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This study was to investigate some determinants and effects that relate to the degree of involvement of the county staff members by the County Extension Chairman in decision making. The population included 79 County Extension Chairmen who had been appointed to the position in the county and had been on the job at least one year, and 419 county staff members who had had at least one year's work experience in their counties. Two questionnaires, one for the County Extension Chairmen and one for the county staff members, were prepared by a team of researchers for the North Carolina Agricultural Extension Service during 1968, to examine various aspects of staff relations, job performance, and satisfaction associated with the leadership role of the County Extension Chairman. Perceived level of involvement was highest among (1) agents in counties with small staff sizes, (2) youngest and oldest staff members, and (3) agents who rated chairmen highest in interpersonal skills. Moreover, perceived involvement was associated with the level of job satisfaction and performance of county staff members, but was not significantly associated with the level of career satisfaction, as measured in the study. (author/nl)

AN ANALYSIS OF THE LEVEL OF INVOLVEMENT OF THE COUNTY STAFF MEMBERS BY THE COUNTY EXTENSION CHAIRMAN IN DECISION MAKING IN THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE

by

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ABSTRACT

ERWIN, MAX GETTYS. An Analysis of the Level of Involvement of the County Staff Members by the County Extension Chairman in Decision Making in the North Carolina Agricultural Extension Service. (Under the direction of JAMES DALTON GEORGE).

The purpose of this study was to investigate some determinants and effects that relate to the degree of involvement of the county staff members by the County Extension Chairman in decision making.

The population included all county units in the North Carolina Agricultural Extension Service that met the following criteria:

1. The County Extension Chairman had been appointed to the position in that county and had been on the job at least one year.
2. The staff consisted of a minimum of three agents with each having at least one year of work experience in that respective county.

In January and February, 1968, this population of 79 chairmen and 419 county staff members were asked to complete a questionnaire.

Two questionnaires, one for the County Extension Chairmen and one for the county staff members, were prepared by a team of researchers for the North Carolina Agricultural Extension Service during 1968 to examine various aspects of staff relations, job performance, and satisfaction associated with the leadership role of the County Extension Chairman.

This study was taken from the section of the staff members' questionnaire that dealt with the level of involvement as perceived by the staff members.

The perceived level of involvement of staff members by the chairman was significantly related to staff size, age of staff member, and

perceived level of interpersonal skills of the chairman. The following factors were related to level of involvement: sex of staff member, chairman's tenure in Extension, tenure as chairman, and chairman's level of participation in selected educational experiences (*e.g.*, courses in administration, psychology, and sociology).

More specifically, perceived level of involvement was highest among agents in counties with small staff sizes, among youngest and oldest staff members, and among agents who rated chairmen highest in interpersonal skills.

Perceived level of involvement was associated with level of job satisfaction and level of performance of county staff members.

Involvement was not significantly associated with level of career satisfaction, as measured in this study.

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INTRODUCTION

The Problem

This study focuses on variations in county staff members' perceived level of involvement in decision making by county Extension chairmen in the North Carolina Agricultural Extension Service.[1]

More specifically, the purpose was twofold: (1) to investigate the influence of selected personal and situational factors on variations in perceived level of involvement in decision making; and (2) to study the influence of variations in perceived level of involvement on job and career satisfaction and level of performance among the county Extension staff members.

The role of the County Extension Chairman is complex and multi-dimensional. Decisions that must be made are many and are rarely simple. The effort to improve the quality of these decisions, secure a high degree of commitment by staff members, and maintain a high level of job satisfaction for the county staff theoretically undergird the need for involvement of the staff in decision making.

It is hoped that the findings of this study will contribute to the limited knowledge that now exists relating to determinants and effects of democratic leadership in professionally staffed organizations.

Nature and Significance of Problem

The Cooperative Extension Service is committed to the involvement principle at all levels in the organization.

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[1]Data used were taken from that collected in a relatively comprehensive study conceptualized and conducted by R. W. Shearon, and Pauline Calloway, graduate students, Department of Adult Education, and T. N. Hobgood, Community Development Specialist, North Carolina State University at Raleigh, 1968.

The organizational structure is characterized with three levels of administration--federal, state, and county. Unlike most federal agencies, administrative authority for decision is decentralized to the states with minimum direction from the federal level. Members of the county staff operate in a framework which provides considerable freedom in developing and carrying out programs based on the needs of local people.

The designation of a person as Chairman of the County Extension Office originated in North Carolina in 1962. Prior to this time, there was no individual at the county level with the responsibility of giving over-all administrative leadership for the county staff.

This administrative change gave the staff member designated as County Extension Chairman administrative responsibility at the county level. The other staff members are professional adult educators working under his supervision.

A commitment to the concept of involvement is embodied in the official statement of the philosophy of Cooperative Extension in North Carolina found in a Programming Guide for the North Carolina Agricultural Extension Service (1965, p. 1):

> The philosophy of Extension in North Carolina is that people must be assisted within a democratic framework. This philosophy reflects the firm conviction that people adjust to change most rapidly in a democratic environment in which self-expression, self-direction, and self-improvement are encouraged. This development can best be accomplished through a program of purposeful, continuing education in which people through their own initiative identify and solve problems directly affecting their welfare.

Within this framework, one of the major tasks of the County Extension Chairman is to set the "tone" (Navexos, 1960, p. 2255) or

create an atmosphere of democratic involvement and participation by the entire staff.

Barnlund and Haiman (1960) point out that involvement is not brought about after months or years of abuse or by a few choice words. Rather, the leader must constantly strive to create an atmosphere conducive to involvement.

Further support regarding the need for examining the central issue of this study, Involvement of Staff in Decision Making, is implied through an observation by Ferguson (1964, p. 77):

> Much has been written in recent years extolling the virtues of democratic administration as contrasted to autocracy. Research strongly supports these conclusions. Permissive administration, when coupled with involvement of both staff and clientele, has many proponents in the Extension system. The fact that Extension education is and always has depended on voluntary participation has, over the years, tended to strengthen these concepts. What was good in working with clientele might also be good for the executive's relations with his staff. If democracy is a virtue in program development, the same philosophy should find validity in administration.

In summary, it is proposed that information from this study will assist in the following manner:

1. It will aid County Extension Chairmen in evaluation of the "tone" (Navexos, 1960, p. 2255) or atmosphere within the County Extension Office.
2. It will serve as a guide for new County Extension Chairmen in developing their own personal philosophy of group leadership in a democratic atmosphere.
3. It will provide an understanding for each staff member as to the reason for a democratic involvement and share of responsibilities in carrying out the local Extension program.

4. It will provide additional guidelines for planning and executing in-service training programs in Extension Administration for Extension personnel.

Conceptual Framework

The central concern of the study dealt with perceived involvement of the agents by the County Extension Chairman in decision making. Certain determinants and effects were studied in relationship to this central issue.

Many studies have been made of involvement or participation in decision making involving small group interaction and of democratic or permissive leadership styles. From the time of the classic work of Lewin (1943) to recent findings by Gross and Herriott (1965), there is considerable support for efforts dealing with commitment to goals, high morale, improved performance of staff, and job satisfaction.

Generally, the findings have shown that a high degree of involvement or participation in making decisions, setting goals, and other facets of one's work will lead to increased commitment, job satisfaction, and morale.

However, what has not been studied is how certain correlations or determinants tend to operate in influencing the County Extension Chairman in the North Carolina Cooperative Extension Service relating to his tendency to involve staff members in decision making.

Also, there has been no study of the factors that are associated with the level of involvement in decision making as seen by the county staff members in the North Carolina Agricultural Extension Service.

This study was an attempt to view these areas of concern between the County Extension Chairman and the county staff.

Involvement implies cooperation. Ashley Montagu (1958, p. 21) assembled a collection of findings from experiments in biology, anthropology, and psychology which supports the idea that man is basically cooperative. He states this clearly as follows:

> Man is born for cooperation, not for competition or conflict. This is a basic discovery of modern science. It confirms a discovery made some two thousand years ago by one Jesus of Nazareth.

When one accepts this idea of the cooperative nature of man, it is logical to move to a consideration of the consequences of cooperation. Hollander (1964, p. 40) describes how Kurt Lewin established a milestone in group involvement for decision making. A controlled experiment was set up so that a traditional method was compared to a newer method in which groups of housewives were called together to discuss the problem and arrive at their own decisions on how to save more food. It was found that when women in the participating groups made the decisions themselves, they increased their food-saving habits significantly more than the women who were simply exposed to persuasive appeals by the government and its representatives.

K. H. Palveu (1941) supported the principle underlying his idea of "Collective Genius," that people working cooperatively and collectively can create products far superior to those created by persons working alone. In solving reasoning problem, Shaw (1932) found that a group of people interacting did a better job than a single person.

Sodem (1953) realized that all group decisions are not made under the same conditions; therefore, his study group of participation found

that groups which developed their own solutions to problems under conditions conducive to expression of feeling were found to reach solutions that tended to be of higher quality than solutions developed by other groups.

Bovard (1952) lends further support to this notion by findings that a group in which members interacted with each other and were allowed to make their own decisions acquired significantly more clinical insight and understanding than a group in which verbal interaction was largely between the leader and the individual members.

Stuart Chase (1951, p. 51) in his book, Roads to Agreement, tells how the Quakers individualism remains unquestioned, but it is nourished by an unusual system of group participation. Members who have ideas on a subject participate in the discussion. "Experience has demonstrated," said the Book of Discipline, "that the final decision of the group is usually superior to that of the individual." Members pool their knowledge and experience.

In discussing the commitment of an individual to a decision, Allport (1945) concludes from his studies that a person ceases to be reactive and contrary in respect to a desirable course of conduct only when he has had a hand in declaring that course of conduct desirable.

In describing the principal advantages that may stem from using participation as a mangerial device, Tannenbaum *et al.* (1961, p. 94) point to the improved quality of managerial decisions.

> It is seldom, if ever, possible for managers to have knowledge of all alternatives and all consequences relating to the decisions which they must make. Because of the existence of barriers to the upward flow of information in most enterprises, much valuable information possessed by subordinates never reach their managers. Participation tends to break down the barriers,

> making the information available to managers. To the extent that such information alters the decisions which managers make, the quality of their decisions may thereby be improved.

The theoretical issues of man being cooperative by nature, and the tendency of group decisions to be superior to ones made by individuals, would be just issues and not practice if democratic leadership were not used as a style of operation.

In this study, the County Extension Chairman is the key person in creating a democratic atmosphere that will recognize these two theoretical issues of man's cooperativeness and superior group decisions.

To support the concept of democratic leadership, the pioneering study of Lippitt, Lewin, and White as reported by Gordon (1955, p. 63), for example, showed that democratically led groups in which the members were allowed to make decisions about their work activities were significantly different from more leader-centered groups in the following respects: (1) the members were less aggressive toward each other, (2) they showed less dependence upon the leader, (3) there was more group initiative to start new work, and (4) more time was spent in productive work.

In discussing what makes permissive or democratic leadership effective, Bass (1960) points to the opportunity afforded members to interact before accepting a decision and also the opportunity to make the decision. The permissive leader may call for members to commit themselves personally, either in public or in private, to selected courses of action. Here the members impose some coercion on themselves. The permissive leader may keep the group in discussion until a decision is reached to which no one objects. When such consensus is reached,

then the power of the group contributed to insuring that every member will work to carry out the decision agreed upon by all.

In this discussion, the term permissive leadership should not be interpreted to mean "laissez-faire" or no leadership direction. Rather, it is viewed in a spirit of cooperation as Gross (1964, pp. 157-158) quotes Follett: "The opposite of laissez-faire is not coercion, but coordination" and "coordination is by its very nature a process of auto-governed activity--the reciprocal relating of all the factors in a situation." Thus a National Planning Board "ought not to arrogate to itself the task of coordination." Its task, rather, should be to facilitate the coordination process.

Gouldner (1965, p. 467) quotes Bernard Kutner in an unpublished paper, stating:

> The group must guarantee that the functions of the organization, its structure, procedures, and executive personnel may be altered by democratic processes. With such flexibility and unity of purpose, the achieving of group goals become more probable. It guarantees the continued active existence of the group which, while examining itself, is pursuing its end.

Sodem (1953, p. 25) sums up the case for democratic leadership as follows: "The great asset of democratic leadership in which the group decision method is used is that it accomplishes group acceptance of a solution."

One of the real classic research projects with human beings was conducted in 1927 at the Hawthrone Plant of Western Electric Company in Chicago. Van Dersal (1962) describes this experiment that involved six experimental "female operators" in the Hawthrone Plant as guinea pigs.

Changes were made that included moving the six girls into an experimental room where they performed their work, giving them rest

breaks (the forerunner of the modern coffee break) of different lengths, cutting the work week, and finally returning to original conditions. After 18 months, the girls were assembling 25 per cent more relays than at the start.

The reports of the research men spoke of the "astonishing" upward trend in output, regardless of the kinds of changes introduced.

The answer to the question turned out to have nothing to do with rest pauses or the shortened hours or refreshments. It had to do, instead, with a change in mental attitude of the "female operators."

Three major changes seemed to have brought about this change in mental attitude: supervision, organization, and participation. The girls reported that for the first time in their working lives they were being treated as human beings instead of "female operators." And also for the first time, reported Van Dersal (1962, p. 57), they were <u>participating</u> in the planning of their own work.

> It seemed that when you treat people as human beings, they respond as human beings. And when they play a part in planning their own work, they outdo themselves in executing it.

Laird and Laird (1956) report a study by Dr. Robert Tannenbaum on permissive versus restrictive leadership in a government operation. The two divisions compared had the same regulations, pay scales, and red tape. Their work was parallel. The main difference was the style of their supervisors.

One division was under a strict boss who kept close watch to see that all the small type in the rule book was followed--a restrictive style of bossing. The chief of the parallel section allowed the employees some leeway: they watched the red tape for themselves--permissive style.

The study showed that people under the restrictive boss were more likely to reject the people they had to contact (hostility). The restrictive climate which was set by the chief apparently made the human relations throughout his entire division less satisfying to the workers.

But the workers under the permissive, or more democratic, chief were much more satisfied with their jobs. They also had higher morale (less anxiety). These workers felt their production was better than average.

Those under the restrictive chief felt their production was not up to par.

Laird and Laird (1956) use another example from a study by Daniel Katz and staff at Survey Research Center. This study concerned routine office workers in an eleven billion dollar corporation. Most of the clerks were unmarried girls who were high school graduates and were an average age of 25 years.

The findings by Katz and his staff showed that all the bosses of the high producing offices used a democratic style of leadership. In the 12 low producing offices, only one-third of their supervisors were of democratic style. The bosses in most of these low output offices set up autocratic climates which apparently cut into productivity.

The leader who drives in autocratic ways for more output has been found to keep a vicious cycle going. The harder they pushed for production, the more unfavorable the climate became. This lowered production, so they exert still more pressure, which in turn ushered in another cold front and reduced production further.

The issue of democratic leadership and participation was raised by Whyte (1952, p. 44) in this question: "How do we go about directing

ever greater numbers of people in such a way that they will accept our direction and not undermine it?"

Whyte proposed that the answer lies in participation. He suggested that where the basic principle has been followed, where management has wanted the participation of the worker, the results can almost be called exciting. Whatever the mechanics--the Pitney Bowes's "industrial council", the Scanlon Plan--in every case there has flowed a new measure of mutual confidence.

The Harwood Manufacturing Corporation case is reported by Guetzkou (1950). This was a study of how technological changes in production methods were introduced through group meetings using three different degrees of participation: (1) total participation by all members in the collaboration planning of the changes, (2) participation through the election of representatives to plan the change, and (3) no participation, but careful explanation of the changes and reasons for them.

The major findings revealed that the level of production after the change is a function of the degree of participation. The level of production resulting from total participation was about 50 per cent higher than the level of no participation.

William F. Whyte and Lawrence K. Williams (1968) published in February, 1968, Toward An Integrated Theory of Development. This work will offer up-to-date support for this third undergirding theory of high commitment from democratic leadership and participation.

Whyte points out the influence of our United States democratic culture and relatively high level of interpersonal trust tends to lead us to believe that participation is good in and of itself.

According to Whyte, research does indicate the one aspect of participation that contributes to the attainment of goals is the degree of commitment that takes place through the process of participation.

Blake and Mouton (1964), in The Managerial Grid, use the term "9,9 management" to describe democratic leadership with a high level of involvement and participation in decision making.

They define the goal of "9,9 management" as being to unleash participation and to exploit involvement in the planning of work so that all who shoulder concern for full production can find the opportunity to think enough and to develop a basis of effort which reflects the best available thinking. In this way, all team members feel responsible for getting the job done in the best possible manner. In a real sense, the key to control is commitment.

Gordon's (1955, p. 63) statement would seem to be applicable to a County Extension Chairman.

> The philosophy an individual chooses to accept determines whether, as an administrator in an industrial organization, he makes decisions for subordinates or strives to involve them in joint decision making processes.

Gross and Herriott (1965) studied the principals in 501 public school systems from all sections of the United States and their involvement of teachers in decision making. This study supported the hypothesis that the more a principal permits his teachers to share in his decisions, the higher he was rated as an administrator.

Bertram Gross (1964) describes the framework for participation as being provided by the structure distribution of roles and functions. The more decentralized the structure, the greater the participation of each part in planning its own affairs.

The County Extension Chairman in North Carolina finds himself in a structure that is decentralized and has a high degree of involvement built in from history and actual operation.

If there is still doubt as to using habits of participation, greater productivity and job satisfaction, Stuart Chase (1951, p. 95) quotes Scanlon as follows: "The average employer has little conception of the wealth of imagination and ingenuity lying untapped in the heads of the workers."

This study makes two assumptions:

1. The extent of the degree that the County Extension Chairman involves the staff in decision making varies from county to county.
2. Identifiable factors are associated with different levels of involvement, both in the form of determinants and organizational effects.

Objectives and Hypotheses of the Study

The major purpose of this study was to examine several factors that determine the level of involvement of the county staff members by the County Extension Chairman in decision making and to the extent the level of involvement is associated with selected effects.

One specific objective was to examine the relationship between level of involvement and the following personal and situational variables:

1. Staff size.
2. Sex of county staff members.
3. Age of county staff members.

4. Tenure of Chairman in Extension.

5. Tenure as Chairman.

6. Educational experiences of Chairman in selected areas.

7. Interpersonal skills of Chairman.

A second broad objective was to study the influence of level of involvement of the county staff members by the County Extension Chairman in decision making on these factors:

1. Career satisfaction.

2. Job satisfaction.

3. Performance of county staff.

The foregoing objectives provide the framework for the following hypotheses:

1. The staff member's perceived level of involvement in decision making will be influenced by:

   a. Staff size.

   b. Sex of county staff members.

   c. Age of county staff members.

   d. Tenure of Chairman in Extension.

   e. Tenure as Chairman.

   f. Educational experiences of Chairman in selected areas.

   g. Interpersonal skills of the Chairman.

2. The staff member's perceived level of involvement in decision making will have influence on:

   a. Career satisfaction.

   b. Job Satisfaction.

   c. Performance of county staff.

METHODOLOGY

The population for the study included agents in county units in the North Carolina Agricultural Extension Service that met these criteria:

1. County Extension Chairman had been appointed to the position in that county and had been on the job for at least one year.
2. The staff consisted of a minimum of three agents with each having at least one year of work experience in that respective county.

Preparation of the Instrument

Two questionnaires, one for the County Extension Chairman and one for the County Extension Agents, were prepared by Shearon, Hobgood, and Calloway[2] to examine various aspects of staff relations, job performance, leadership and satisfaction. The questionnaires were sufficiently broad enough in scope of allow several studies.

A part of the questionnaire was devoted to securing information on such variables as staff size, sex, age, tenure, educational experiences, health, interpersonal skills of Chairman, and involvement of the staff members by the Chairman in decision making.

Other questions were designed to provide information relating to job satisfaction, performance, and morale of county staff, and commitment of agents to their work.

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[2]R. W. Shearon and Pauline Calloway, graduate students, Department of Adult Education, and T. N. Hobgood, Community Development Specialist, North Carolina State University at Raleigh, 1968.

Pretesting the Instrument

The instrument used was pretested for reliability and validity of the questionnaire. Graduate students with previous experience as Extension workers, who were not included in the sample, were asked to pretest the instrument. The questionnaire was revised for clarity and organization.

Collection of Data

The data for this study was obtained by a visit to each county by Shearon, Hobgood, Calloway, Sloan, and George during January and February, 1968.[3] The instrument was administered to the total staff in a group setting. By using this approach, subjects were given instruction during a briefing period and emphasis was placed on confidentiality and anonymity of response.

Analysis of Data

Items in the questionnaire were precoded for electronic computers. Data from selected items were punched on electronic data processing cards and analyzed at North Carolina State University's statistical laboratory.

Statistical techniques, including Chi-square, scaling, mean scores, and percentage distribution were used to examine relationships between variables.

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[3]R. W. Shearon and Pauline Calloway, graduate students, Department of Adult Education; T. N. Hobgood, Community Development Specialist, F. S. Sloan, State Program Leader, and J. D. George, Extension Research Specialist, Agricultural Extension Service, North Carolina State University at Raleigh.

Variable Measurements

The variables involved in the study were specified in the foregoing chapter. Following is a description of procedures followed in arriving at measurements on the variables--giving primary consideration to those involving scaling techniques. These were:

1. Involvement.
2. Interpersonal Skills of the Chairman.
3. Career Satisfaction.
4. Job Satisfaction.
5. Performance of County Staff.

Also, personal and situational variable measurement procedures will be elaborated briefly.

Involvement

The central issue in the study was the extent to which county Extension staff members felt that they were involved in decision making by the County Extension Chairman.

The responses of the staff members to a series of statements, each of which related to one aspect of decisions to be made, were used to arrive at a single involvement scale score for each respondent.

For example, one statement read: "To what extent does the County Extension Chairman in your county actually share with you the responsibility for determining how agents should be supervised?"[4] The response choices were: always, almost always, frequently, occasionally, almost never, and never.

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[4]A complete listing of statements is included in Appendix A, Section 7.

The Guttman technique for scaling (Guttman, 1947, pp. 247-280) was used to arrive at each respondent's score on involvement (as well as measurements on the following other variables: Interpersonal Skills, Career Satisfaction, Job Satisfaction, and Performance of County Staff).[5]

These scores ranged from 0 to 7, with high scores indicating a relatively high level of perceived involvement and low scores, a low level.[6]

It is emphasized that these are relative rather than absolute scores. In other words, it can only be argued that staff members with a high involvement score perceive that they are involved in decision making to a greater extent than do those who score relatively lower on this variable. (The same can be generalized to other scaled variables; *viz.*, Interpersonal Skills, Career Satisfaction, Job Satisfaction, and Performance of County Staff.).

For purposes of descriptively relating this variable to other variables, three catagories on involvement were formed as follows:

Involvement level	Scores	Frequency
Low	0-1	115
Medium	2-4	173
High	5-7	131

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[5]The scaling process was carried out by T. N. Hobgood, with assistance from J. D. George, Community Development Specialist and Extension Research Specialist, respectively, Agricultural Extension Service, North Carolina State University at Raleigh, 1968.

[6]See Appendix B, Appendix Table 1, for a summary of the scalogram analysis, including a frequency distribution by scale scores.

Interpersonal Skills

A major independent variable in this study dealt with the Chairman's skills in interpersonal relations, as viewed by his subordinates.

The staff member's responses to a series of statements, each dealing with some aspect of interpersonal relations, were used to arrive at a single interpersonal skill scale score for each respondent.

As an example, one statement read: "To what extent does your Chairman put you at ease when you talk with him?"[7] The response choices were: always, almost always, frequently, occasionally, almost never, and never.

These scores ranged from 0 to 7, with high scores indicating a relatively high level of perceived interpersonal skills and low scores, a low level.[8]

For purposes of descriptively relating this variable to other variables, three categories on interpersonal skills were formed as follows:

Interpersonal skills level	Scores	Frequency
Low	0-1	95
Medium	2-5	183
High	6-7	141

[7]A complete listing of statements is included in Appendix A, Section 8.

[8]See Appendix B, Appendix Table 2, for a summary of the scalogram analysis, including a frequency distribution by scale scores.

Career Satisfaction

The responses to a series of questions related to Extension as a career were used to arrive at a single career satisfaction scale score for each respondent, through the use of the Guttman (1947) technique.

For example, one statement read: "To what extent are you satisfied with the amount of recognition given to Extension workers by members of other professions?"[9] The response choices were: very satisfied, moderately satisfied, slightly satisfied, slightly dissatisfied, moderately dissatisfied, and very dissatisfied.

The obtained scores ranged from 0 to 7, with high scores indicating a relatively high level of perceived career satisfaction and low scores, a low level.[10]

In descriptively relating this variable to other variables, three categories on career satisfaction were formed as follows:

Career satisfaction level	Scores	Frequency
Low	0-1	117
Medium	2-5	179
High	6-7	123

Job Satisfaction

Agents were also scored on level of job satisfaction through responses to a series of questions dealing with satisfaction with

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[9]A complete listing of statements is included in Appendix A, Section 9.

[10]See Appendix B, Appendix Table 3, for a summary of the scalogram analysis, including a frequency distribution by scale scores.

Extension as a job. These responses were used to arrive at a single job satisfaction scale score for each respondent.

One such statement read: "To what extent are you satisfied with the latitude to exercise your own initiative in your position?"[11] The response choices were: very satisfied, moderately satisfied, slightly satisfied, slightly dissatisfied, moderately dissatisfied, and very dissatisfied.

These scores ranged from 0 to 7, with high scores indicating a relatively high level of perceived job satisfaction and low scores, a low level.[12]

In descriptively relating this variable to other variables, three categories on job satisfaction were formed as follows:

Job satisfaction level	Scores	Frequency
Low	0-1	152
Medium	2-5	181
High	6-7	86

Performance of County Staff

The staff members' responses to a series of statements were used to arrive at a single score representing a relative level of performance of the county staff. Staff members were asked to serve as observers of the behavior of other staff members working that county. Agents responded

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[11]A complete listing of statements is included in Appendix A, Section 10.

[12]See Appendix B, Appendix Table 4, for a summary of the scalogram analysis, including a frequency distribution by scale scores.

by recording the actual number of staff members who, in general, met the criterion mentioned in each statement.

As an example, one statement read: "How many of the agents in your county continually endeavor to reach new audiences?"[13]

The scores ranged from 0 to 6, with high scores indicating a relatively high level of perceived performance of the county staff and low scores, a low level.[14]

For purposes of descriptively relating this variable to other variables, three categories on performance of county staff were formed as follows:

Performance of county staff level	Scores	Frequency
Low	0-1	112
Medium	2-4	156
High	5-6	151

Staff Size

This variable is measured by the total number of individuals on the county staff, including secretaries. For the purpose of relating this variable to other variables in the study, three categories were formed. These catagories and the number in each were as follows:

Size of staff	Frequency
Under 8	67
8-11	259
12 and over	93

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[13]A complete listing of statements is included in Appendix A, Section 11.

[14]See Appendix B, Appendix Table 5, for a summary of the scalogram analysis, including a frequency distribution by scale scores.

Sex of County Staff Member

There were 209 females and 210 male staff members included in the study.

Age of County Staff Member

The actual age of each staff member was obtained. In relating this variable to other variables in the study, respondents were collapsed into three age categories. These categories and the number in each were as follows:

Age of staff member	Frequency
Under 31	118
31-45	184
46 and over	114

Tenure of Chairman in Extension

This variable is expressed in the number of years each of the 79 Chairmen had been in Extension work. These years of service were formed into three categories for purposes of relating it to other variables in the study, as follows:

Tenure of Chairman in Extension	Frequency
Under 16	82
16-22	159
23 and over	178

Selected Educational Experiences of Chairman

Chairmen were asked to indicate the number of credit courses they had completed in the following areas:

1. Administration.

2. Psychology.

3. Sociology.

The number of these courses completed represented a chairman's score on this variable. Three categories were formed as follows:

Selected educational experiences of Chairman	Frequency
0-2	116
3-5	165
6 and over	138

The findings reported in the next chapter are based on variable measurements as outlined above.

THE FINDINGS

This chapter is devoted to a report of the findings regarding the relationship between level of involvement and other variables in the study. More specifically, in the first section involvement is treated as a dependent variable and its relationship to postulated causal factors is examined. The second section includes a report of findings in which involvement is presumed to be an independent variable and its influence on certain variables, labeled organizational effects, is reported. Finally, the findings are summarized in the concluding section of the chapter.

Level of Involvement as a Dependent Variable

It was hypothesized that level of involvement would be significantly related to the following personal and situational variables:

1. Staff Size.
2. Sex of County Staff Member.
3. Age of County Staff Member.
4. Tenure of Chairman in Extension.
5. Tenure as Chairman.
6. Educational Experiences of Chairman in Selected Areas.
7. Interpersonal Skills of Chairman.

Percentage distribution, mean scores, and Chi-square statistical tests (Guilford, 1956) were computed to examine and report relationships between these variables.

Data in Table 1 indicate relationships between level of involvement and the seven aforementioned independent variables. In the remainder of this section a brief discussion of the findings will be presented.

Table 1. Percentage distribution of staff members among low, medium, and high involvement groups; mean involvement scores; and, Chi-square as related to specified independent variables

Independent variables	N	Involvement groups			Mean involement score	Chi-square
		Low per cent	Medium per cent	High per cent		
1. Staff Size						
Under 8	67 (100 per cent)	10	51	39	4.00	13.15[a]
8-11	259 (100 per cent)	29	41	30	3.24	
12 and over	93 (100 per cent)	35	36	29	3.01	
2. Sex of Staff Member						
Female	209 (100 per cent)	28	43	29	3.29	1.40
Male	210 (100 per cent)	27	39	34	3.33	
3. Age of Staff Member[b]						
Under 31	118 (100 per cent)	20	50	30	3.41	
31-45	184 (100 per cent)	29	43	28	3.17	10.50[a]
46 and over	114 (100 per cent)	32	31	37	3.38	
4. Tenure of Chairman in Extension						
Under 16	82 (100 per cent)	23	44	33	3.53	
16-22	159 (100 per cent)	24	38	38	3.62	8.18
23 and over	178 (100 per cent)	33	43	25	2.92	
5. Tenure as Chairman						
Under 11	170 (100 per cent)	29	39	32	3.28	
11-18	118 (100 per cent)	30	40	30	3.27	1.70
19 and over	131 (100 per cent)	24	45	31	3.38	

(table continued)

Table 1 (continued)

Independent variables	N	Involvement groups: Low per cent	Medium per cent	High per cent	Mean involvement score	Chi-square
6. Selected Educational Experiences of Chairman						
0-2	116 (100 per cent)	29	42	29	3.27	
3-5	165 (100 per cent)	27	42	31	3.30	0.65
6 and over	138 (100 per cent)	26	39	33	3.34	
7. Interpersonal Skill Score of Chairman						
0-1	95 (100 per cent)	59	39	2	1.45	
2-5	183 (100 per cent)	25	49	26	3.27	114.34[c]
6-7	141 (100 per cent)	10	33	57	4.61	
All Staff Members	419	28	41	31	3.31	

[a]Significant beyond .05 level.

[b]Only 416 respondents completed the information on age; therefore, three of the staff members could not be used in the comparison of age with level of involvement.

[c]Significant beyond .001 level.

Staff Size

The relationship between staff size and involvement is shown in Section 1 of of Table 1. The findings indicate that chairmen on small staffs tend to be rated higher on involvement than do those on larger staffs.

About one-third, or 35 per cent, of the agents on large staffs rated chairmen low on involvement, 35 per cent rated chairmen medium, and 29 per cent of the agents rated their chairmen high.

Among the 67 staff members on small staffs, 39 per cent scored the Chairman high on level of involvement. Only 10 per cent of these 67 staff members scored the Chairman low on involvement.

The trend is even more easily seen in mean involvement scores, which increase from 3.01 for large staff size group to 3.24 for the medium staff size group to 4.00 for those on small staffs.

The Chi-square value of 13.15 is significant at the .05 level of probability.

Therefore, the findings indicate a negative relationship between size of staff and level of involvement, *i.e.*, agents on small staffs tended to rate chairmen higher on involvement than did those on the larger staffs.

Sex of Staff Member

Data in Section 2 of Table 1 indicate that there is no real difference in the perceived level of involvement between men and women.

This is noted both in percentage distribution and in mean involvement scores for men and women.

The mean involvement score for both men and women is very close and near the mean score for all staff members. The score for men is 3.33 and for women is 3.29, the mean score for all staff members being 3.31.

Likewise, the Chi-square value of 1.40 is not significant at the .05 level.

Therefore, the conclusion can be drawn that there is no relationship between level of involvement and sex of staff member.

Age of Staff Member

The relationship between age of staff member and level of involvement can be observed in Section 3 of Table 1.

Among the 118 youngest staff members, 30 per cent scored the Chairman at a high level of involvement. Fifty per cent scored the Chairman at a medium level and only 20 per cent recorded a low level of involvement for the Chairman.

For the 114 staff members in the older group (46 years and over) there is also a slight trend toward scoring the Chairman at a high level of involvement. Thirty-seven per cent scored the Chairman at a high level and 32 per cent scored the Chairman at a low level of involvement.

The trend can be seen clearly in the mean involvement score. The younger staff members (under 31 years of age) and the older ones (46 years and over) have a mean involvement score of 3.41 and 3.38, respectively. However, the middle-aged group (31-45) showed a 3.17 mean involvement score.

The Chi-square value of 10.50 is significant at the .05 level of probability.

Therefore, it was concluded that young and older agents tended to rate chairmen higher in involvement than did the middle-aged group.

Tenure of Chairman in Extension

In Section 4 of Table 1 the relationship between the tenure of Chairman in Extension and level of involvement can be observed.

Among the 82 staff members in counties with chairmen of less than 16 years of tenure in Extension, 33 per cent scored the Chairman at a high level of involvement, while 23 per cent scored the Chairman at a low level of involvement.

This pattern was almost reversed among the 178 staff members in counties with chairmen of 23 or more years of tenure in Extension. Twenty-five per cent scored the Chairman at a high level of involvement and 33 per cent scored the Chairman at a low level of involvement.

This trend is also observed in mean involvement scores. The middle groups of staff members that are from counties with chairmen of 16 to 22 years in Extension have the highest mean involvement score, 3.62. The staff members in counties with chairmen of shortest tenure (under 16 years) have a mean involvement score of 3.53, while the staff members in counties with chairmen of longest tenure (23 years and over) have only 2.93 as a mean involvement score. The score for all staff members is 3.31.

However, in spite of these trends in the descriptive data, the Chi-square value of 8.18 is not significant at the .05 level of probability; therefore, it was concluded that no relationship exists between tenure of Chairman in Extension and level of involvement.

Tenure as Chairman

A study of data in Section 5 of Table 1 reveals that there is little relationship between tenure as Chairman and the score given by staff members to the Chairman on level of involvement.

Regardless of tenure classification, the percentage distribution among low, medium and high classifications on involvement is essentially the same.

Likewise, the mean involvement scores for all tenure groups are quite similar.

The Chi-square value of 1.70 was not significant at the .05 level of probability; therefore, it was concluded that there is no relationship between tenure as Chairman and level of involvement.

Selected Educational Experiences of the Chairman

The data in Section 6 of Table 1 show very little difference in the involvement ratings of chairmen among agents with varying levels of participation in the specified educational experiences. This is indicated both in percentage distribution patterns and in mean involvement scores.

The Chi-square value of 0.65 was not significant at the .05 level of probability; therefore, it was concluded that these variables are not related.

Interpersonal Skills

The relationship between the interpersonal skill of the County Extension Chairman and the level of involvement can be observed in Section 7 of Table 1. A very clear pattern is seen here with a high score on interpersonal skills being associated with a high level of involvement.

Among the 95 staff members who scored the Chairman low on interpersonal skills, 59 per cent also scored the Chairman low on level of involvement. Only 2 per cent of these staff members scored the Chairman high on level of involvement.

On the other end of the scale, among the 141 staff members who scored the Chairman high on interpersonal skills, 57 per cent also scored the Chairman high on level of involvement. Only 10 per cent of these staff members scored the Chairman at a low level of involvement.

The mean involvement score also shows that trend very clearly. The score for the low interpersonal skills group is 1.45. For the medium group, the score is 3.27 and for the high interpersonal skills group, the score is 4.61.

The Chi-square value of 114.34 is significant beyond the .001 level of probability; therefore, there is strong support for relationship as hypothesized, *e.g.*, the higher the score on interpersonal skills, the higher the involvement score of the Chairman.

Level of Involvement as an Independent Variable

It was hypothesized that level of involvement would have an influence on the following variables:

1. Career Satisfaction.
2. Job Satisfaction.
3. Performance of County Staff.

Percentage distribution, mean scores and Chi-square statistical procedures were used to examine the relationship between these variables.

Career Satisfaction

Data in Table 2 deal with relationships between involvement and career satisfaction.

In terms of percentage distribution patterns, there is some indication that these variables are positively related.

Likewise, there is a trend toward higher mean career satisfaction scores as involvement level increases. These mean scores increase from 3.62 for the low involvement groups to 3.92 for the medium involvement group to 4.32 for those scoring highest on involvement.

Table 2. Percentage distribution of staff members among low, medium, and high career satisfaction groups; mean career satisfaction scores by level of involvement groups; and, Chi-square value

Involvement score	N	Career satisfaction groups			Mean career satisfaction score	Chi-square
		Low per cent	Medium per cent	High per cent		
0-1	115 (100 per cent)	35	39	26	3.62	
2-4	173 (100 per cent)	29	43	28	3.92	6.72[a]
5-7	131 (100 per cent)	21	45	34	4.32	
All Staff Members	419	28	43	29	3.97	

[a]Not significant.

However, the Chi-square value of 6.72 was not significant at the .05 level of probability. Thus, it was concluded from these findings that level of involvement does not influence level of career satisfaction.

Job Satisfaction

The relationship between level of involvement and job satisfaction can be observed from data in Table 3. Sixty-seven per cent of the 115 staff members in the low involvement group also fell into the low job satisfaction group. Only 10 per cent of this low involvement group scored high on job satisfaction.

Among the high level of involvement group, a reverse trend can be observed. Only 12 per cent of the 131 staff members in the high

level of involvement group scored in the low job satisfaction group. Thirty-seven per cent of these staff members also scored in the high job satisfaction group.

Table 3. Percentage distribution of staff members among low, medium, and high job satisfaction groups; mean job satisfaction scores by level of involvement groups; and, Chi-square value

Involvement score	N	Job satisfaction groups			Mean job satisfaction score	Chi-square
		Low per cent	Medium per cent	High per cent		
0-1	115 (100 per cent)	67	23	10	2.09	
2-4	173 (100 per cent)	34	49	17	3.44	84.53[a]
5-7	131 (100 per cent)	12	54	37	4.62	
All Staff Members	419	36	43	21	3.44	

[a]Significant beyond .001 level.

The trend is even more pronounced in the mean job satisfaction scores by involvement groups. The low involvement staff members had a mean job satisfaction score of 2.09. The medium level of involvement group received a mean score of 3.44 and the high level of involvement group had a mean score of 4.62 on job satisfaction. The mean job satisfaction score for all staff members was 3.44.

The Chi-square value of 84.53 is significant beyond the .001 level of probability; therefore, the findings support the hypothesis concerning the relationships between the level of involvement and job

satisfaction. The higher a staff member scores the Chairman on level of involvement, the higher the job satisfaction expressed by the staff member.

Performance of County Staff

An analysis of data in Table 4 reveal a trend toward a higher level of performance by the county staff as scores on level of involvement increase.

Table 4. Percentage distribution of staff members among low, medium, and high performance of county staff groups; mean performance scores by level of involvement groups; and, Chi-square value

Involvement score	N	Performance of county staff score			Mean performance of county staff score	Chi-square
		Low per cent	Medium per cent	High per cent		
0-1	115 (100 per cent)	36	39	25	3.31	
2-4	173 (100 per cent)	31	36	33	3.66	23.73[a]
5-7	131 (100 per cent)	14	37	50	4.60	
All Staff Members	419	27	37	36	3.86	

[a]Significant beyond .001 level.

Among the 115 staff members in the low involvement group, thirty-six per cent also scored low on performance of county staff. Only 25 per cent of these staff members scored high on performance of county staff.

A study of the 131 staff members in the high level of involvement groups reveals an opposite trend. Only 14 per cent of this group scored

low on performance of county staff, while one-half scored high on performance of county staff.

This pattern can also be seen in the mean performance scores. The low involvement group has a mean performance score of 3.31. The medium involvement group received a mean score of 3.66 and the high involvement group had a mean performance score of 4.60.

The Chi-square value of 23.73 is significant at the .05 level of probability; therefore, it was concluded that there is a positive relationship between performance of the county staff and perceived level of involvement in decision making.

Summary of Findings

An interpretive summary of the findings is covered in the following points:

1. There is a conclusive relationship between the level of interpersonal skills of the Chairman and the level of involvement. The higher the level of interpersonal skills of the Chairman, the higher the level of involvement of the staff members by the Chairman in decision making.
2. The findings indicate that the smaller the staff, the higher the level of involvement.
3. According to the findings, the younger and older staff members felt that they were involved to a greater degree than the middle-aged staff members.
4. The other four variables studied as determinants, sex of staff members, tenure of Chairman in Extension, tenure as Chairman, and selected educational experiences, appear to

have some influence on level of involvement. However, a statistical test shows this relationship to be insignificant.

5. Regarding the influence of level of involvement upon selected effects, there is a strong relationship between level of involvement and job satisfaction. The findings indicate the higher the level of involvement, the more the staff member will tend to have a high job satisfaction score.
6. The higher the level of involvement of the county staff members by the Chairman in decision making, the higher the level of performance of the county staff will tend to be.
7. The slight tendency in the career satisfaction variable to be influenced by level of involvement was found to be insignificant by the Chi-square test.

CONCLUSIONS AND IMPLICATIONS

The central concern in the study was the extent to which County Extension Chairmen in North Carolina involve staff members in decision making. One phase of the study dealt with factors presumed to be "causal" in nature in their relationship to level of involvement. In other words, involvement was presumed to be the dependent variable.

A second aspect of the study was undergirded by the assumption that variations in perceived levels of involvement would have important consequences with respect to job and career satisfaction and performance of the county staff members, *e.g.*, involvement was treated as an independent variable.

The conclusions and related implications drawn from the findings will be presented within the framework inferred in the preceding two paragraphs.

Among the seven independent variables which were related to involvement, the findings lead to the conclusion that the perceived level of interpersonal skills of the Chairman, as viewed by the agents, was the most important contributor to variation in perceived level of involvement.

Parenthetically, and worthy of special note, is the fact that measurements on both of these variables were based on the respondents' perception of the Chairmen's behavior. However, no apology need be made for this approach, inasmuch as the "real" behavior of the Chairman, in the eyes of the observer, is that which is perceived by him (the observer). It is on this basis that a staff member acts, reacts, and

relates to the Chairman. It is through this avenue that the staff member's own behavior and feelings are influenced.

Since these findings indicate that the perceived level of interpersonal skills of the Chairman influence the staff member's impression of the extent to which he is involved in decision making, what are some of the implications?

Two areas of consideration seem to be implied. First, the selection of new County Extension Chairman; and, second, the training of present Chairmen.

In the selection of new County Extension Chairmen, the findings of this study would infer that prospective Chairmen be rated on interpersonal skills and this given consideration when new Chairmen are selected.

Training that will bring about changes in interpersonal skills may need to be of a different nature than that now available. A special kind of training, such as the Sensitivity Training developed at the National Leadership Training Laboratory, may be more effective in assisting the County Extension Chairmen change behavior patterns that will result in a higher level of interpersonal skills.

The findings also indicate that the level of involvement tends to be higher in the counties with the smaller number of staff members than in the counties with larger numbers of staff members. No doubt, part of this could be explained in light of the more narrow scope of the program in a county with few staff members. The range of decisions would not be as broad and varied in the counties with small size staffs.

Another factor may well be the actual physical aspect of involving staff members. The Chairman in a county with a large staff will

experience more difficulty in getting the staff members together to assist in making a decision.

These findings suggest that Chairmen in counties with a large staff need to devote more of their total efforts toward involvement of the staff members in decision making. Therefore, consideration should be given to relieving the Chairman of a large staff of all but administrative responsibilities. This could make possible the physical arrangement for greater involvement of the staff members on the larger staffs.

It is difficult to account for the findings that younger and older staff members felt that they were involved in decision making to a greater degree than the middle-aged group of staff members. One speculation may be that this middle-aged group contained a larger per cent of staff members with higher aspirations and, therefore, may be more difficult to involve.

Another factor may be that the larger size staffs may have more middle-aged members; thereby, bringing together two groups that tend to feel less involved.

A future study, in which age and staff size are controlled, might be fruitful; however, the scope of the current study did not permit this elaboration.

The findings indicate that a high level of involvement tends to result in high job satisfaction.

Inasmuch as the feeling of job satisfaction is a very critical element in morale and well-being of the individual staff member, it would seem wise to devote some resources toward assisting the County Extension Chairmen understand how to more effectively involve the staff members in decision making.

A very significant finding indicates that a high level of involvement tends to be associated with a high level of performance by the county staff.

Since the entire Extension organization exists to support the educational programs conducted by the county staff at the local level, the performance of the county staff is a highly significant consideration.

Therefore, it is obvious that a high level of involvement should be the objective of each County Extension Chairman in order to obtain a higher level of performance by the county staff.

RECOMMENDATIONS

It is suggested that future researchers might further elaborate on some of the findings of this study. For example, the finding that the middle-aged group of staff members felt less involved in decision making than younger or older staff members. Is there a relationship between age and size of staff? A further study dealing with the whys of this finding would seem highly desirable.

Another approach might be the possibility of comparing performance of county staff, as measured in this preception study, with the overt behavior of the staff, measured in some alternative manner. Data from the Computer Reporting System now in use offer possibilities along this line.

Further attention might be given to other approaches to measurement of involvement in decision making. To what extent is there congruence between perceived level of involvement and actual involvement, as measured in other ways?

It is hoped that the approach followed in this study will be of some assistance to those who may conduct investigations in this field.

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APPENDICES

Appendix A.
Excerpts from the Research Instrument Applicable to This Study

(1) Item used to measure staff size variable.
(From Section I, original instrument, Survey II).

8. Current size of your staff (not including yourself).

_____ Extenstion Agents
_____ Secretaries

(2) Item used to ascertain sex of county staff member.
(From Section I, original instrument, Survey I).

2. Your present title.

_____ Assistant Home Economics Agent
_____ Assistant Agricultural Agent
_____ Associate Home Economics Agent
_____ Associate Agricultural Agent
_____ Home Economics Agent
_____ Agricultural Agent

(3) Item used to determine age of county staff member.
(From Section I, original instrument, Survey I).

1. Year born.

19__

(4) Item used to determine tenure of Chairman in Extension.
(From Section I, original instrument, Survey II).

3. Total number of years employed by Extension.

_____ (years)

(5) Item used to determine tenure as Chairman.
(From Section I, original instrument, Survey II).

2. Your age when first appointed to the CEC position.

_____ (years)

(6) Item used to determine educational experiences of Chairman in selected areas.
(From Section I, original instrument, Survey II).

13. Number of credit courses completed in the following content areas during both your undergraduate and graduate education.

_____ Administration
_____ Economics

_____ Education
_____ History
_____ Philosophy
_____ Political Science
_____ Psychology
_____ Sociology

(7) Item used in measurement of involvement variables. (From Section V, original instrument, Survey I).

The question: To what extent does the CEC in your county actually share with agents the responsibility for:	Response scale Code	Code
	6 = always	3 = occasionally
	5 = almost always	2 = almost never
	4 = frequently	1 = never

2. Determining how agents should be supervised?

10. Interpreting standards of performance?

8. Determining criteria to be used in appraising agents' performance?

3. Developing policy in regard to county operating procedures?

7. Evaluating how good a job the County Extension Service is doing?

9. Determining how the county operating budget will be spent?

11. Determining needs for adequate office space, equipment, supplies, and demonstrational materials?

(8) Item used in measurement of interpersonal skill variable. (From Section IV, original instrument, Survey I).

The question: To what extent does the CEC in your county engage in the following kinds of behavior?	Response scale Code	Code
	6 = always	3 = occasionally
	5 = almost always	2 = almost never
	4 = frequently	1 = never

23. Puts you at ease when you talk with him.

25. Developes a "we feeling" in working with others.

29. Explains the reasons behind important decisions he makes.

32. Goes out of his way to be nice to others.

31. Knows the right way to handle delicate interpersonal situations.

24. Displays a genuine interest in your welfare.

28. Encourages you to seek his counsel on any matter pertaining to Extension work.

(9) Item used in measurement of career satisfaction variable. (From Section IX, original instrument, Survey I).

The question: How do you feel about the following statements?	Response scale Code	Code
	6 = very satisfied	3 = slightly dissatisfied
	5 = moderately satisfied	2 = moderately dissatisfied
	4 = slightly satisfied	1 = very dissatisfied

3. My chances for receiving salary increases as an Extension worker.

2. The top salary available for Extension workers.

5. The amount of recognition Extension is given by society for its efforts and contributions.

4. The amount of progress which I have made in my professional career.

7. The possibilities for an Extension worker advancing to a position of greater responsibility.

8. The amount of recognition given to Extension workers by members of other professions.

1. The current status of Extension work as a "profession" as compared to other professions.

(10) Item used in measurement of job satisfaction variable. (From Section IX, original instrument, Survey I).

The question: How do you feel about the following statements?	Response scale Code	Code
	6 = very satisfied	3 = slightly dissatisfied
	5 = moderately satisfied	2 = moderately dissatisfied
	4 = slightly satisfied	1 = very dissatisfied

37. Opportunity for responsibility in helping plan total county Extension program.

33. The way you are involved in making policy decisions.

39. The willingness of your immediate supervisor to delegate responsibility.

45. The extent to which I am informed by my supervisors about Extension matters affecting me.

34. The latitude to exercise your own initiative in your position.

56. The amount of responsibility you have in your work.

46. Extension's educational philosophy which seems to prevail in this county.

(11) Items used in measurement of performance of county staff variable. (From Section VIII, original instrument, Survey I).

Instructions:
In this section of the survey, you are requested to serve as an observer of the behavior of agents working in your county. First, you are asked to record the total number of agents in your county including yourself (do not include the CEC). Second, please record the actual number of agents who, in general, meet the criterion mentioned in each question.

19. Continually endeavor to keep themselves abreast of the latest changes in their subject matter area?

15. Take a genuine interest in the total welfare of their clients?

14. Try new Extension teaching methods?

17. Use the problem-solving approach in teaching?

22. "Usually drag their feet" when new ideas are introduced into the Extension program.

21. Continually endeavor to reach new audiences?

Appendix B.
Supplementary Data on Scaling of Variables

Appendix Table 1. Guttman scalogram analysis summary - involvement variable

Scale item number	Original instrument item no.[a]	Positive response definition	Positive marginals		
			Scaling subsample	Replication subsample	Total sample
1	2	2-6	.80	.84	.82
2	10	3-6	.68	.67	.68
3	8	3-6	.59	.57	.59
4	3	4-6	.53	.56	.54
5	7	5-6	.33	.44	.38
6	9	5-6	.27	.29	.28
7	11	6 only	.18	.21	.19
Number of cases			215	204	419
Coefficient of reproducibility			.93	.93	.93
Coefficient of chance reproducibility			.84	.84	.84
	Scale score		Frequencies		
	(High) 7		26	24	50
	6		12	15	27
	5		23	31	54
	4		37	33	70
	3		31	26	57
	2		28	18	46
	1		29	33	62
	(Low) 0		29	24	53

[a]See Appendix A, Section 7, for wording of items.

Appendix Table 2. Guttman scalogram analysis summary - interpersonal skills variable

Scale item number	Original instrument item no.[a]	Positive response definition	Positive marginals		
			Scaling subsample	Replication subsample	Total sample
1	23	4-6	.83	.85	.84
2	25	4-6	.69	.76	.73
3	29	4-6	.63	.61	.62
4	32	5-6	.50	.57	.53
5	31	5-6	.44	.51	.47
6	24	6 only	.36	.45	.40
7	28	6 only	.21	.23	.22
Number of cases			215	204	419
Coefficient of reproducibility			.94	.94	.94
Coefficient of chance reproducibility			.83	.84	.83
Scale score			Frequencies		
(High)	7		34	36	70
	6		32	39	71
	5		21	23	44
	4		20	18	38
	3		33	22	55
	2		23	23	46
	1		22	16	38
(Low)	0		30	27	57

[a]See Appendix A, Section 8, for wording of items.

Appendix Table 3. Guttman scalogram analysis summary - career satisfaction variable

Scale item number	Original instrument item no. [a]	Positive response definition	Positive marginals		
			Scaling subsample	Replication subsample	Total sample
1	3	3-6	.84	.81	.83
2	2	3-6	.75	.73	.74
3	5	4-6	.67	.68	.67
4	4	5-6	.63	.62	.62
5	7	5-6	.47	.45	.47
6	8	5-6	.43	.42	.42
7	1	6 only	.31	.27	.29
Number of cases			215	204	419
Coefficient of reproducibility			.89	.90	.89
Coefficient of chance reproducibility			.83	.83	.83
Scale score			Frequencies		
(High)	7		35	34	69
	6		29	25	54
	5		26	24	50
	4		38	39	77
	3		30	22	52
	2		31	29	60
	1		8	13	21
(Low)	0		18	18	36

[a] See Appendix A, Section 9, for wording of items.

Appendix Table 4. Guttman scalogram analysis summary - job satisfaction variable

Scale item number	Original instrument item no.[a]	Positive response definition	Positive marginals: Scaling subsample	Positive marginals: Replication subsample	Positive marginals: Total sample
1	37	5-6	.77	.77	.77
2	33	4-6	.66	.71	.68
3	39	5-6	.60	.66	.63
4	45	4-6	.53	.51	.52
5	34	6 only	.40	.44	.42
6	56	6 only	.27	.26	.27
7	46	6 only	.16	.19	.17
Number of cases			215	204	419
Coefficient of reproducibility			.93	.92	.92
Coefficient of chance reproducibility			.84	.84	.84
Scale score			Frequencies		
(High)	7		22	18	40
	6		23	23	46
	5		27	33	60
	4		37	34	71
	3		23	27	50
	2		25	29	54
	1		23	20	43
(Low)	0		35	20	55

[a]See Appendix A, Section 10, for wording of items.

Appendix Table 5. Guttman scalogram analysis summary - performance of county staff variable

Scale item number	Original instrument item no.[a]	Positive response definition	Positive marginals		
			Scaling subsample	Replication subsample	Total sample
1	19	4-6	.84	.88	.86
2	15	5-6	.76	.76	.76
3	14	5-6	.69	.74	.71
4	17	5-6	.57	.55	.56
5	22	6 only	.52	.53	.53
6	21	6 only	.41	.52	.47
Number of cases			215	204	419
Coefficient of reproducibility			.92	.92	.92
Coefficient of chance reproducibility			.84	.84	.84
	Scale score		Frequencies		
	(High) 6		68	83	151
	5		22	11	33
	4		32	20	52
	3		30	41	71
	2		26	18	44
	1		18	19	37
	(Low) 0		19	12	31

[a]See Appendix A, Section 11, for wording of items.