"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>-.201</td>
<td>.009</td>
</tr>
</tbody>
</table>

The calculated coefficient was significant at the .05 level of significance. The null hypothesis was rejected. Although the null hypothesis was rejected, the findings did not totally support the research hypothesis. The researcher had hypothesized that a positive relationship would exist. The findings reveal a negative relationship between job classification and "the criteria used in evaluating a program." The degree of association represented by the correlation coefficient was low. Such a level of association did indicate a trend but was not viewed as a strong level of association.

Hypothesis 17

The research hypothesis. The level of response to "the criteria used in evaluating a program" will be positively related to the size of 4-H staff.

The null hypothesis. There will be no significant relationship between the size of 4-H staff and the level of response to "the criteria used in evaluating a program."

A Pearson product-moment correlation coefficient was calculated to determine the relationship between the
interval level variables, size of total 4-H staff and "the criteria used in evaluating a program." Table 23 shows the degree of association found between these two variables.

Table 23

Pearson Product-Moment Correlation Coefficient Between Size of 4-H Staff and "the Criteria Used in Evaluating a Program"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>.222</td>
<td>.005</td>
</tr>
</tbody>
</table>

The calculated coefficient was significant at the .05 level of significance. The null hypothesis was rejected. The findings supported the research hypothesis. As the size of 4-H staff increased, the level of response to "the criteria used in evaluating a program" also increased. Although the correlation coefficient was significant at the .05 level of significance, the degree of association represented is low. The degree of association did indicate a trend but was not viewed as a strong level of association.

Hypothesis 18

The research hypothesis. The level of response to "the criteria used in evaluating a program" by agents in some Extension districts will exceed that of agents in other districts.

The null hypothesis. There will no significant difference between the Extension district of respondents and the
level of response to "the criteria used in evaluating a program."

Analysis of variance of mean scores of "the criteria used in evaluating a program" by Extension district was tested. There are six Extension districts in Virginia. The researcher had hypothesized that there would be differences in mean scores by Extension districts on "the criteria used in evaluating a program." Table 24 shows the results of the analysis of variance. The F ratio indicates there are significant differences in mean scores by Extension district for "the criteria used in evaluating a program." The null hypothesis could not be rejected. The research hypothesis was not supported by the findings.

Table 24

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5</td>
<td>74.57</td>
<td>14.91</td>
<td>.867</td>
<td>.505</td>
</tr>
<tr>
<td>Within Groups</td>
<td>132</td>
<td>2271.26</td>
<td>17.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>2345.83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Hypothesis 19

The research hypothesis. The level of response to "the criteria used in evaluating a program" will be different
depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban and rural setting.

The null hypothesis. There will be no significant difference between the place of residence of an Extension agent's 4-H members and the level of response to "the criteria used in evaluating a program."

Analysis of variance of mean scores of "the criteria used in evaluating a program" by place of residence of the Extension unit's 4-H members was tested. Three categories of residence were considered. The researcher had hypothesized that there would be differences in the level of response by agents to "the criteria used in evaluating a program" for different categories of 4-H member residence. Table 25 shows the findings of the test. The F ratio indicates that a significant difference did not exist at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis.
Table 25

Analysis of Variance of Mean Scores
On "the Criteria Used In Evaluating A Program" By
Place of Residence of the
Extension Unit's 4-H Members

<table>
<thead>
<tr>
<th></th>
<th>Rural Area</th>
<th>Urban Area</th>
<th>Approximately Equal Distribution of Rural and Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>99</td>
<td>29</td>
<td>10</td>
</tr>
<tr>
<td>Mean</td>
<td>.08&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.56</td>
<td>.84</td>
</tr>
<tr>
<td>SD</td>
<td>4.21</td>
<td>4.13</td>
<td>3.55</td>
</tr>
<tr>
<td>Source</td>
<td>df ss ms</td>
<td>F Ratio p</td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2 17.07 8.54</td>
<td>.495 .611</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>135 2328.75 17.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137 2345.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> = Mean expressed in z score format.

Hypothesis 20

The research hypothesis. The level of response to "the criteria used in evaluating a program" by agents who are former 4-H members will be different than that of agents who were not former 4-H members.

The null hypothesis. There will no significant difference between Extension agents who were former 4-H members and Extension agents who were not former 4-H members on the level of response to "the criteria used in evaluating a program."

A one-way analysis of variance was conducted to determine if differences existed between Extension agents who were former 4-H members and Extension agents who were not former 4-H members on the level of response to "the criteria used in evaluating a program." Table 26 shows the
results of the test. The calculated F ratio was not significant at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis.

Table 26

Analysis of Variance of Mean Scores on "the Criteria Used in Evaluating a Program" by Former and Non-Former 4-H Members

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>1.58</td>
<td>1.58</td>
<td>.092</td>
<td>.762</td>
</tr>
<tr>
<td>Within Groups</td>
<td>135</td>
<td>2321.62</td>
<td>17.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>2323.20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Hypothesis 21

The research hypothesis. The level of response to "the variables contributing to resistances to program change" by female agents will be different than that of male agents.

The null hypothesis. There will be no significant difference in the level of response to "the variables contributing to resistances to program change" by female and male Extension agents.

A one-way analysis of variance was conducted to determine the difference between male and female Extension agents on the level of response to "the variables
contributing to resistances to program change." The calculated F ratio was not significance at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis. Table 27 shows the results of the analysis of variance.

Table 27

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>63</td>
<td>75</td>
</tr>
<tr>
<td>Mean</td>
<td>-.01&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.01</td>
</tr>
<tr>
<td>SD</td>
<td>1.81</td>
<td>1.98</td>
</tr>
<tr>
<td>Source</td>
<td>df</td>
<td>ss</td>
</tr>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>136</td>
<td>492.87</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>492.88</td>
</tr>
</tbody>
</table>

<sup>a</sup> = Mean expressed in z score format.

Hypothesis 22

*The research hypothesis.* There will be a positive relationship between "the variables contributing to resistances to program change" and the age of an agent.

*The null hypothesis.* There will be no significant relationship between the age of an Extension agent and the level of response to "the variables contributing to resistances to program change."

A Pearson product-moment correlation coefficient was calculated to determine the relationship between the
interval variables age and "the variables contributing to resistances to program change." Table 28 shows the correlation coefficient.

Table 28
Pearson Product-Moment Correlation Coefficient Between Age and "the Variables Contributing to Resistances To Program Change"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>136</td>
<td>-.154</td>
<td>.036</td>
</tr>
</tbody>
</table>

The correlation coefficient was significant at the .05 level of significance. The null hypothesis was rejected. Although the null hypothesis was rejected, the findings did not totally confirm the research hypothesis. The researcher had hypothesized that a positive relationship would exist between the variables. The calculated correlation coefficient of -.154 indicates that as the age of an Extension agent increases, the level of response to "the variables contributing to resistances to program change" decreases. This was counter to the research hypothesis.

The degree of association represented by the correlation coefficient was low. The low level of association did indicate a trend but was not viewed as a strong level of association.
Hypothesis 23

The research hypothesis. There will be a positive relationship between "the variables contributing to resistances to program change" and the length of tenure of an agent.

The null hypothesis. There will be no significant relationship between the length of an Extension agent's tenure and the level of response to "the variables contributing to resistances to program change."

A Pearson product-moment correlation coefficient was calculated to determine the relationship between the two variables, both of which were interval in nature. Table 29 shows the correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. The researcher has expected a positive relationship between the two variables. This was not confirmed by the findings.

Table 29
Pearson Product-Moment Correlation Coefficient Between Length of Tenure and "the Variables Contributing to Resistances To Program Change"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>-.105</td>
<td>.111</td>
</tr>
</tbody>
</table>

Hypothesis 24

The research hypothesis. The level of response to "the variables contributing to resistances to program change"
will decrease with an increase in the level of an agent's education.

The null hypothesis. There will be no significant relationship between an Extension agent's educational level and the level of response to "the variables contributing to resistances to program change."

A Spearman correlation coefficient was calculated to determine the degree of association between educational level and "the variables contributing to resistance to program change." Table 30 shows the results of the test.

Table 30

Spearman Correlation Coefficient Between Educational Level and "the Variables Contributing to Resistance to Program Change."

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>-.062</td>
<td>.236</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis was not rejected. The findings did not support the research hypothesis.

Hypothesis 25

The research hypothesis. The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's performance rating.
The null hypothesis. There will be no significant relationship between an Extension agent's performance rating and the level of response to "the variables contributing to resistances to program change."

A Spearman correlation coefficient was calculated to determine the relationship between performance rating and "the variables contributing to resistance to program change." The results of the test are shown in Table 31.

Table 31

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>-0.072</td>
<td>.209</td>
</tr>
</tbody>
</table>

The correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. The researcher had hypothesized that as an Extension agent's performance rating increased, the level of response to "the variables contributing to resistance to program change" would decrease. The findings did not support the research hypothesis.

Hypothesis 26

The research hypothesis. The level of response to "the variables contributing to resistances to program change"
will decrease with an increase in the level of an agent's job classification.

The null hypothesis. There will be no significant relationship between an Extension agent's job classification and the level of response to "the variables contributing to resistances to program change."

A Spearman correlation coefficient was calculated to determine the degree of association between job classification and "the variables contributing to resistances to program change." Table 32 shows the results of the test.

Table 32

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>.124</td>
<td>.074</td>
</tr>
</tbody>
</table>

The calculated correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. The researcher had expected the level of response to "the variables contributing to resistances to program change" to decrease with increasing levels of job classification. The findings did not support this relationship.
Hypothesis 27

The research hypothesis. The level of response to "the variables contributing to resistances to program change" will be negatively related to size of unit 4-H staff.

The null hypothesis. There will be no significant relationship between the size of an Extension agent's unit 4-H staff and the level of response to "the variables contributing to the resistances to program change."

A Pearson product-moment correlation coefficient was calculated to determine the degree of association between the total number of 4-H staff in a unit and "the variables contributing to the resistances to program change." Table 33 shows the results of the test.

Table 33

Pearson Product-Moment Correlation Coefficient Between Size of 4-H Staff and "the Variables Contributing to the Resistances to Program Change"

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>.039</td>
<td>.326</td>
</tr>
</tbody>
</table>

The calculated correlation coefficient was not significant at the .05 level of significance. The null hypothesis could not be rejected. The research hypothesis was not supported by the findings.
Hypothesis 28

The research hypothesis. The level of response to "the variables contributing to resistances to program change" by agents in some Extension districts will exceed that of agents in other districts.

The null hypothesis. There will be no significant difference between the Extension district of respondents and the level of response to "the variables contributing to the resistances to program change."

Analysis of variance of mean scores of "the variables contributing to the resistances to program change" by Extension district was tested. Virginia has six Extension districts. The researcher had hypothesized that there would be differences in mean scores by Extension districts on "the variables contributing to the resistances to program change." Table 34 shows the results of the analysis of variance. The F ratio indicates there are no significant differences in mean scores by Extension district for "the variables contributing to the resistances to program change." The null hypothesis could not be rejected. The research hypothesis was not supported by the findings.
Table 34

Analysis of Variance of Mean Scores
On "the Variables Contributing to the Resistances"
To Program Change" by Extension District

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td></td>
<td>7.44</td>
<td>1.49</td>
<td>.405</td>
<td>.845</td>
</tr>
<tr>
<td>Within Groups</td>
<td>132</td>
<td>485.44</td>
<td>3.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>492.88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Hypothesis 29

The research hypothesis. The level of response to "the variables contributing to resistances to program change" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban and rural areas.

The null hypothesis. There will be no significant difference between the place of residence of an Extension agent's 4-H members and the level of response to "the variables contributing to resistances to program change."

Analysis of variance of mean scores of "the variables contributing to the resistances to program change" by place of residence of the Extension unit's 4-H members was tested. The researcher had hypothesized that there would be differences in the level of response by Extension agents to "the variables contributing to the resistances to program..."
change" for the different categories of 4-H member residence. Table 35 shows the results of the analysis of variance. The F ratio indicates that a significant difference did not exist at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis.

Table 35

Analysis of Variance of Mean Scores
On "the Variables Contributing to the Resistances To Program Change" by Place of Residence of The Extension Unit's 4-H Members

<table>
<thead>
<tr>
<th></th>
<th>Rural Area</th>
<th>Urban Area</th>
<th>Approximately Equal Distribution of Rural and Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>99</td>
<td>29</td>
<td>10</td>
</tr>
<tr>
<td>Mean</td>
<td>-.14a</td>
<td>.65</td>
<td>-.50</td>
</tr>
<tr>
<td>SD</td>
<td>1.94</td>
<td>1.67</td>
<td>1.83</td>
</tr>
<tr>
<td>Source</td>
<td>df</td>
<td>ss</td>
<td>ms</td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>16.95</td>
<td>2.40</td>
</tr>
<tr>
<td>Within Groups</td>
<td>135</td>
<td>475.93</td>
<td>3.60</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>492.88</td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Hypothesis 30

The research hypothesis. The level of response to "the variables contributing to the resistances to program change" by agents who are former 4-H members will be different than those of agents who were not former 4-H members.

The null hypothesis. There will be no significant difference between Extension agents who were former 4-H members and Extension agents who were not former 4-H members on the
level of response to "the variables contributing to the resistances to program change."

A one-way analysis of variance was conducted to determine if differences existed between Extension agents who were former 4-H members and Extension agents who were not former 4-H members on the level of response to "the variables contributing to the resistances to program change." Table 36 shows the results of the test. The calculated F ratio was not significant at the .05 level of significance. The null hypothesis could not be rejected. The findings did not support the research hypothesis.

Table 36

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>ss</th>
<th>ms</th>
<th>F Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>10.54</td>
<td>10.54</td>
<td></td>
<td>.088</td>
</tr>
<tr>
<td>Within Groups</td>
<td>135</td>
<td>482.07</td>
<td>3.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>492.61</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a = Mean expressed in z score format.

Discussion of Findings

The age of Extension agents was found to be significantly related to two of the three factors related to
readiness for program change. Older Extension agents were found to be more open to and skillful in effecting program change. Findings relative to this factor are contradictory to Rogers and Shoemaker's findings, in a related area, in which earlier adopters of innovations were no different from later adopters in age.

The age of Extension agents was also significantly related to the factor, "the variables contributing to resistance to program change." The findings indicated the presence of an inverse relationship between the factor and age. This indicated that younger Extension agents were more resistant to program change than were older agents. The presence of greater resistances to program change by younger agents was counter to findings by Rogers and Shoemaker (1971) which indicated that younger persons were more innovative than their peers.

The size of unit 4-H staff that Extension agents were members of was significantly related to the factors, "the variables contributing to an agency's openness and skill in effecting program change" and "the criteria used in evaluating a program." Agents who were members of larger 4-H staffs (agents and technicians) were more open to and skillful in effecting program change. Additionally, agents in the larger 4-H staffs used program evaluation criteria most conducive to achieving program change. The findings
regarding size of 4-H staff were consistent with findings of Gross, Giacquinta and Bernstein (1971), Katz, Levin and Hamilton (1972) and Ward (1978).

The job classification of Extension agents was significantly related to the factor, "the criteria used in evaluating a program." Agents at the lower position classifications were more likely to use evaluative criteria that was indicative of greater readiness for program change than agents at higher classifications. This finding was contradictory to implications made by Havelock (1971) relative to an individual's readiness for program change.

Certain demographic variables were found to be unrelated to either of the three factors related to readiness for program change. These findings regarding the relationship to the three factors related to readiness for program change and the variables, place of residence of unit 4-H members, performance rating and an agent's status as a former 4-H member were contradictory to the supporting literature. Discussion by Warren (1978) and Foster (1962) implied that the place of residence of 4-H members (rural versus urban) was related to an agent's readiness for program change. This researcher's findings did not support such an association. House (1974) and Havelock (1971) indicated that performance rating could be related to one's readiness for program change. Such a relationship was not found in
this study. Implications by Doob (1972) indicated that an Extension agent's status as a former 4-H member was related to readiness for program change. However, findings from this study indicated no difference between agents who were former 4-H members and those agents who were not former 4-H members and their score on the factors related to readiness for program change.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The Problem

The Virginia Polytechnic Institute and State University Extension Division is concerned about increasing the use of research based program innovations by its local unit 4-H staff personnel. The concern ultimately is for improved 4-H educational programs that meet the educational needs of 4-H clientele more efficiently and effectively than existing 4-H programs.

Many organizational changes have taken place in the Virginia Extension Division in the last decade. These organizational changes, coupled with the dynamic nature of 4-H clientele needs, have brought about many changes in the nature of 4-H educational programs. During the past ten years the leadership of the 4-H organization has introduced program innovations to the local unit 4-H staff personnel in increasing numbers. Few attempts were made by the Virginia Extension Division to assess the factors that influence the willingness of local unit 4-H staff personnel to accept introduced program changes and innovations.
Knowledge about the factors affecting readiness for program change of unit 4-H staff personnel is needed. Having gained knowledge relative to the factors affecting staff readiness for program change, the leadership of the 4-H organization can develop utilization strategies that will increase the likelihood of adoption of effective program changes and innovations by unit 4-H staff personnel.

This study was conducted to determine the relationships between the factors affecting readiness for program change and selected demographic variables of the Virginia Polytechnic Institute and State University Extension Division unit 4-H staff personnel. The factors that were studied by the researcher were those identified by Search Institute (1978). Search Institute (1978) determined that three factors containing eighteen dimensions affected the readiness for program change of youth serving organizations. These factors, as used in this study, were: "the variables contributing to an agency's openness and skill in effecting program change"; "the criteria used in evaluating a program"; and "the variables contributing to resistances to program change."

The selected demographic variables analyzed in the study were:

1. Sex of respondents
2. Age of respondents
3. Position classification of respondents
4. Educational level of respondents
5. Years of service to the organization
6. Local unit's total number of staff with major responsibilities for 4-H programming
7. Geographic location as determined by Extension district
8. Performance rating score of respondent
9. Respondent's status as a former or non-former 4-H member
10. Local unit 4-H members' place of residence.

The Objectives

The specific objectives of the study were:
1. To describe professional non-faculty 4-H field staff in terms of their:
   a. sex
   b. age
   c. position classification
   d. educational level
   e. years of service to the organization
   f. unit's total number of staff with major 4-H programming responsibilities
   g. geographic location as determined by district
   h. performance rating score
i. status as a former or non-former 4-H member
j. unit 4-H members' place of residence

2. To explain the relationship between selected demographic variables and "the variables contributing to an agency's openness and skill in effecting program change."

3. To explain the relationship between selected demographic variables and "the criteria used in evaluating a program."

4. To explain the relationship between selected demographic variables and "the variables contributing to resistances to program change."

**Methodology**

The accessible population for this study was 183 Extension agents, identified by district program leaders as having a major responsibility for local unit 4-H programming. A field test of the study instrument was conducted with 37 of the agents from the population. The 37 field test subjects were determined by drawing a 20 percent stratified random sample of the 183 agents identified as having a major responsibility for local unit 4-H programming. The six Extension districts in Virginia served as strata. Data from the field test were used to determine scale reliabilities and to serve as a check for ease of understanding by the
study subjects. Based upon input from the field test sub-
jects, the instrument wording was modified, where appro-
priate, to provide improved readability and understanding.
A census of the 146 agents not involved in the instrument
field test provided the subjects for the study.

The design for this study was a combination of survey
and correlational research. The demographic survey informa-
tion was obtained primarily for studies of relationships.
Data were collected by mail questionnaires sent to subjects
on June 22, 1979.

There were three major dependent variables in this
study. Factors identified by Search Institute (1978) as
effecting readiness for program change were used as depen-
dent variables. The dependent variables were: "the vari-
ables contributing to an agency's openness and skill in
effecting program change"; "the criteria used in evaluating
a program"; and "the variables contributing to resistances
to program change." The demographic variables were measured
by modified "Readiness for Program Change Survey Scales"
developed by Search Institute (1978). Ten demographic
variables were considered as independent variables.

Questionnaires were returned by 138 subjects, represent-
ing a 94.5 percent response rate. All returned question-
naires were usable by the researcher.
The data were analyzed at the Instruction and Research Computer Center of The Ohio State University. The Statistical Package for the Social Sciences by Nie (1975) was utilized. The analyses of data were made in relation to the specific objectives of the study. Statistical techniques used in analyzing the data included one-way analyses of variance, Pearson product-moment correlations, and Spearman correlation coefficients.

Scale reliability analyses according to the Cronbach alpha technique were used to test the reliability of the eighteen scales making up the "Readiness for Program Change Survey Scales." The Krumbach alpha scale reliabilities obtained for the "Readiness for Program Change Survey Scales" in this study are depicted in Table 37.
Table 37

Cronbach Alpha Scale Reliabilities Obtained For the "Readiness for Program Change Survey Scales" In This Study

n = 138

<table>
<thead>
<tr>
<th>Scale Title</th>
<th>Number of Scale Items</th>
<th>Scale Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening Stance</td>
<td>7</td>
<td>.82</td>
</tr>
<tr>
<td>Sensitivity to Timing</td>
<td>10</td>
<td>.82</td>
</tr>
<tr>
<td>Sharing Information</td>
<td>6</td>
<td>.78</td>
</tr>
<tr>
<td>Flexibility in Programming</td>
<td>6</td>
<td>.76</td>
</tr>
<tr>
<td>Organizational Pride</td>
<td>7</td>
<td>.75</td>
</tr>
<tr>
<td>High Morale</td>
<td>7</td>
<td>.80</td>
</tr>
<tr>
<td>Interest in New Ideas</td>
<td>5</td>
<td>.54</td>
</tr>
<tr>
<td>Supportive Leadership</td>
<td>6</td>
<td>.75</td>
</tr>
<tr>
<td>Innovative Policy and Atmosphere</td>
<td>5</td>
<td>.64</td>
</tr>
<tr>
<td>Evidence of Quality</td>
<td>5</td>
<td>.67</td>
</tr>
<tr>
<td>Need for Convincing Information</td>
<td>6</td>
<td>.73</td>
</tr>
<tr>
<td>Need to Meet Goals</td>
<td>6</td>
<td>.74</td>
</tr>
<tr>
<td>Potential for Growth</td>
<td>4</td>
<td>.68</td>
</tr>
<tr>
<td>Potential Worth</td>
<td>10</td>
<td>.75</td>
</tr>
<tr>
<td>Sense of Need</td>
<td>13</td>
<td>.84</td>
</tr>
<tr>
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<td>.79</td>
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<tr>
<td>Enhancing Status</td>
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Summary of Major Findings

Characteristics of Respondents

All 138 study respondents were professional Extension agents of the Virginia Polytechnic Institute and State University Extension Division. Each agent had a major responsibility for local unit 4-H programming. Data concerning the respondents were collected on the following variables:
a. Age. The mean age of all respondents was 34.0 years, with a range of 38 years.

b. Sex. There were 75 females and 63 males in the group of respondents. Females represented 54 percent of the respondent population and males represented 46 percent.

c. Position Classification. Extension agent positions in the Virginia Extension Division are classified from an entry level position of Extension agent, "A," to the highest position level, Extension agent, "C." In the group of study respondents there were 3 Extension agents, "A"; 64 Extension agents, "B"; and 70 Extension agents, "C."

d. Level of Formal Education. A Master's degree or higher was held by 41 percent of the study subjects. There were 43 individuals with a Bachelor's degree only, as well as 43 individuals with a Master's degree. The next largest group was composed of the 39 individuals with extra hours of work beyond the Bachelor's degree.

e. Years of Tenure in the Organization. The mean length of tenure for the study respondents was 7.6 years with the maximum being 28 years and the minimum being one year of service.
f. Number of 4-H Staff Assigned to Unit. Data collected on this variable included all professional and technician staff members having major responsibility for local unit 4-H programming. The mean 4-H staff size of the study respondents was 2.9 members. The range was from a 4-H staff size of one to a maximum of 13.

g. District. There are six Extension districts in the Virginia Extension Division. A census of Extension agents with major responsibility for 4-H programming was conducted. The number of personnel with major responsibility for 4-H programming at the local unit level in each district ranged from 15 to 34 individuals.

h. Performance Rating. One hundred twenty-nine Extension agents provided information concerning their most recent performance rating. The data reveal that 58.1 percent of the agents had a performance rating score in excess of 85. Performance rating scores ranged from 76 to 93.

i. Status as a Former 4-H Member. One hundred thirty-seven subjects provided information concerning their status as a former 4-H member. There were 74 Extension agents who were former 4-H
members and 63 agents who were not former 4-H members. Former 4-H members represented 54 percent of the respondents and non-former 4-H members represented 46 percent of the respondents.

j. Extension Unit 4-H Members' Place of Residence.

Three residence classification were used in the study. The data revealed that 72 percent of the respondents indicated that the majority of their 4-H members resided in rural areas. Rural areas were considered to be towns and areas of 10,000 people or less. Twenty-one percent of the respondents indicated that the majority of their local unit's 4-H members resided in urban areas. Urban areas were considered to be towns and cities of 10,000 or more people. Only 7 percent of the respondents indicated that the majority of their local unit's 4-H members were about equally divided between rural and urban places of residence.

Hypotheses of the Study

Hypothesis 1. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by female agents will be different than that of male agents.

A one-way analysis of variance of mean levels of response to "the variables contributing to an agency's
openness and skill in effecting program change" by male and female subjects showed a calculated F ratio of .487 with a probability of .486. This indicated that the mean level of response of male and female agents was not significantly different at the .05 level of significance. The research hypothesis was not supported by the findings.

Hypothesis 2. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will increase with an increase in an agent's age.

A low relationship between age and the variables contributing to an agency's openness and skill in effecting program change was found. A Pearson product-moment correlation coefficient was calculated to determine the relationship between age and the variables contributing to an agency's openness and skill in effecting program change. A correlation coefficient of .275 was obtained with a probability of .001. The research hypothesis was supported by the findings.

Hypothesis 3. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will increase with an increase in an agent's length of tenure.

No significant relationship was found between length of tenure and the level of response to "the variables
contributing to an agency's openness and skill in effecting program change." The degree of association was .114 with a probability of .091. The research hypothesis was not supported by the findings.

Hypothesis 4. There will be an increase in the level of response to the "variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's educational level.

No significant relationship (p = .399) was found between level of education and "the variables contributing to an agency's openness and skill in effecting program change." A Spearman correlation coefficient was calculated (r = -.022) to determine the relationship between level of education and "the variables contributing to an agency's openness and skill in effecting program change." The research hypothesis was not supported by the findings.

Hypothesis 5. There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's performance rating.

A Spearman correlation coefficient was calculated (r = .078) to determine the relationship between performance rating and "the variables contributing to an agency's openness and skill in effecting program change." The
calculated correlation coefficient was not significant at the .05 level of significance (p = .191). The research hypothesis was not supported by the findings.

**Hypothesis 6.** There will be an increase in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" with an increase in an agent's job classification.

No significant relationship (r = -.028) was found between agent job classification and "the variables contributing to an agency's openness and skill in effecting program change" at the .05 level of significance (p = .383). The research hypothesis was not supported by the findings.

**Hypothesis 7.** The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will be positively related to the size of 4-H staff.

A low association was found between size of 4-H staff and "the variables contributing to an agency's openness and skill in effecting program change." A Pearson product-moment correlation coefficient of .227 was obtained with a probability of .004. The agents in the larger local unit 4-H staffs had a significantly higher level of response to "the variables contributing to an agency's openness and skill in effecting program change" than did agents in the
smaller local unit 4-H staff. The research hypothesis was supported by the findings.

**Hypothesis 8.** The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by agents in some Extension districts will exceed that of agents in other districts.

The F ratio (F = .697) in the analysis of variance test indicated that there was no significant difference in mean scores on "the variables contributing to an agency's openness and skill in effecting program change" by Extension district (p = .627). The research hypothesis was not supported by the findings.

**Hypothesis 9.** The level of response to "the variables contributing to an agency's openness and skill in effecting program change" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban and rural setting.

An analysis of variance test produced an F value (F = .900) with probabilities indicating that there was no difference in the level of response to "the variables contributing to an agency's openness and skill in effecting program change" for the different categories of 4-H member place of residence (p = .409). The research hypothesis was not supported by the findings.
Hypothesis 10. The level of response to "the variables contributing to an agency's openness and skill in effecting program change" by agents who were former 4-H members will be different than that of agents who were not former 4-H members.

A one-way analysis of variance on the two groups was conducted. The obtained F ratio (F = .169) indicated that there was no significant difference, at the .05 level of significance (p = .681), between former and non-former 4-H member respondents on their level of response to "the variables contributing to an agency's openness and skill in effecting program change." The research hypothesis was not supported by the findings.

Hypothesis 11. The level of response to "the criteria used in evaluating a program" by female agents will be different than that of male agents.

A one-way analysis of variance test produced an F ratio (F = .487) with a probability (p = .486) indicating there was no difference between male and female agents on their level of response to "the criteria used in evaluating a program." The research hypothesis was not supported by the findings.
Hypothesis 12. The level of response to "the criteria used in evaluating a program" will increase with an increase in the age of an agent.

A Pearson product-moment correlation coefficient was calculated \( r = .026 \) to determine the relationship between age and "the criteria used in evaluating a program." The obtained probability \( p = .383 \) indicated that a significant relationship did not exist at the .05 level of significance. The research hypothesis could not be supported by the findings.

Hypothesis 13. The level of response to "the criteria used in evaluating a program" will increase with an increase in the length of tenure of an agent.

The Pearson product-moment correlation coefficient calculated \( r = -.068 \) between length of tenure and "the criteria used in evaluating a program" was not significant at the .05 level of significance \( p = .212 \). The research hypothesis was not supported by the findings.

Hypothesis 14. The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's level of education.

The probability \( p = .225 \) associated with the calculated Spearman correlation coefficient \( r = -.065 \) between level of education and "the criteria used in
evaluating a program" was not significant at the .05 level of significance. The research hypothesis was not supported by the findings.

**Hypothesis 15.** The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's performance rating.

The Spearman correlation coefficient ($r = -.067$) calculated between performance rating and level of response to "the criteria used in evaluating a program" was not significant at the .05 level of significance ($p = .226$). The research hypothesis was not supported by the findings.

**Hypothesis 16.** The level of response to "the criteria used in evaluating a program" will increase with an increase in an agent's job classification.

A low negative relationship ($r = -.201$) between job classification and the level of response to "the criteria used in evaluating a program" was obtained with a probability of .009. The findings did not totally support the research findings. The researcher had expected that a positive relationship would exist. The findings do indicate a relationship between job classification and the level of response to "the criteria used in evaluating a program." However, the data indicate a negative relationship existed.
Hypothesis 17. The level of response to "the criteria used in evaluating a program" will be positively related to the size of 4-H staff.

The data revealed a low relationship between size of 4-H staff and the level of response to "the criteria used in evaluating a program." The calculated Pearson product-moment correlation coefficient of .222 had a probability of .005. The findings supported the research hypothesis. The level of response to "the criteria used in evaluating a program" increased as the size of local unit 4-H staff increased.

Hypothesis 18. The level of response to "the criteria used in evaluating a program" by agents in some Extension districts will exceed that of agents in other districts.

An analysis of variance test produced an F value ($F = .867$) with a probability ($p = .505$) indicating that there was no difference at the .05 level of significance in the level of response to "the criteria used in evaluating a program" by Extension district. The research hypothesis was not supported by the findings.

Hypothesis 19. The level of response to "the criteria used in evaluating a program" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban or rural setting.
The F value \( F = .495 \) produced by the analysis of variance test had a probability \( p = .611 \) that indicated there was no difference in the level of response to "the criteria used in evaluating a program" for the different categories of 4-H member place of residence. The research hypothesis was not supported by the findings.

**Hypothesis 20.** The level of response to "the criteria used in evaluating a program" by agents who were former 4-H members will be different than that of agents who were not former 4-H members.

A one-way analysis of variance was conducted on the two group responses. The obtained F ratio \( F = .092 \) indicated that there was no significant difference \( p = .762 \), at the .05 level of significance, between former and non-former 4-H member respondents on their level of response to "the criteria used in evaluating a program." The findings did not support the research hypothesis.

**Hypothesis 21.** The level of response to "the variables contributing to resistances to program change" by female agents will be different than that of male agents.

A one-way analysis of variance test produced an F ratio \( F = .003 \) with a probability \( p = .956 \) indicating there was no difference between male and female agents on their level of response to "the variables contributing to
resistances to program change." The research hypothesis was not supported by the findings.

**Hypothesis 22.** There will be a positive relationship between "the variables contributing to resistances to program change" and the age of an agent.

A Pearson product-moment correlation coefficient was calculated ($r = -.154$) to determine the relationship between age and "the variables contributing to resistances to program change." The obtained probability ($p = .036$) indicated a significant relationship existed between an agent's age and the level of response to "the variables contributing to resistances to program change." The obtained correlation coefficient indicated the existence of a low negative relationship with a probability of .036. Although a significant relationship was found to exist between age and "the variables contributing to resistances to program change," the research hypothesis was not completely supported by the findings. The researcher had expected a positive relationship between the two variables. The findings indicated a low negative relationship between age and "the variables contributing to resistances to program change."
Hypothesis 23. There will be a positive relationship between "the variables contributing to resistances to program change" and the length of tenure of an agent.

The Pearson product-moment correlation coefficient calculated ($r = -0.105$) to determine the relationship between length of tenure and "the variables contributing to resistances to program change" was not significant at the .05 level of significance ($p = .111$). The research hypothesis was not supported by the findings.

Hypothesis 24. The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's education.

The probability ($p = .236$) associated with the calculated Spearman correlation coefficient ($r = -0.062$) between level of education and "the variables contributing to resistances to program change" was not significant at the .05 level of significance. The research hypothesis was not supported by the findings.

Hypothesis 25. The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's performance rating.

The Spearman correlation coefficient calculated ($r = -0.072$) to determine the relationship between
performance rating and "the variables contributing to resistances to program change" was not significant at the .05 level of significance (p = .209). The research hypothesis was not supported by the findings.

**Hypothesis 26.** The level of response to "the variables contributing to resistances to program change" will decrease with an increase in the level of an agent's job classification.

The Spearman correlation coefficient calculated (r = .124) to determine the relationship between job classification and "the variables contributing to resistances to program change" was not significant at the .05 level of significance (p = .074). The research hypothesis was not supported by the findings.

**Hypothesis 27.** The level of response to "the variables contributing to resistances to program change" will be negatively related to size of unit 4-H staff.

The Pearson product-moment correlation coefficient calculated (r = .039) to determine the relationship between size of 4-H staff and "the variables contributing to resistances to program change" was not significant at the .05 level of significance (p = .326). The research hypothesis was not supported by the findings.
Hypothesis 28. The level of response to "the variables contributing to resistances to program change" by agents in some Extension districts will exceed that of agents in other districts.

An analysis of variance test produced a F value \( F = .405 \) with a probability \( p = .845 \) indicating that there was no difference at the .05 level of significance, in the level of response to "the variables contributing to resistances to program change" by Extension district. The research hypothesis was not supported by the findings.

Hypothesis 29. The level of response to "the variables contributing to resistances to program change" will be different depending on whether the agent's 4-H members reside in an urban, rural, or a combination of an urban or rural areas.

The F value \( F = 2.40 \) produced by the analysis of variance test had a probability \( p = .094 \) that indicated there was no difference in the level of response to "the variables contributing to resistances to program change" for the different categories of 4-H member place of residence. The research hypothesis was not supported by the findings.

Hypothesis 30. The level of response to "the variables contributing to resistances to program change" by agents who
are former 4-H members will be different than those of agents who are not former 4-H members.

A one-way analysis of variance was conducted on the two groups' responses. The obtained F ratio \( F = 2.95 \) indicated there was no difference \( p = .088 \) at the .05 level of significance between agents who were former 4-H members and agents who were not former 4-H members on their level of response to "the variables contributing to resistances to program change." The findings did not support the research hypothesis.

**Conclusions**

The following conclusion are based on the interpretations of the data presented in the study:

1. Extension agents who are members of larger local unit 4-H staffs score higher on the combined "Readiness For Program Change" scales measuring "the variables that contribute to an agency's openness and skill in effecting program change." Higher scores on the combined scales suggest that agents in larger 4-H staffs:

   a. Are more willing to listen to what the local unit youth and parents say about the unit 4-H program and the program needs

   b. Are more sensitive to the detailed long-range planning required to anticipate what is needed to assure the adoption of a new program
c. Are more willing to share information in ways that will gain the support and cooperation of their constituency

d. Are more flexible in their approach to programming and are more willing to consider new program options germane to the needs being served

e. Take more pride in their work and the image the staff has created

f. Are more likely to seek new ideas relative to unit programming

g. Are more likely to feel that their supervisors are encouraging, supportive, and affirming in their treatment of personnel

h. Are more likely to view the atmosphere and policy of their organization as encouraging innovativeness

i. Are more likely to feel a greater sense of team spirit and satisfaction with the way things are going in the unit.

2. Extension agents who are members of larger local unit 4-H staffs score higher on the combined "Readiness For Program Change" scales measuring "the criteria used in evaluating a program." Higher scores on the combined scales suggest that Extension agents in larger local unit 4-H staffs are:
a. More likely to adopt programs that have received a high qualitative evaluation from a professional who is knowledgeable about the program.

b. More likely to adopt new programs that they are convinced will be successful, if tried.

c. More likely to adopt a new program if it will achieve a desired goal.

d. More likely to adopt a new program that has the potential for affecting enthusiasm and organizational growth.

e. More likely to carefully evaluate the potential worth of a new program.

f. More likely to exhibit concern over what is happening to the youth and their parents, and is not happening through current unit youth programs.

3. Older Extension agents score higher on the combined "Readiness For Program Change" scales measuring "the variables that contribute to an agency's openness and skill in effecting program change" than do younger Extension agents. Higher scores by older Extension agents on the combined scales suggest that they:

a. Are more willing to listen to what the local unit youth and parents say about the unit 4-H program and the program needs.
b. Are more sensitive to the detailed long-range planning required to anticipate what is needed to assure the adoption of a new program

c. Are more willing to share information in ways that will gain the support and cooperation of their constituency

d. Are more flexible in their approach to programming and are more willing to consider new program options germane to the needs being served

e. Take more pride in their work and the image the staff has created

f. Are more likely to seek new ideas relative to unit programming

g. Are more likely to feel that their supervisors are encouraging, supportive, and affirming in their treatment of personnel

h. Are more likely to view the atmosphere and policy of their organization as encouraging innovativeness

i. Are more likely to feel a greater sense of team spirit and satisfaction with the way things are going in the unit.

4. Younger Extension agents score higher on the combined "Readiness For Program Change" scales measuring "the variables contributing to resistance to program
change." Higher scores by younger agents on the combined scales suggest that:

a. Their decision making is characterized by an attitude of greater resistance to anything new

b. Tension, power struggles, conflict, and ambiguity of goals are more likely to hinder their innovativeness

c. Their adoption of a program is more contingent on its likelihood of enhancing their own status or that of their staff.

5. Extension agents in lower position classifications score higher on the combined "Readiness For Program Change" scales measuring "the criteria used in evaluating a program." Higher scores on the combined scales suggest that Extension agents in lower position classifications are:

a. More likely to adopt programs that have received a high qualitative evaluation from a professional who is knowledgeable about the program

b. More likely to adopt new programs that they are convinced will be successful, if tried

c. More likely to adopt a new program if it will achieve a desired goal

d. More likely to adopt a new program that has the potential for effecting enthusiasm and organizational growth
e. More likely to carefully evaluate the potential worth of a new program

f. More likely to exhibit concern over what is happening to the youth and their parents, and is not happening through current unit youth programs.

6. The demographic variables, sex, length of tenure, level of education, place of residence of unit 4-H members, performance rating, district, and an agent's status as a former 4-H member are not associated with the score on the combined "Readiness For Program Change" scales measuring "the variables contributing to an agency's openness and skill in effecting program change." This suggests that there is no difference by sex, length of tenure, level of education, performance rating, place of residence of 4-H members, district, or an agent's status as a former 4-H member and the emphasis that agents place on:

a. What the local unit youth and parents say about the unit 4-H program and the program needs

b. The detailed long-range planning that is required to anticipate what is needed to assure adoption of new programs

c. The sharing of information that will gain the support and cooperation of their constituency

d. The flexibility in programming that is needed to consider new program options
e. Organizational pride and the unit image
f. Seeking new program ideas
g. The presence of supportive organizational leadership
h. The presence of an innovative work atmosphere and organizational policy
i. High unit staff morale.

7. The demographic variables, sex, length of tenure, level of education, place of residence of 4-H members, performance rating, district, and an agent's status as a former 4-H member are not associated with the score on the combined "Readiness For Program Change" scales measuring "the criteria used in evaluating a program." This suggests that there is no difference by sex, length of tenure, level of education, performance rating, place of residence of 4-H members, district, or an agent's status as a former 4-H member and:

a. The degree to which adoption of a program is contingent on its quality as evaluated by professionals
b. The degree to which one's adoption of a new program is contingent on being solidly convinced of its being successful, if tried
c. The degree to which adopting a program is contingent on the likelihood of its achieving a desired goal
d. The degree to which adoption of a program is contingent on its potential for effecting enthusiasm and organizational growth

e. The degree to which something new is evaluated carefully

f. The degree of expressed concern over what is happening to the youth and their parents, and not happening through current unit youth programs.

8. The demographic variables, sex, length of tenure, level of education, place of residence of unit 4-H members, performance rating, district, and an agent's status as a former 4-H member are not associated with the score on the combined "Readiness For Program Change" scales measuring "the variables contributing to resistances to program change." This suggests that there is no difference by sex, length of tenure, level of education, performance rating, place of residence of 4-H members, district, or an agent's status as a former 4-H member of agents and:

a. The degree to which attitudes of resistance to anything that is new characterizes their decision-making

b. The degree to which tension, power struggles, conflict, and ambiguity of goals hinder innovativeness
c. The degree to which the adoption of a program is contingent on its likelihood of enhancing one's status or that of one's staff.

9. The size of local unit 4-H staff that the Extension agent is part of is not significantly associated with the score on the "Readiness For Program Change" scales measuring "the variables contributing to resistance to program change." This suggests that there is no difference by size of 4-H staff and:

a. The degree to which attitudes of resistance to anything that is new characterizes their decision-making

b. The degree to which tension, power struggles, conflict, and ambiguity of goals hinder innovativeness

c. The degree to which the adoption of a program is contingent on its likelihood of enhancing one's status or that of one's staff.

10. The job classification of Extension agents is not associated with the score on the combined "Readiness For Program Change" scales measuring "the variables contributing to an agency's openness and skill in effecting program change." This suggests that there is no difference by position classification of agents and:

a. The degree to which they listen to what youth and parents say about unit programs and program needs
b. The degree to which they do the detailed long-range planning which sensitively anticipates what is needed to assure adoption of a new program
c. The degree to which information is shared that will gain the support of their constituency
d. The degree to which their programming approach is flexible enough to consider new program options germane to the needs being served
e. The degree to which they take pride in their work and the image they have created
f. The degree to which they feel a sense of team spirit and satisfaction with the way things are going
g. The degree to which new ideas are sought by individuals and the staff of their unit
h. The degree to which they feel their supervisors are encouraging, supportive, and affirming in their treatment of personnel
i. The degree to which they feel the atmosphere and policies of the organization encourage innovativeness.

11. The position classification of Extension agents is not associated with the score on the combined "Readiness For Program Change" scales measuring "the variables contributing to resistances to program change." This suggests that there is no difference by position classification of Extension agents and:
a. The degree to which attitudes of resistance to anything new characterize their decision-making

b. The degree to which tension, power struggles, conflict, and ambiguity of goals hinder their innovativeness

c. The degree to which the adoption of a program is contingent on its likelihood of enhancing their status or that of their unit.

Recommendations

1. The findings of this study should be utilized by the Program Leaders, 4-H and Extension Leaders, 4-H in Virginia to plan for personal interaction strategies with local unit 4-H staff personnel. Specifically, the information gained regarding the factors affecting readiness for program change should be understood by program leaders and Extension leaders and applied in such a manner that local unit 4-H staffs would be more willing to accept proposed program changes.

2. Since the study findings indicated that larger local unit 4-H staffs exhibited greater regard for "the variables that contribute to an agency's openness and skill in effecting program change" and greater regard for "the criteria used in evaluating a program," the findings should be considered in the determination of staffing patterns for the local unit 4-H staff.
3. Inservice education programs should be developed for local unit 4-H staff personnel that are designed to provide an understanding of the eighteen dimensions of the "Readiness for Program Change Survey Scales." The objective of such inservice programs would be to: help agents value more highly the nine variables composing "the variables contributing to an agency's openness and skill in effecting program change"; and to help agents more highly value the six variables that compose "the criteria used in evaluating a program." An additional objective of the inservice education would be to help agents de-emphasize the value placed on the three variables that contribute to resistances to program change.

4. The state 4-H staff should utilize the modified "Readiness for Program Change Survey Scales" with local unit 4-H staffs at two to three year intervals to assess the effectiveness of inservice education programs (recommendation three) and to assess the effectiveness of program leader and Extension leader personal interaction plans (recommendation one).

5. The state 4-H staff should conduct further research with the Virginia 4-H organization relative to the 18 dimensions contained within the three factors related to readiness for program change. The researcher's study collected base-line data regarding the three factors related
to readiness for program change. Additional research focusing on the individual dimensions of each factor is required to more fully assess readiness for program change.

6. Since this study was the first of its kind to be done with state 4-H organization personnel, it should be replicated, using the same design, in other state 4-H organizations. Replication of the study would aid in determining if local unit 4-H agents in other states differ significantly from local unit agents in this study.
To: Certain Extension Agents

Dear Co-workers:

I would appreciate your cooperation in filling out the enclosed questionnaire which pertains to a study being conducted by Mr. David Barrett, Extension Agent, on educational leave from Extension. The results of this study should be very significant to the 4-H program and the Extension Division in helping to determine factors related to readiness for program change.

I am sure Dave would appreciate your prompt response to the questionnaire. The information gained from the study should be very helpful in strengthening the effectiveness of our organization.

Sincerely,

Kenneth E. Dawson
Director, 4-H

cc: Mr. J. David Barrett
Enclosure
Dear Co-workers:

Extension professionals are always concerned with assessing when program change is too fast, too slow, too great or too small. In cooperation with the Virginia Tech Extension Division and the Agricultural Education Department of The Ohio State University, I am conducting a study concerning readiness for program change of those field staff of the Virginia Tech Extension Division having a major responsibility for 4-H programming.

Each Extension Agent having a major responsibility for 4-H programming has been selected to participate in the study. The Extension Division administrative staff has encouraged me to pursue this line of research, and has authorized me to request your cooperation in the study.

Your assistance is needed to help determine the readiness for program change of agents having a major responsibility for 4-H programming. The enclosed questionnaire is being used to gather data for the study. Completion of the questionnaire will require about 30 minutes of your time. Be assured that your responses will be confidential. The purpose of the code number on the questionnaire is to facilitate processing and necessary follow-up of those who do not return the research material. Data from the study will be used only in an overall analysis with no individual used.

It is very important that you reply promptly. Please complete the questionnaire and return it in the pre-addressed, stamped envelope as soon as possible and prior to July 6, 1979. I truly appreciate your participation in this study.

Sincerely,

J. David Barrett

rh

cc: District Program Leaders, 4-H
Dr. Dawson
Dr. Slayton

Enclosures
Dear Co-Workers:

Approximately three weeks ago, I requested your assistance in completing a questionnaire for a research project concerning the readiness for program change of those Extension Agents having a major responsibility for 4-H programming. It is extremely important that I have your input for the research being conducted.

Since I have received no reply from you, I suspect that the questionnaire may have become lost in the mail or that you have inadvertently misplaced it. Therefore, I am enclosing another questionnaire and stamped, pre-addressed envelope for your use.

Please complete and mail the questionnaire as soon as possible, and by July 24. Any data received after July 27, 1979 cannot be used in the study. Your prompt reply is appreciated.

Sincerely,

J. David Barrett

Enclosure
Your Code Number is _____________.

I am conducting a study of field staff personnel of the Virginia Polytechnic Institute and State University Extension Division, having a major responsibility for 4-H programming. The study is to determine factors which may be related to your readiness for program change. Your cooperation in completing the following questionnaire is appreciated. Please read the instructions for each segment carefully.

General Instructions
1. Please read all instructions carefully.
2. Please answer all questions. All responses will be considered confidential.
   Frankness in your responses is needed and will be appreciated.
3. If any item poses difficulty in answering, please respond with your best estimate or appraisal.
4. When you have completed the entire questionnaire, please recheck it to ensure all items have been answered.
5. Please return your completed questionnaire in the pre-addressed stamped envelope.
6. Your name is not needed on the questionnaire. The code number in the upper right corner is only to facilitate processing and follow-up.
7. Please mail your completed questionnaire as soon as possible and not later than July 6, 1979.
PART I

This part of the questionnaire consists of 124 statements which I call "items," divided into sections. I encourage you to read carefully the set of instructions at the beginning of each section. I ask you to be candid and straightforward as possible in answering the questionnaire. I need and appreciate your thoughtful, careful consideration of this task.

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Section A

PLEASE CIRCLE THE NUMBER THAT SHOWS HOW MUCH YOU AGREE OR DISAGREE WITH EACH STATEMENT AS IT RELATES TO YOUR EXTENSION UNIT STAFF.

YOUR CHOICE OF RESPONSES IS:

5--Strongly Agree
4--Agree
3--Neither Agree Nor Disagree
2--Disagree
1--Strongly Disagree

1. The staff I work with knows how to introduce changes effectively. 5 4 3 2 1

2. Extension's administrative procedures are quite flexible. 5 4 3 2 1

3. Most of our young people serving as leaders are highly responsible. 5 4 3 2 1

4. Time is rarely scheduled for considering anything new. 5 4 3 2 1

5. My staff's first reaction to a new idea is to determine why it will not work. 5 4 3 2 1

6. My 4-H Program Leader encourages me to consider new ideas. 5 4 3 2 1

7. Considerable tension exists between our administrators and volunteer leaders. 5 4 3 2 1
8. Doing things in new or creative ways is appreciated by our top administrator.  
   \[5\ 4\ 3\ 2\ 1\]

9. Paid staff usually decide what should be done, without input from volunteers.  
   \[5\ 4\ 3\ 2\ 1\]

10. The staff I work with faces its problems head-on.  
    \[5\ 4\ 3\ 2\ 1\]

11. My Extension supervisor shows an interest in what I am doing.  
    \[5\ 4\ 3\ 2\ 1\]

12. Our local unit is highly respected in the community.  
    \[5\ 4\ 3\ 2\ 1\]

13. Communication is mostly one-way--from the top down.  
    \[5\ 4\ 3\ 2\ 1\]

14. Some Extension administrators seem to want "change for change's sake."  
    \[5\ 4\ 3\ 2\ 1\]

15. Our staff has freedom to innovate even when funding is involved.  
    \[5\ 4\ 3\ 2\ 1\]

16. We are open to the suggestions of youth.  
    \[5\ 4\ 3\ 2\ 1\]

17. The making of independent decisions is highly valued in our organization.  
    \[5\ 4\ 3\ 2\ 1\]

18. I am unhappy with the way things are going in my local unit.  
    \[5\ 4\ 3\ 2\ 1\]

19. Conflicts over values hinder our work.  
    \[5\ 4\ 3\ 2\ 1\]

20. Most of the people on our staff seem unclear as to the goals of our local unit.  
    \[5\ 4\ 3\ 2\ 1\]

21. We have considerable freedom to try out new ideas.  
    \[5\ 4\ 3\ 2\ 1\]

22. The people on our staff share ideas with each other.  
    \[5\ 4\ 3\ 2\ 1\]

23. Our local unit has a history of being innovative in programming.  
    \[5\ 4\ 3\ 2\ 1\]

24. Power struggles hinder our work.  
    \[5\ 4\ 3\ 2\ 1\]
25. Too much time and energy is spent in getting things approved.  

26. I enjoy my work here.  

27. I welcome my supervisor's evaluation of my work.  

**SECTION B**

PLEASE CIRCLE THE NUMBER THAT SHOWS HOW OFTEN THE ITEM IS TRUE FOR YOU OR OTHER INDIVIDUALS IN THE UNIT SHARING RESPONSIBILITIES FOR 4-H PROGRAMMING. (IF YOU FEEL THAT SOME MEMBERS OF YOUR UNIT TIP ONE DIRECTION, AND OTHERS GO ANOTHER DIRECTION, ANSWER AS IS USUALLY TRUE FOR MOST MEMBERS OF THE UNIT HAVING 4-H RESPONSIBILITIES.)

YOUR CHOICE OF RESPONSES IS:

5—Very Often
4—Quite Often
3—Sometimes
2—Seldom
1—Never

28. We try to inform those we serve as to why we do what we do.  

29. We discuss the best time for introducing a new program.  

30. I read books and articles about youth.  

31. I gain program ideas through conversations with friends and colleagues elsewhere.  

32. We share information on innovations well in advance of a decision to adopt them.  

33. I am given credit for what I do.  

34. People from our local unit attend seminars and workshops for new ideas.
35. We are conscious of the expectations of the people we serve.

36. Resource materials from our state/area 4-H office are reviewed and made available.

37. The start of new programs is coordinated with the budget year.

38. We consider how to increase people's sense of need for the new program being introduced.

39. We discuss the success that other groups or organizations have had with certain programs.

40. I am forgiven if I make mistakes in my work.

41. When innovations are presented, more than one option is given.

42. We seek out new ways to do our work by reviewing what others write.

43. I feel trusted by my Extension supervisor.

44. Our staff allows flexibility in the scheduling of a new program.

45. We gain the endorsement of known and respected people before launching new programs.

46. I receive stimulating information on youth work from the Extension organization.

47. I participate in the decision making process in my local unit.

48. We spend time needed to test a new program before introducing it.

49. I hear enthusiastic comments about our programs from the people we serve.
50. We allow time to modify programs on the basis of feedback from the people involved. 5 4 3 2 1
51. I know what I am supposed to be doing in my role in our local unit. 5 4 3 2 1
52. Inservice training on different aspects of working with youth is provided for our adult leaders. 5 4 3 2 1
53. We evaluate our progress toward clearly defined goals. 5 4 3 2 1
54. We seek parent reaction to a proposed new program. 5 4 3 2 1
55. We make schedules of what must be done before a new program is introduced. 5 4 3 2 1
56. I feel a part of our staff. 5 4 3 2 1
57. We take into account the delay caused by resistance to change. 5 4 3 2 1
58. There is an enthusiastic, informal sharing of ideas among members of our staff. 5 4 3 2 1
59. We take the time to hear what parents feel is needed before introducing changes. 5 4 3 2 1
60. We coordinate an innovation with other activities. 5 4 3 2 1
61. We stimulate an awareness of the urgent needs of youth. 5 4 3 2 1
62. I feel satisfied with the opportunities given me to use my abilities. 5 4 3 2 1
63. I tend to be enthusiastic over new ideas or programs. 5 4 3 2 1
64. We adapt programs to meet our particular situation. 5 4 3 2 1
65. We try to identify the needs of the youth we serve. 5 4 3 2 1

66. Mass media stimulate our awareness of topics to incorporate into our program. 5 4 3 2 1

67. We evaluate the impact of our programs. 5 4 3 2 1

68. Our youth talk about their leaders as being caring people.

SECTION C

PLEASE TRY TO DESCRIBE HOW LIKELY YOU ARE TO REACT IN THE WAYS DESCRIBED BELOW WHEN A NEW PROGRAM IS PRESENTED TO YOU FOR THE FIRST TIME. IN THIS SECTION, ANSWER FOR YOURSELF ONLY, NOT FOR OTHER INDIVIDUALS IN YOUR UNIT SHARING RESPONSIBILITY FOR 4-H PROGRAMMING. CIRCLE THE NUMBER THAT IS MOST INDICATIVE OF YOUR REACTION ONLY.

1—Unlikely
2—Possibly
3—Somewhat Likely
4—Quite Likely
5—Very Likely to React This Way

69. Try to determine the motivation for it being introduced. 5 4 3 2 1

70. Notice whether the presenter is convinced of its value. 5 4 3 2 1

71. Wonder how it affects my area of responsibility. 5 4 3 2 1

72. Be alert to reasons for or against it. 5 4 3 2 1

73. Prefer staying with what we are doing. 5 4 3 2 1

74. Be suspicious of it if I distrust the presenter. 5 4 3 2 1
75. Wonder what others think about it. 5 4 3 2 1
76. Wonder if a criticism of current efforts is implied. 5 4 3 2 1
77. Think about how satisfying it will be to youth. 5 4 3 2 1
78. Evaluate it in light of its possibilities. 5 4 3 2 1
79. Evaluate it with the priorities of our local unit in mind. 5 4 3 2 1
80. Prefer to be involved in it only partially. 5 4 3 2 1
81. Feel uneasy if it seems "too new." 5 4 3 2 1
82. Support it even if it starts slowly or has some active critics. 5 4 3 2 1
83. Assume nothing will come of it. 5 4 3 2 1
84. Feel it is being railroaded through. 5 4 3 2 1
85. Look at its possible effects on the total program. 5 4 3 2 1

SECTION D

YOU MAY OBSERVE OR EXPERIENCE THINGS IN YOUR COMMUNITY OR LOCAL UNIT WHICH CONCERN YOU OR BOTHER YOU. IF A CERTAIN PROBLEM DOES EXIST FOR YOU, INDICATE HOW CONCERNED YOU ARE ABOUT IT. IF THE PROBLEM DOES NOT EXIST, LEAVE THE ITEM BLANK.

YOUR CHOICE OF RESPONSES FOR THE PROBLEMS THAT DO EXIST IS:

6—Very Concerned
5—Quite Concerned
4—Somewhat Concerned
3—Little Concerned
2—Not Concerned
86. Talented youth do not feel challenged by our program. 5 4 3 2 1
87. Some of our staff are not following through on their assignments. 5 4 3 2 1
88. Parents and youth in our unit's area are in more conflict than they were a few years ago. 5 4 3 2 1
89. Few of our youth want to take responsibility. 5 4 3 2 1
90. We are losing youth from our 4-H clubs/groups. 5 4 3 2 1
91. Delinquent behavior among youth in our unit's area of work is on the increase. 5 4 3 2 1
92. Too many parents of our youth do not assume enough responsibility for their children. 5 4 3 2 1
93. We are meeting the needs of too limited a variety of youth. 5 4 3 2 1
94. Parents of our youth are spending less time with their children than they used to. 5 4 3 2 1
95. We're hearing complaints about our program. 5 4 3 2 1
96. Some parents are not willing to participate in any way. 5 4 3 2 1
97. Our active youth are not reaching out as friends to lonely and alienated youth. 5 4 3 2 1
98. The people we serve do not understand our distinctive purpose. 5 4 3 2 1

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PLEASE TURN TO PAGE 10 FOR SECTION E.
SECTION E

THE FOCUS OF THIS SECTION IS ON HOW MUCH CERTAIN SITUATIONS MAY INFLUENCE YOUR DECISIONS TO ADOPT A NEW PROGRAM. ANSWER FOR YOURSELF ONLY, NOT FOR OTHER INDIVIDUALS IN YOUR UNIT SHARING RESPONSIBILITIES FOR 4-H PROGRAMMING.

YOUR CHOICE OF RESPONSES IS:

5—Very Much
4—Quite a Bit
3—Somewhat
2—Very Little
1—Not at All

How much are you influenced toward adopting a new program...

99. If you are convinced your youth will benefit from it. 5 4 3 2 1

100. If you see it as offering something your program lacks. 5 4 3 2 1

101. If you believe it will make the Extension/4-H organization look good. 5 4 3 2 1

102. If you believe it will benefit you. 5 4 3 2 1

103. If you are impressed with other groups or organizations using it. 5 4 3 2 1

104. If you were given a chance to discuss its positive and negative features. 5 4 3 2 1

105. If you think the designated leaders can make it a success. 5 4 3 2 1

106. If it has been successful when tried by another organization. 5 4 3 2 1

107. If you had some part in shaping or evaluating it. 5 4 3 2 1

108. If young people say they like it. 5 4 3 2 1
109. If you know that later its effectiveness will be evaluated. 5 4 3 2 1
110. If you see it as having both long- and short-range benefits. 5 4 3 2 1
111. If it will help expand your youth membership. 5 4 3 2 1
112. If there is research evidence of its success in other places. 5 4 3 2 1
113. If it is enthusiastically recommended by someone that you know has expertise in the field. 5 4 3 2 1
114. If you believe it will tap an unused potential in youth. 5 4 3 2 1
115. If it is free of charge to your local unit. 5 4 3 2 1
116. If it could draw a lot of favorable publicity. 5 4 3 2 1
117. If it will help your youth get other youth involved. 5 4 3 2 1
118. If youth and adults will be involved in launching it together. 5 4 3 2 1
119. If it is based on an analysis of need to be met. 5 4 3 2 1
120. If you think it will make positive changes in the lives of some youth. 5 4 3 2 1
121. If you personally believe in it. 5 4 3 2 1
122. If it relates to a high priority goal. 5 4 3 2 1
123. If it fits into the total program. 5 4 3 2 1
124. If enthusiasm for the new program is high among volunteer leaders. 5 4 3 2 1

PLEASE TURN TO PAGE 12 FOR PART II.
PART II

PLEASE COMPLETE THE FOLLOWING QUESTIONS BY EITHER "FILLING IN" OR CHECKING (✓) THE APPROPRIATE BLANK CONCERNING INFORMATION ABOUT YOURSELF.

1. Age: _______ years.
2. Sex: _______ Male _______ Female
3. Your present position category:
   _______ Extension Agent, A  _______ Extension Agent, B
   _______ Extension Agent, C
4. Your highest completed level of formal education:
   _______ Bachelor's Degree
   _______ Bachelor's Degree plus hours toward Master's Degree
   _______ Master's Degree
   _______ Master's Degree plus additional hours
   _______ Doctorate
5. To the nearest year, how long have you worked for Extension in Virginia? _______
6. What is the total number of staff (Agents and Technicians) assigned to your unit with a major responsibility for 4-H programming? _____
7. In which district do you work?
   _______ East Central  _______ Northeast  _______ Northern
   _______ Southeast  _______ Southwest  _______ West Central
8. What was your most recent performance rating (merit rating) score?
   _______ 76-77  _______ 78-79  _______ 80-81  _______ 82-83
   _______ 84-85  _______ 86-87  _______ 88-89  _______ 90-91
   _______ 92-93  _______ 94-95  _______ 96
9. Were you a former 4-H member? _______ Yes _______ No
10. Where do the majority of your 4-Hers reside? (Consider rural to be towns & areas of 10,000 or less, and urban as towns and cities over 10,000 people.)
    _______ Rural  _______ Urban  _______ About equal rural & urban.
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