A COMPARATIVE STUDY OF THREE PATTERNS OF STAFFING WITHIN THE COOPERATIVE EXTENSION SERVICE ORGANIZATION AND THEIR ASSOCIATION WITH ORGANIZATIONAL STRUCTURE, ORGANIZATIONAL EFFECTIVENESS, JOB SATISFACTION AND ROLE CONFLICT

DISSERTATION

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By

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* * * * *

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CHAPTER I

INTRODUCTION

The Problem

The Cooperative Extension Service from its beginning with the Smith Lever Act of 1914 has evolved into a major functional service institution for rural America. It has been said that the Extension Service is the largest organized, informal educational movement in the world (Bliss, 1952).

Brunner has stated the overall goal of Extension as "the maximum development of all resources, in the nation and in each county, economic and social, human and inanimate, for the achievement of the highest level of life possible" (1949). The Extension Service was designed to meet the needs of people. Its programs focus on these needs in order to improve the quality of life of rural people through increasing their technical and social knowledge. As a result of this problematic orientation, a sensitivity to the needs of its clientele is imperative. The Extension Service, aware of the importance of popular support and direction, has developed a comprehensive system of advisory committees so as to ensure widespread participation on the part of local people in program development and execution.

The Cooperative Extension Service is proud of its heritage—its growth over the years, its history of responsiveness to its clientele
and the confidence that people have in it as a service organization; however, essential to its future is a continuous program of evaluation in light of changing needs. There must be a constant awareness of change; objectives and programs must be dynamic.

In describing the effectiveness of the Vermont State Extension Service, J. E. Carrigan said, "Our program, especially, should be different now from that of a year ago, or even yesterday, and it should be different next year and even tomorrow. It must be a living, developing thing, otherwise it will become stagnant. Extension, like other human institutions, has failed at times to read the signs of time" (1952: 327-331).

Not only are organizational changes seen as essential, but writers such as Brunner have suggested specific adjustments to follow, when he stated, "I think it is clear that one trend already apparent will become more important. Necessarily the extension agent has been working and will work, less with individual farmers and home makers and more with social groups. These groups will be on a neighborhood or community basis, as in the planning programs, or they will be on a special interest, that is, a crop or a subject matter basis" (Brunner, 1952: 303-306). Therefore, as early as the 1950's there were suggestions that the audiences of Extension will tend to be in larger social units with more specialized needs. If Extension is to continue to fulfill its purpose of providing technical and social knowledge to improve the quality of life, it must adjust as the needs of its clientele change.
In response to changing clientele needs and demands as anticipated by Brunner, Extension has moved toward providing more specialized assistance. In order to be able to respond to very specific problems, many states have initiated organizational changes that place more specialists closer to the client.

Traditionally, the field staff of the Extension Service has been organized on a county basis. The Smith Lever Act provided for the development of Extension through an agricultural advisor in each county (Brunner and Yang, 1949: 15), and therefore there developed, regardless of the variations in the type of state organizations, the county as the basic unit for delivery of services.

It was found that specialized needs do not necessarily follow county lines, and thus there developed in many states a new type of worker with multi-county responsibilities. As early as 1964, state organizations reported having 407 specialists assigned on a multi-county basis. This trend has continued such that by 1972 states reported 1,703 workers with multi-county responsibilities.¹

The trend toward the utilization of more Extension personnel with multi-county responsibilities has thus been established in many states throughout the United States. Generally these workers are specialists in their subject matter fields with assignments on a multi-county basis. They are referred to by many different titles and are assigned varying functions. In a comprehensive inventory of all

¹As reported by the Extension Management Information System in 1964 and 1972.
states, Moore found that there is no single multi-county pattern, but rather many types being used (1972).

The Purpose

Because so many states are moving to the multi-county approach and because there exists only a limited amount of information on the subject, there is a need for further research in order to provide answers to the many questions that arise concerning the overall effectiveness of this relatively new organizational staffing pattern. From this interest, this study developed as a part of a larger research endeavor supported by the Extension Committee on Organization and Policy (ECOP), funded by the Extension Service-United States Department of Agriculture, and carried out by the Ohio Cooperative Extension Service.

The overall purpose of the total research project was "to conduct a study on the relative advantages and disadvantages of area agent staffing compared with traditional staffing by county units."\(^2\) The present study is a part of the larger research project in that it concerns the organizational considerations of staffing patterns. In attempting to choose an appropriate approach to the analysis of the Extension organization, the author surveyed the literature of organizational studies. One soon discovers that many approaches have been utilized in the investigation of organizations.

\(^2\)Taken from the Cooperative Agreement between the Extension Service-United States Department of Agriculture and The Ohio State University.
The Weberian School has long stressed the structural dimensions of an organization. Studies by structuralists have been macro in scope and have been principally concerned with such topics as task allocation, delegation of authority, specialization, span of control, coordination of function, and arrangement and size of organizational subunits (Pugh, 1966).

Another group of researchers has focused on the measurement of organizational performance. Such concepts as productivity, efficiency, effectiveness and goal achievement have evolved as measures of organizational success. Most organizational analyses concern themselves with performance, in one form or another, because it deals with the question of whether the organization is really doing the job for which it was intended (Price, 1972).

Other studies have approached the organization from the viewpoint of the individual member. This level of analysis focuses on the individual and his predispositions, reactions and personality within the organizational setting. This psychological perspective would contend that the organization is really just a composite of the behavior and performance of the individuals within the organizational structure. The concern would be in terms of human motivation and the effect of the organization on the individual within the system (Argyris, 1964).

A fourth and more recent approach to the study of organizations has emphasized the concept of role and role perception. This method focuses on the interaction patterns among organizational members and the members' expectations for individual behavior. According to this
perspective; the group and the processes of group interaction become the important concepts for understanding organizations (Biddle and Thomas, 1966).

In order to strengthen this study by avoiding some of the short-comings of the aforementioned approaches, the author has decided to use a combination of them. As an indication of structural components, the variables size and complexity are investigated. In order to assess the performance of the organization an effectiveness measure is included. Job satisfaction is used as an indicator of the effect of the organization upon the individual. Interaction is treated in the form of role conflict.

More specifically, the purpose of this study is to analyze the organization, the Cooperative Extension Service, in terms of the four different approaches as operationalized in the variables organizational structure, organizational complexity, job satisfaction and role conflict as each relates to the different staffing patterns.

The aim or desired end of this research is to provide answers to some of the many questions concerning the advantages and disadvantages of staffing patterns from the organizational perspective. The intention is to provide insight into whether the variables—organizational structure, organizational effectiveness, job satisfaction and role conflict, tend to be associated more with one of the types of multi-county staffing or with the county pattern of organization. The information obtained should assist Extension administrators in making important decisions concerning the future of the Extension organization and its ability to meet the needs of our changing society.
The Objectives

The study is based on the assumption that information gained in the analysis of the four variables has relevancy for administrators in their assessment of the suitability of the different staffing patterns for their organization. The appropriateness of these variables within Extension has been suggested in past studies.\(^3\) The immediate empirical objectives of this research are the following:

1. To investigate the relationship between selected measures of organizational structure and the type of staffing pattern.

2. To analyze the relationship between organizational effectiveness and the type of staffing pattern.

3. To analyze the relationship between job satisfaction of personnel and the type of staffing pattern.

4. To identify and compare the degree of role conflict within the roles of the county agent, area agent and state specialist positions as they relate to the type of staffing pattern.

5. To investigate the relationship between the variables organizational structure, organizational effectiveness, job satisfaction and role conflict and the following characteristics of the respondents:
   a. Job Group
   b. Program Area
   c. Tenure
   d. Age
   e. Level of Education
   f. Sex

\(^3\) Structure has been suggested by Cebotarev (1972). Effectiveness was suggested by McIntyre (1968) and Rose (1971). Role conflict has been suggested by Kunzru (1971), McCormick (1965), Pilgrim (1971), and Honnold (1970). Job satisfaction was suggested by Barrett and Louderback (1971) and Rose (1971).
CHAPTER II
THEORETICAL BASIS OF THE STUDY

Organization

Definition

As an organization, the Cooperative Extension Service is the focus of this study. Traditionally, organizations have been discussed in terms of Max Weber's conceptualization of bureaucracy. Weber defined an organization as "a social relationship that is either closed or limits the admission of outsiders by rules, ... so far as its order is enforced by the action of specific individuals whose regular function this is, of a chief or 'head' and usually also an administrative staff" (1947: 145-46).

Weber's definition contains the elements of interaction, boundary maintenance, order, hierarchical authority and division of labor. Weber went on to add that organizations are also purposive in nature (1947: 151-52). Many organizational analysts have subscribed to the elements of Weber's early work.

Organization has been defined by Litterer as "a social unit within which people have achieved somewhat stable relations among themselves in order to facilitate obtaining a set of objectives or goals" (1963: 5). Mouzelis defines organization as "a form of social
grouping which is established in a more or less deliberate or pur-
posive manner for the attainment of a specific goal" (1967: 4). His
definition stresses the purposiveness and goal specificity of the so-
cial unit.

Caplow contends that an organization has five minimum elements
(1964):

1. A social system
2. An unequivocal collective identity
3. An exact roster of members
4. A program of activity
5. Procedures for replacing members.

Drawing from diverse sources of literature, Argyris presents the
following definition:

An organization is characterized by an arrangement
of parts that form a unity or whole which feeds back
to help maintain the parts: a 'part' of an organi-
ization is actually an 'organic' part in that it ex-
ists by virtue of its position in the pattern that
is the whole; the whole, in turn may be differentiated
from the parts along two dimensions. First, the whole
has a different boundary than any given (or subset of
parts). Second, the functional unity of the whole
displays properties only revealed in the actual pro-
cess of full operation of the whole (1964: 119-120).

From this definition he cites the following essential properties of a
dynamic organization: (1) a plurality of parts, (2) maintaining them-
selves through their inter-relatedness, (3) achieving specific objec-
tives, and (4) adapting to the external environment, thereby (5) main-
taining the interrelated state of parts. This definition emphasizes
the system approach in which the organization is maintained through
the interest of its parts.
Scott outlines what he considers to be the elements of organizations when he notes that:

... organizations are defined as collectivities that have been established for the pursuit of relatively specific objectives on a more or less continuous basis. It should be clear, however, that organizations have distinctive features other than goal specificity and continuity. These include relatively fixed boundaries, a normative order, authority ranks, a communication system and an incentive system which enables various types of participants to work together in the pursuit of common goals (1964: 488).

For the purposes of this study an organization will be viewed as consisting of the following essential elements:

1. A social unit, or group
2. An established interaction pattern
3. Goal oriented, or purposiveness.

Organizations may be viewed as formal or informal social units. The same elements are present in both, however, in formal types the elements are usually more clearly visible. The Cooperative Extension Service is an example of a formal organization. Thus a formal organization is seen as a social system with relatively clearly defined goals in which human behavior must be successfully integrated to form a problem solving whole.

Schools of Thought

There have been several attempts to describe the field of organizational analysis from varied points of view. The many divergent themes have generally been categorized into areas such as scientific management, Weberian bureaucracy, behaviorism, group dynamics,
decision making, and formal administration. Two major schools of thought are described here as encompassing the above mentioned areas. They are bureaucracy and managerial tradition.

Weber introduced the concept of ideal type of bureaucracy primarily as a planned, rational form of organizational administration that places emphasis on discernible structural patterns of the organization. Early theorists such as Weber and Michels stressed the macro approach, whereas more contemporary writers have been more concerned with middle range theory and empirical studies as exemplified by the work of Selznick (1948), Gouldner (1959) and others. Rules, procedures and structural regulations became the means of accomplishing the objectives and goals of the organization.

Managerial Tradition is seen as encompassing the areas of scientific management, formal administration theory, the human relation approaches, group dynamics and the decision making perspective. Granted these are quite divergent subareas to be placed in a single school called "managerial tradition;" however, they are essentially social-psychological in that they attempt to articulate human motivation as related to organizational activity. The primary focus is not the structure of the system as a whole but rather the individual within the system. This second school of thought originated with Taylorism in the movement toward scientific management and was later followed with a more formal theory of organization. Both have attempted to elaborate a set of general principles in the management of the organization. Contrary to the classical writers on bureaucracy, Taylorism
and management theory stressed efficiency with respect to the individual worker as an isolated unit rather than as an organizational element.

With the introduction of the behavioral sciences and with a move away from formalism came interest in human relations, group dynamics and decision making as socio-psychological approaches for accessing the impact of an organization's structure on individual behavior. This school of thought focuses its attention on the patterns of behavior and norms which arise spontaneously in the process of social interaction.

These two approaches differ in some very important aspects. Couldner stresses this distinction in his comparison of, what he calls, the rational and natural schools (1959). These two positions are closely aligned with the bureaucratic and managerial traditions. The rational places emphasis on the structure, as does bureaucracy, as a means for effecting the accomplishment of group goals and tasks and coordination of effort and efficiency; whereas, the natural or non-rational stresses the individual and his social interaction, normative commitments, and motivation and loyalty, as does the managerial tradition.

Other authors have made a similar distinction between the structure and the individual with other terms: initiating structure and giving consideration (Stockdill, 1957), goal attainment and group maintenance (Bales et al., 1951).

The differences in the level of analysis has generally been the focal point of the two approaches. Bureaucracy is concerned with the
organizational level of analysis; whereas, the managerial tradition has evolved from atomistic Taylorism and has continued at the individual and small group level.

Bureaucracy assumes purposiveness. The efficient realization of organizational goals is a basic tenet of the rational position. Managerial tradition, on the other hand, stresses the spontaneous, natural outcome of human interaction. Even though the emphasis is on the unplanned and non-rational, one might question whether it is possible that the human behavior approach be completely aimless. It would seem that if this school accepts the definition of organization as including an element of goal attainment, then some degree of purposiveness is inherent in their position. The contention being that by definition people are assumed to be organizing in order to pursue a common goal.

Despite the stated differences of these two positions concerning organizational analysis, there are also similarities. One important assumption that is present in both positions is the notion that the organization is a dynamic system and it must adapt to an ever changing environment. By accepting dynamism as a given, adaptive and integrative mechanisms must also be assumed to be important elements of the organizational model, an important assumption for the study of organizational change.

Secondly, both positions have some degree of reliance on functionalism. The structural emphasis in this regard is quite clear. For example, Parsons identifies four functional requisites for system survival. Proponents of the managerial approach have suggested that
individual satisfaction rather than goal attainment is a means of maintaining organizational equilibrium (Simon, 1964). Implicit here is the need for integration of individual elements into an organismic whole.

Third, as was mentioned above, both seem to give some recognition of the attainment of goals though this would be denied by supporters of the managerial tradition.

What can be concluded about the concept of organization from this brief discussion? Organization is viewed as a problem solving social entity, which must cope with internal and environmental structures and processes in order effectively to meet organizational objectives. Whether it be viewed from a bureaucratic or a managerial perspective, the environment is dynamic and therefore systemic adaptability and integration are important concepts that are best treated with a consideration of both structure and the individual needs in organizational analysis.

This study will consider structural variables and effectiveness criteria that fall into the bureaucratic school as well as the variables, role perception and job satisfaction, which are outgrowths of the managerial approach.

**Organizational Change**

It is generally accepted that change is an inevitable and universal phenomenon. Change can occur haphazardly, which frequently leads to dysfunctionalism, or man can attempt to understand, effect, structure, coordinate and control the change process.
The Cooperative Extension Service is an organization undergoing change. It was developed to meet the educational needs of early America and has changed and must continue to adjust to satisfy the changing needs of its clientele. Extension administrators throughout the nation are seeking assistance in the understanding of organizational change (as is evidenced by the request on the part of the Extension Committee on Organization and Policy for a study of the area staffing pattern).

When considering organizational change, one must define the type of "change" that is being considered. This study will use the distinction emphasized by Parsons in the functionalist literature (1961). He draws a distinction between changes within the system and changes of the system. Changes within the system are identified as small-scale changes which are a normal accompaniment of any ongoing unit of social organization. Of relevance to the theory of social change, however, are changes of the system where the basic pattern takes on a new form.

In the functionalist approach, systems are organized around the tendency to maintain equilibrium. Thus, any change-inducing factor impinging on the system generates tensions which in turn call for adaptive responses.

Hage and Aiken suggest that analysis of organizational change should be concerned with the variables that are related to this "adaptive response"—what accounts for the change, the rate of change and the sources of change (1970).
The general concept of social change has been widely discussed since the time of classical writers. This concern with change has also carried over into organizational analysis. Sources of change have been the focus of attention for many researchers concerned with organizational analysis. For example, Moore discusses the following possible sources of system change: adaptation to external events, flexibilities in the system, and strains inherent in the system (1960: 810-818). Loomis suggests that system linkages are the key to an analysis of change (1960). Parsons distinguishes between exogenous and endogenous sources of change (1967: 189-212). He suggests that the impact of a change upon the structural components of a system varies according to the magnitude of the force, proportion of units affected and the strategic nature of the affected units. Conflict theorists such as Marx and Dahrendorf have viewed change as a product of struggles for social power.

Organizational change within the Cooperative Extension Service could best be described in terms of a functional consensus model in that this particular organization is a relatively decentralized professional body that stresses adaptation to clientele needs through a maximum level of agreement.

Leavitt summarizes the sources of organizational change as arising from one of four origins: task variables, human variables, technological variables and structural variables (1965: 1144-1170).
The four categories are stated as general groupings of more specific variables of other studies and are described as follows:

**Task** refers to the production and delivery of goods and services.

**Actors** refer to people and their interaction.

**Technology** refers to direct problem solving inventions, including both machines and programs.

**Structure** refers to the means of communication, systems of authority and systems of work flow.

**FIGURE 1**

**SOURCES OF ORGANIZATIONAL CHANGE AND THEIR INTERACTION**
It is appropriate that two of the variables, structure and actors, that are used here in the consideration of organizational change were also the points of focus in organizational theory. Task was also discussed at length as an important element when considering the purposiveness of an organization. Technology has not been discussed as part of organizational theory, however, due to the nature of its emphasis on the development of new methods and processes, it belongs within the subject of change.

As is shown in Figure 1, all four variables, task, actor, technology and structure, are highly interdependent. A change in one usually results in compensatory (or retaliatory) changes in others. Also change may originate in more than one of the variables at the same time.

In a rational-task oriented organization most changes are ultimately designed to influence the task variable; for the Extension Service the task would be to improve its service to the clientele. However a change in any one of the four variables could result in changes in any or all of the other three. For example, the introduction of a new technology, computers for example, may cause changes in actors (e.g., their numbers and skills), in structure (e.g., communication system), and changes in performance.

An example of structural change might be the decentralization of the decision making structure within the Cooperative Extension Service. Such a change should change the performance of certain organizational tasks, change the technology that is brought to bear on
the situation, and change the nature, number, preparation and motivation of actors involved.

All of these changes could have been intended, or, one or all could come as unforeseen results of a single innovation. If the ensuing changes are different than expected, very difficult and often costly outcomes can result.

The model has identified four variables as possible sources of change. The structural variable was a primary mechanism used by classical theorists. They set forth a set of "principles" for optimizing organizational performance by optimizing structure. The approaches used were those associated with order, discipline, division of labor and authority as has been outlined in the concept of bureaucracy.

Organizational change that originates in actors attempts to explain change as originating in human behavior. In task oriented organizations, changes in human behavior are used as means for effecting changes in task solutions and performance. It is also argued that changes in human behavior can result in secondary changes in organizational technology and structure as well. These effects are in addition to changes that result in human growth, fulfillment and self satisfaction. The process of change through people focuses on the micro level that is internal to the organization. In contrast, structural changes focus chiefly on the macro level.

By choosing both structural and actor oriented variables this investigation attempts to integrate the advantages of both the bureaucratic and managerial approaches into a single study.
Even though technological changes are not the primary focus of this study, their effects nevertheless are important and necessary to consider in the model. The Taylorism movement of scientific management in the early 1900's demonstrated the effect that technology can have on organizational change. Scientific management brought empirical work measurement techniques into use in industrial organizations and as a result revolutionized the thinking with regard to the relationship between work and people. More recently organizations have made use of such developments as computers, linear programming, testing, attitude-surveying, job-evaluation and assimilation as technological improvements in the organization. Undoubtedly, there have been accompanying changes in the variables-task, structure and people.

Changes in the Extension Service staffing pattern is often explained as a move to better serve changing clientele needs. When the task of an organization changes, concomitant changes are often witnessed in the other variables as well. Changes in organizational tasks can change the actors required (nature, numbers, etc.), the structure needed to execute the work to be done, and the technology that is brought to bear on the situation (information, machinery, methods).

Of the four sources of change in the model, this study will concentrate on structure, actors and task. Changes in the staffing arrangements of an organization is principally a structural change. This study addresses itself to the question of what effect, if any, this structural change has on technological, actor, task and other structural variables.
The variables considered in this study can be categorized as:

- **structural**: organizational size, organizational complexity and staffing pattern;
- **actor**: age, tenure, education level, sex, job satisfaction and role conflict;
- **task**: organizational effectiveness.

**Organizational Staffing Pattern**

The organizational staffing pattern refers to the manner in which an organization chooses to distribute its functions among its workers.

Until recently the Cooperative Extension Service has maintained a single county staffing pattern since its origin. Under this pattern the personnel are assigned to a particular county with responsibility for programs within the boundaries of that geographical and governmental unit. Program responsibilities have typically been organized along the lines of agriculture, home economics, and 4-H (youth), with the addition of other agents depending upon the needs of the county.

The county agent, in turn, utilizes specialists at the state level (most often located at the land grant university) as a resource of technical support in specific subject-matter areas.

More recently, some states have moved to a multi-county approach in which personnel who are specialists in a specific subject-matter field or organizational function are being assigned responsibilities in a multi-county geographical area. Under this pattern these personnel have program responsibilities in more than one county, but less than the entire state. These persons generally work directly
with clientele, but may have some responsibilities for training and otherwise assisting county personnel.

As was pointed out previously, Brunner suggested the move to larger and more specialized audiences as early as the 1950's (1952: 302-303). Lamphere et al. later described the rapid move toward multi-county staffing as one of the most significant organizational changes within the Extension Service in recent years (1965: 1). In that Federal Extension Service study of 13 states in 1965 the beginning of a trend was documented that is further supported with Extension Management Information System data. In the period from 1964 to 1970 the number of Extension personnel with multi-county (but less than an entire state) responsibilities has increased more than threefold (from 407 to 1,502).

Moore identified, not one, but seven different variations of multi-county staffing. The three most commonly found were (1972):

1. County agents specializing in certain subject matter fields and trading services with agents in nearby counties who specialize in other subjects.

2. Both county and multi-county staff who work out of separate offices.

3. Both county and multi-county staff who work out of the same office.

In addition he found that many states are continuing to employ the traditional single county pattern.

It could not be assumed that any one state utilized only a single staffing pattern. On the contrary, Moore discovered that there
most often existed combinations of more than one pattern operating within the same state organization.

States were found to be using many titles to describe the multi-county staff position. Some terms being utilized were area agent, area specialist, regional specialist, multi-county agent, area advisor, cross-county advisor, area technologist, intercounty agent and district specialist. The functions of these positions also varied from state-to-state.

This study will attempt to select state Extension Services that are representative of three staffing patterns:

1. County agents who also exchange specialities with surrounding counties,

2. Both county and multi-county staff (without making a distinction as to location of office), and

3. County agents only (no multi-county staff).

McIntyre describes the function of Indiana area specialists as two fold: (1) that of providing specialized help in a specific subject-matter speciality in a multi-county area and (2) that of maintaining the broader based programs on the county level (1968: 22).

Slocum describes the multi-county agent as a subject matter specialist (1969). Moore, in speaking generally of the responsibilities, of an area agent, describes him as an authority in his subject matter area (1972). He further defines the area agent's responsibilities as that of a resource person for county extension personnel, as well as for the clientele in his multi-county area.
Zettle distinguishes between state and area specialists on the basis of the recipient of their services. The state specialist is seen as a teacher of county workers, whereas the area specialist works directly with clientele (1964).

Rose describes the multi-county area agent as a specialist in a subject matter field with only secondary responsibility for support for other programs outside of that subject matter operating in the multi-county area. He emphasizes that they work directly with clientele and have little responsibility for training other agents (1971: 3).

Without becoming overly concerned with the specific provisions of each position description, a general conceptualization becomes evident. A new type of position has been developed that has changed the way the staff of the Cooperative Extension Service is organized. There are now persons with program responsibilities that differ somewhat from the traditional "generalist" and that are responsible for specific clientele needs of a newly defined geographical area that cuts across county lines. The important question then is, what is the relationship between this organizational pattern and other selected variables; namely organizational structure, organizational effectiveness, role perception, and job satisfaction?

This study will not attempt to show a cause and effect relationship between the pattern of organizational staffing and the four selected variables, but rather will concern itself with analyzing their degree of association with the different staffing patterns.
Organizational Structure

Two structural variables will be considered in this study, size and complexity. The relationship of these two variables to staffing pattern will be examined, as well as to the other variables effectiveness, role conflict and job satisfaction.

Size

This researcher has chosen to separate out size from complexity because of the difference of opinion as to their interrelation. Caplow (1957) and Grusky (1961) have assumed that large organizations are by definition more complex and formalized than small organizations, whereas Blau and Scott (1962) and Zelditch and Hopkins (1961) question this assumption. None of these authors are discounting the idea that size and structural components are related, but the question remains as to just how they are related.

Zelditch and Hopkins make a point of the fact that organizational complexity is often indicated by size, but is a distinct concept (1961: 470).

Although there is a lack of agreement on the theoretical implications of organizational size (Blau et al., 1966; Blau and Scott, 1962: 226-227; Caplow, 1964; Hall, Haas and Johnson, 1967), this dimension is included because of its potential for administrative and supervision difficulties. As Biddle and Thomas point out, size is not a "pure" variable but rather is more like an index due to its relationship to a complement of variables that are associated with the number
of persons in an organization (1959). Caplow explains the same phenomenon in terms of the interrelation of group size and the number of potential relationships within the organization (1957).

Moore has suggested that states with larger numbers of counties may be more inclined to use a single county approach, whereas states with small numbers of counties utilize multi-county, without county, staff (1972).

Because of the design of this research the relationship between size and staffing pattern cannot be tested. Size was one of the criteria used in the selection of states to be studied. Even though size cannot be shown to be related to the type of staffing pattern, it has been suggested that size is related to some of the other variables under consideration in this study. These relationships will be treated in a later discussion.

Complexity

The importance of complexity in organizational analysis is born out in the statement by Zelditch and Hopkins who state: "Large size, in our view, is not in itself a critical characteristic of organizations. Rather what appears to be important here is complexity which is often indicated by size but is quite distinct from it (1961: 470).

There appears to be agreement that the degree of organizational complexity is important in organizational analysis, however, there are few attempts at defining what is meant by complexity and its operationalization. Hage has equated complexity with specialization and uses the number of operational specialities and the length of training required by each as indicators (1965: 294). Cebotarev uses complexity
as denoted by the "internal organization knowledge reservoir" and operationalizes this concept within the Extension Service in terms of four indicators: number of academic departments and sections, degree of organizational specialization, integrative-aggregative index for specialist and integrative-aggregative index for field work (integrative-aggregative index is defined as a ratio of the number of specialists or field worker job descriptions to the total number of positions in the organization) (1972: 32-34, 79). Price supports this thinking when he states that, "Complexity may be defined as the degree of knowledge required to produce the output of a system. The degree of complexity of an organization can be measured by the degree of education of its members. The higher the education, the higher the complexity" (1968: 26).

Kahn et al. suggest that the structure of an organization becomes more complex with increased size, with differentiated and specialized labor, with the introduction of more levels of supervision and control, and with the involvement of more people and planning (1964: 75).

Hall et al. focus on structural complexity as defined as the "degree of internal segmentation--the number of separate 'parts' of the organization as reflected by the division of labor, number of hierarchial levels, and the spacial dispersion of the organization" (1967: 905-906).

Organizational structure has almost always been studied from viewing the characteristics of the organization, as the above discussion confirms. However, what may be more important for the
functioning of the organization is the attitude of the organizational members as to how complex they feel their organization is. The indirect attitudinal measure may secure quite different results from the direct structural indicators most often used.

As Hall states, "The official structure, is only as important as the degree to which it is adhered to. If the actual organizational structure is a replica of the formal structure, then the formal structure is the significant structural component. On the other hand, the degree of variation from the formal structure is the actual significant structure for organizational operation" (1961: 35).

Therefore an accurate measurement of the perception of organizational members should provide the best indicator of what is, in fact, the actual organizational structure. To provide that information Hall developed a complexity scale composed of some sixty two items of a Likert type that was composed of six dimensions: hierarchial authority, division of labor, rules, procedures, impersonality, and technical qualifications (1961).

This study will define organizational complexity in terms of the perception of some of the indicators set forth by Hall, Kahn, Price and others and will measure them through the use of attitudinal statements.

It would be expected that those organizations utilizing a multi-county staffing pattern would tend to have more hierarchial levels in their vertical line of command, would be more specialized, and have more division of labor. Therefore, a higher degree of complexity would be anticipated in states that have a multi-county pattern than
in those with an individual county approach. The null hypothesis would be that there is no difference among the three staffing patterns and their association with organizational complexity. Although unable to be predicted, differences among the multi-county patterns would also be anticipated.

As Zelditch and Hopkins submit, size is quite distinct from complexity but is often a good indicator of it. Thus it would be expected that size and complexity are highly correlated. The null hypothesis would state that organizational complexity is not related to organizational size, when, in fact, a positive relationship is anticipated.

The interrelationships between complexity and the dependent variables effectiveness and job satisfaction will be suggested later within the discussion of those variables.

**Organizational Effectiveness**

Organizations, in order to assess their strengths and weaknesses as guidelines for future decisions and actions, have attempted to develop conceptual schemes for measuring organizational effectiveness. As Katz and Kahn observed, "There is no lack of material on criteria of organizational success. The literature is studded with references to efficiency, productivity, absence, turnover, and profitability—all of these offered implicitly or explicitly, separately or in combination, as definitions of organizational effectiveness. Most of what has been written on the meaning of these criteria and on their interrelatedness, however, is judgmental and open to question. What is worse, it is
filled with advice that seems sagacious but is tautological and contradictory" (1966: 149).

As Yuchtman and Seashore conclude, "We are badly in need of an improved conceptual framework for the description and assessment of organizational effectiveness" (1967: 891).

The classic model for measuring effectiveness consists of profit, efficiency or activity as the dependent variable and sociological, psychological and economic measures as the independent variables. The independent variables are generally treated in a sophisticated manner, but little attention is given to the appropriateness of the definition of the concept of effectiveness itself.

There have traditionally been three approaches utilized in dealing with the task of measuring organizational effectiveness.

The first, and probably most commonly used, has conceptualized effectiveness in terms of goal attainment. Etzioni defines three functions of a goal as giving orientation to an organization's activities serving as the source of legitimation of the activities and providing the standards for assessment of organizational success (1960-61). The formal, written goals of the organization thus become the standards against which criteria to judge their attainment are applied.

The goal approach has the advantage of excluding the values of the researcher and injecting those of the organization being studied into the set of criteria used for judgment. However, this method has also been strongly criticized, claiming that the formal, written goals represent an unrealistic and unattainable "ideal" state that is not meant to be reached (Yuchtman and Seashore, 1967; Etzioni, 1960-61).
Katz and Kahn state that, "... the stated purposes of an organization as given by its by-laws or in the reports of its leaders can be misleading. Such statements of objectives may idealize, rationalize, distort, omit, or even conceal some essential aspects of the functioning of the organization" (1966: 15).

A second approach at assessing effectiveness could be characterized as functional in that it calls upon the researcher to define the "real" goals of the organization within its frame of reference. According to Parsons's functional model, the identification of the organization's ultimate goals become evident when the organization is seen in its total social structure (1960). The organization can then be evaluated in light of its own welfare, as well as its performance with respect to "derived" goals.

A third, and more recent conceptualization is stated in terms of the relationship of an organization and its environment. The central ingredient of this approach is the contribution of the organization to the total system. Yuchtman and Seashore describe this relationship with the environment in terms of the processes of exchange and competition (1967). When considered in the systemic context, the functions of creating, energizing and maintaining the organization are considered in addition to the exchange of inputs and outputs between the organization and its environment.

When considering which of the three approaches to use for measuring effectiveness, it can be concluded that both the goal and functional approach lack an adequate consideration of the problem of the relations between the organization and its environment, however, the
system approach is seldom used because of its complexity and its lack of explicitness in defining the very organizational-environmental relationship that gives it its desirability.

A major shortcoming of the goal approach, due to the specificity of organizational objectives, is that it lacks generalizability for comparative studies. In this study an attempt will be made to overcome this difficulty by using goals that are common for all of the organizations.

The relationship between organizational effectiveness and the type of staffing pattern is of major concern in this study, however, the direction of the relationship is not completely clear. It has been stated by Extension directors, either explicitly or implicitly, that they are moving to the multi-county pattern to increase their organizations effectiveness in serving its clientele needs. If this is, in fact, true then it would be expected that the multi-county staffing pattern is positively related to effectiveness. Price supports this thinking when he concludes that organizations with a high degree of division of labor are more likely to have a high degree of effectiveness (1968: 16-24).

On the other hand, it has been concluded that with increased organizational size comes a potential for increased role conflict, a lowering of job satisfaction, and as a result a reduction in overall organizational effectiveness (Thomas, 1959; Talacchi, 1960-61). Nevertheless, within the Extension Service with the potential for improved job satisfaction with more specialized responsibilities and the
increased prestige of the multi-county position there is also potential for increased satisfaction of the workers and greater effectiveness. Stated in a null form it would be hypothesized that there is no difference among the three organizational staffing patterns and their association with organizational effectiveness.

Of secondary concern are the interrelationships that exist between organizational effectiveness and the other dependent variables, some of which have been eluded to already.

Price has suggested that large organizations have a higher degree of effectiveness than those of small size, however, he draws an exception to this relationship when there is a high degree of professionalization within the organizations and when the output of the organization is service (1968: 185-189). He states that in a professional service-oriented organization the large size interferes with the important professional-client relationship. Lazarsfeld and Thielens have given support to this explanation in a study of small colleges (1958). They suggest that large organizations tend to be more goal oriented, whereas small organizations tend to be more "people" oriented. Because the Extension Service fits the description of the professional service-oriented organization it is expected that organizational size is inversely related to effectiveness. In the null form it is hypothesized that organizational size is not related to organizational effectiveness.

When analyzing the relationship between effectiveness and organizational complexity it is necessary to consider separately some of the indicators of complexity. With increased vertical differentiation
within the organization follows a potential for more problems in communication and coordination. Price has emphasized the need for openness of vertical communication channels in order to assure proper transmission of information in the superordinate-subordinate relationship (1968: 163-183). Therefore increased vertical differentiation has the potential for reducing effectiveness.

On the other hand, division of labor and specialization are linked together in a contrasting relationship with effectiveness. Blau et al. have distinguished between what they call, specialized division of labor and routinized division of labor in that the former refers to the subdivision of an overall task into specialized responsibilities that require greater utilization of expert specialists, whereas the latter entails the fragmentation of responsibilities into simple assignments with routine duties (1966). Division of labor and specialization within the Extension Service fit the description of specialized division of labor, which Price shows is positively related to organizational effectiveness (1968: 15-30). Thus it would be expected that an increased degree of specialized division of labor coupled with increased specialization would be associated with increased effectiveness. The null would state that there is no relationship between organizational effectiveness and organizational complexity.

Kahn et al. in writing of the consequences of role stress point out that role conflict reduces the effectiveness of the organization in many ways (1964: 53-96). According to role theory every position in an organizational structure should have a specified set of tasks
and responsibilities associated with it. Whenever the expectations of an individual are inconsistent, "... he will experience stress, become dissatisfied, and perform less effectively than if the expectations imposed on him did not conflict" (Rizzo et al., 1963: 151).

There seems to be general agreement that as role conflict increases there will be a decline in organizational effectiveness. It is the null hypothesis that there is no relationship between organizational effectiveness and the degree of role conflict.

In a study of two industrial plants Mann and Hoffman have shown that effectiveness, as indicated by productivity, is very definitely related to the morale (satisfaction) of the workers (1960: 23-45). Likewise, Walker in a study of factory automation confirmed this positive relationship between effectiveness and morale (1957: 200). Therefore one would expect them to be related in the same manner within the organization of the Cooperative Extension Service. The null hypothesis is that there is no relationship between organizational effectiveness and employee job satisfaction.

Role Conflict

A role consists of behavior an individual has learned to enact in response to expectations of a particular group in a specific social situation (Dressler, 1969: 355). The individual can be seen as an array of roles which he plays in the particular groups to which he belongs. Researchers are increasingly using the role concept in explaining organizational structure and function.
Other group members depend upon the individual's performance of the role in that they are rewarded by it or require it in order to perform their own tasks. Because his performance affects them, they develop beliefs and attitudes about what he should and should not do as part of his role. This conception of the other group members as to an individual's behavior within the group is referred to as role expectation (Kahn et al., 1964: 14-15).

It is possible, and in fact probable, that different members of the group would hold quite different role expectations of a group member. At any point in time there may be conflicting demands placed on an individual concerning his expected behavior. The exposure of the individual in a given position to incompatible behavioral expectations is referred to as role conflict. Role conflict is an important concept in organizational research because it creates psychological stress for the person who is the target in that he cannot completely and realistically fulfill conflicting behavioral expectations, and thus performs less effectively within the organization.

Kahn et al. present a theoretical model of role as comprised of the interrelation of three antecedents—organizational factors, personality factors and interpersonal factors (1964: 26-35). To a considerable extent, the role of an actor is determined by the organizational context. In a formal organization the structure, functional specialization, division of labor and reward system often dictate a major portion of the behavioral expectations. The personality factors, as defined broadly, refer to a person's propensity to behave in
a certain manner: his motives and values, his weaknesses and
strengths, his skills and intelligence, his fears and sensitivities.
Such personality factors are seen as conditioning variables that orig-
inate from within the individual. They are predispositions that evoke
and elicit differential responses and expectations. The third set of
factors, interpersonal relations, refers to the patterns of interaction
of an individual and the group members and their orientations toward
each other. Kahn et al. describe four important dimensions in the
interpersonal context: (1) power or ability to influence; (2) affec-
tive bonds, such as respect, trust or benevolence; (3) dependence; and
(4) communication style (31-33).

One way to study organizations is to assess each individual's
role within the organization. As Kahn et al. conclude, "Organizations
consist ultimately of the patterned and concerted activities of their
members" (1964: 34). An analysis of role expectations and conflict
within the organization is concerned with the impact of an organization
and its members upon the individual; and as a result, the effect of the
individual performer and his behavior on the organization's effective-
ness.

In recent years there have been attempts to study the Cooperative
Extension Service through the application of role theory. Gallaher has
defined the role of the change agent (1967). Bible, Nolan and Brown
have specified the role definition of Extension executive committee
members (1961). Wilkening has analyzed the role of county Extension
agents (1957), and Shriver followed with another study in 1969.
Durfee related supervisory staff and county agents with the use of a

More recently the interest has turned to the multi-county agent and his role, though the number of studies is yet limited. Hudley explored the role of the District Agricultural Agent in Kansas in 1967. At the same time Johnsrud carried out a study of the multi-county staff position for youth in North Dakota (1967). These studies were followed by one by Shroeder, again in Kansas, on the role of the District Extension Home Economist (1968). Honnold has used role theory in a study of staff members' expectations of programming roles of multi-county agents in Indiana (1970). Very recently two studies have been conducted that relate very closely to the present study. One by Kunzru seeks to identify the role of the Area Agent in Ohio through the use of task statements (1971); the other by Pilgram analyzes the expectations held of the Area Specialist by five job groups within the Extension staff of Minnesota (1971).

Both the Kunzru and Pilgram studies conclude that role conflict does exist in the expectations held for the multi-county agent by different staff members of the organization. With the introduction of a new role, the multi-county agent, within an existing organization it would be expected that there would be a lack of role consensus concerning the expectations of the new position for a period of time until the members of the organization adjusted to this new role. It is also anticipated that differences could be identified among the multi-county
patterns and their association with role conflict. Stated in the null form it is hypothesized that there is no difference between multi-
county and county staffing patterns and their association with the de-
gree of role conflict.

The other dependent variables are related to role conflict in the
following discussion. Role conflict has been found to be related to
organizational size. Kahn et al. define a stress (conflict) curve
that begins to rise from very small organizations to those of 50 or 100
persons and continues to rise until the number of employees reaches
5,000 (1964: 392-396). Only for organizations of more than 5,000 em-
ployees does the curve of conflict begin to level off. They interpret
the increased conflict as stemming from a lack of coordination in
larger organizations. They argue that increased size carries with it
an increased requirement for coordination, and thus the need for
changes in organizational structure.

Thomas, in a study of role conception and organizational size,
found, as did Kahn and his associates, a direct relationship between
the size of the organization and the amount of role discrepancy (con-
flict) (1959: 30-37). He suggests that role consensus is dependent
upon the workers and superiors sharing a frame of reference as to the
importance of functions to be performed by workers, and that greater
consensus in smaller organizations may indicate greater cohesion of
the primary groups and thus a readier acceptance of the goal to pro-
vide service on a personal basis.

It is therefore expected that organizational size is directly
related to the amount of role conflict. The null hypothesis is that
there is no relationship between the degree of role conflict and the size of the organization.

Kahn et al. state the relationship between role conflict and organizational complexity very clearly when they assert,

With increased size the structure of the organization becomes more complex. The division of labor becomes more differentiated and specialized; more levels of supervision are introduced to maintain coordination and control; and more people become involved in organizational planning. In many industries advanced technology adds to the complexity; no single person can be adequately trained in all of the relevant technical areas. The fact that size and complexity of organizations exceed the individual's span of comprehension probably accounts for much of the role ambiguity found today (1964: 75).

With increased complexity comes increased role conflict. The null hypothesis would state that there is no relationship between role conflict and organizational complexity.

Strong evidence is presented by Kahn et al. that role conflict leads to inner conflict and tension within the individual, there is a general sense of futility and then a dissatisfaction with the job results. They point out that persons who are anxiety-prone when put under conditions of role conflict suffer severe tensions and experience little job satisfaction. With respect to employee attitudes their data show that role conflict causes one to lose one's confidence in his superiors and in the organization as a whole (1964: 66, 214, 253-4). Therefore with the evidence presented one would anticipate that role conflict is indeed related to job satisfaction. The null would hypothesize that the degree of role conflict is not related to employee job satisfaction.
Job Satisfaction

Job satisfaction refers to the degree of favorableness of an individual's work role. As Hoppock has suggested in his monograph, Job Satisfaction, job satisfaction as an independent variable may not even exist but rather is only an indicator of a complex set of variables (1935: 47).

Positive attitudes toward the job are conceptually equivalent to job satisfaction and negative attitudes correspond to job dissatisfaction. Herzberg has suggested that there are two sets of factors influencing one's attitude toward his work, what he calls satisfiers and dissatisfiers (1957).

The term morale is often used interchangeably with job satisfaction to indicate an individual's mental attitude toward his work, or as Barnard has defined it, the degree to which individual motives are gratified (1954: 56-61).

Job satisfaction is typically measured by means of interviews or questionnaires in which workers are asked to state the degree to which they like or dislike various aspects of their jobs. Therefore the response is the perception of the individuals to how his motives are being gratified. Two indirect measures that are commonly used as indicators of job satisfaction are rates of employee turnover and absenteeism.

Job satisfaction of the individual employee is important because of its effect on performance, and, as a result, the overall effectiveness of the organization in meeting clientele needs (Likert,
1961: 5-25). Barnett and Louderback point out that administrators of the Cooperative Extension Service have dual concerns in making organizational changes: that of meeting clientele needs, as well as that of the effect of change on job satisfaction of its staff (1971).

Simon et al. warn that "Any change that threatens to decrease the net satisfaction of an organization member--regardless of the reasons for the change--will be resisted by him" (1950: 112). Therefore, when making any changes in staffing pattern arrangements administrators should be concerned with the ensuing impact on level of employee job satisfaction.

In relating job satisfaction to two patterns of organization in Extension in the state of Colorado, Rose found a significantly higher mean score of job satisfaction for personnel working in a multi-county area over those working in the single county pattern (1971: 53-59). This same relationship would be expected in the present study. Analyses as to differences between the two multi-county patterns will be carried out even though it is not possible to hypothesize those relations. In relating job satisfaction and staffing pattern the null hypothesis would state that there is no difference among the three staffing patterns and their association with the level of employee job satisfaction.

The following are the interrelations of the dependent variables that have not already been discussed. In a study relating individual attitudes with organizational size Talacchi found a negative relationship between size and level of employee satisfaction (1960-61). Also
closely related to employee job satisfaction, he found the level of satisfaction in the area of interpersonal relations decreases as size increases.

These findings are supported by Lazarfeld and Thielens in their study of colleges in that they found that the larger the organization the lower the employee morale (1958: 25-26). Price suggests that the morale is higher in smaller organizations because they are more concerned with satisfying the needs of their employees, whereas larger organizations are more goal oriented (1968: 190).

In the case of the Extension Service it is expected that organizational size will be inversely related to employee job satisfaction. In the null form it is hypothesized that there is no relationship between employee job satisfaction and organizational size.

In relating complexity to job satisfaction a distinction needs to be drawn between the components specialization and vertical differentiation. Price suggests that routinized division of labor lowers employee morale, whereas specialized division of labor increases morale (1964: 16-24). Specialized division of labor within the Extension Service would be expected to be positively related to job satisfaction. Vertical differentiation, on the other hand, would be expected to be inversely related to job satisfaction. The null hypothesis would be that there is no relationship between the level of employee job satisfaction and the degree of complexity of an organization.

The following is a summary list of the hypotheses to be tested in this study.
1. There is no difference among the three staffing patterns and their association with organizational effectiveness.

2. There is no difference among the three staffing patterns and their association with organizational complexity.

3. There is no difference among the staffing patterns and their association with the level of employee job satisfaction.

4. There is no difference between the multi-county and county staffing patterns and their association with the degree of role conflict in the organization.

5. Organizational size is not related to organizational effectiveness.

6. Organizational complexity is not related to organizational size.

7. There is no relationship between employee job satisfaction and organizational size.

8. There is no relationship between organizational effectiveness and organizational complexity.

9. There is no relationship between the level of employee job satisfaction and the degree of complexity of the organization.

10. There is no relationship between organizational effectiveness and employee job satisfaction.

11. There is no relationship between organizational size and the job satisfaction of the employees.
12. There is no relationship between organizational size and the degree of role conflict.

13. There is no relationship between the complexity of an organization and the degree of role conflict.

14. There is no relationship between the effectiveness of an organization and the degree of role conflict.

15. There is no relationship between the degree of role conflict in an organization and the job satisfaction of the employees.
CHAPTER III

METHODOLOGY

In order to investigate the advantages and disadvantages of area staffing versus the individual county approach a comparative study was used as the design for this research. Organizational staffing pattern was the principal independent variable while the four dependent variables were organizational structure, organizational effectiveness, job satisfaction, and role conflict. Extension Service organizations in seven states were selected to represent three different types of staffing patterns.

1. County staff with area responsibilities--Indiana, New Jersey.
2. County and area staff--Ohio, Minnesota, Idaho.
3. Single county staff only--Tennessee, New Mexico.

These seven states were selected on the basis of the following criteria:

1. The type of staffing pattern the state employed.
2. The use of a single staffing pattern throughout nearly all of the state.
3. The use of a single pattern throughout, as nearly as possible, the four programming areas (agriculture, home economics, youth and community resource development).
4. The geographical location of the state such that not all states representing a single pattern would be from the same geographical region.

5. The relative size of the Extension staff.

**Universe and Sample**

The universe for this study consisted of the professional staff members (excluding clerical and paraprofessional workers) of the Indiana, Ohio, Tennessee, New Jersey, Minnesota, Idaho, and New Mexico Extension Services. The sample was selected as a stratified random sample. The selection of the sample was random from within the position subgroups of each state. Stratification of the sample permitted the selection of larger portions of certain job groups of small size to insure an adequate number of respondents in each subgroup. The staff directories served as the source of the listing of professional staff.

The sample proved to be a 32 per cent sample of the total staff of the seven states.

**Instrumentation**

The primary instrument for collection of information concerning the variables was a mailed questionnaire. The questionnaire consisted of six major parts. The first section asked for background information of the respondents, which provided measures for some of the independent variables of the study. The second part consisted of the thirty five Extension Management Information System (EMIS) purpose statements. As
a measure of effectiveness, the respondents indicated how well they felt each purpose was being attained in their state. The third part of the questionnaire consisted of sixteen items of the Brayfield-Rothe index of overall job satisfaction. A fourth section contained a list of thirty-six items concerning organizational complexity. A fifth part contained twenty-four task statements concerning role perception. A final open-ended section of the questionnaire allowed respondents to express their feelings as to the strengths and weaknesses of their present staffing arrangement and to suggest any changes that would increase its effectiveness.

**Analysis of Scales**

Validity indicates the degree to which an instrument measures the concept that is under discussion (Bohrnstedt, 1970: 91-98). However, as Kerlinger pointed out, there is no one validity, but rather there is a valid scale for the scientific purpose of the researcher (1964: 444-462).

The problem of validity is one of whether or not a scale measures what it was designed to measure. One method of estimating validity in a rather informal manner is through the face validity of the items of a scale. An inspection of the items was carried out not only by this researcher, but also by Extension workers in the seven states studied. It was concluded that a high degree of face validity was present.

Content validity refers to the representativeness or sampling adequacy of the substance of an instrument. Content validity is reflected in the question: Is the content of the scale representative
of the universe of content of the dimension being measured? Content validity is essentially judgmental.

To insure content validity the researcher searched the literature to determine how various authors have conceptualized the variables being operationalized. In those cases where the variables were not unidimensional, the major components as identified by various authors were considered. Once the components of each variable were decided upon, a series of items which measure each of the facets was constructed. These items composed what Bohnstedt calls the "domain of content" (1970: 91-93).

Therefore, although content validity cannot be demonstrated with a single statistic, logical procedures can be followed to help insure that the items have content validity.

Criterion validity, an objective technique that compares the instrument with a well accepted measure, was possible with the job satisfaction scale.

The Cleaver program for internal consistency analysis was utilized to analyze the two attitudinal scales used in the questionnaire (1968). The Cleaver program utilizes the Rundquist and Sletto procedure to evaluate the internal consistency item analysis of a Likert-type attitudinal scale. The program provides a correlated split-half correlation, that indicates the internal consistency of the total scale, and a scale value difference ratio which indicates how each item is discriminating when that item is combined with the others of the scale.
Organizational Structure

Structure is a fact of any organization and is the point from which most organizational analyses are begun. Studies of organizational structure have been concerned with such things as specialization, standardization, formalization, centralization, hierarchial levels, size, etc. The choice of indicator(s) of structure has often been somewhat arbitrary; however, two commonly used are size and complexity. These two were investigated in this study.

Size in this study was indicated by the number of full time equivalent professionals employed by the organization.

Organizational complexity was characterized by the perception of the organizational members as to the organization's degree of hierarchial authority, specialization, rules and regulations, routinization, impersonality, and technical competency. Items were developed to reflect each of these six dimensions.

The six components used in this scale were suggested in previous research of organizational structure.1 Thirty-six items were then developed to reflect the six dimensions and were scored in an agree/disagree Likert manner. The thirty-six item organizational complexity scale was implemented and then evaluated in terms of the Cleaver item analysis program (1968). The initial results yielded a correlated

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1For a general discussion of the many dimensions used to measure organizational structure, see Richard N. Hall, Organization: Structure and Process (Englewood, New Jersey: Prentice-Hall, 1972), pp. 105-200.
split-half correlation (Spearman-Brown formula) of .58. When items with low scale value difference ratios were excluded, all items representing the components of specialization and technical competency were discarded. This suggests that the discarded components were indicating something different from what the other items were representing. This finding seems to lend support to Hall's assertion that it is erroneous to think of complexity as a multidimensional concept as is commonly accepted, but rather that the dimensions, in fact, vary independently and should be studied as separate variables (1961).

From the original sixty six items fifteen were then selected for further analysis. They together showed a correlated split-half correlation of .88. Upon closer examination it was concluded that the new scale more nearly approximated the concept of authority structure. Authority structure refers to the distribution of power within the organization, the actor's participation in the decision-making process, and the allocation of authority among the hierarchy levels.

The following are the items included in the authority structure scale:

1. I feel that I am my own boss in most matters.
2. Rules are rigidly enforced without regard for the individual.
3. Employees are free to use their own judgment in handling various problems.
4. I feel that I know top administrators well.
5. People feel as though they are constantly being watched to see that they obey all the rules.

6. There can be little action until a supervisor approves a decision.

7. A person who wants to make his own decisions would quickly become discouraged here.

8. Red tape isn't often a problem in getting a job done.

9. I frequently have an opportunity to visit informally with top administrators.

10. Increasingly, small matters have to be referred to someone higher up for a final answer.

11. The employees are constantly being checked upon for rule violations.

12. Administrators seem remote and inaccessible.

13. Most decisions I make have to have my boss's immediate approval.

14. There is a tendency to follow the letter of the law rather than the spirit.

15. We are to follow strict operating procedure at all times.

Organizational Effectiveness

Organizational effectiveness can be seen as how well an organization is "doing its job," or in more precise terms, the degree to which it realizes its goals. Organizational goals were utilized in this study as the standards for assessment of organizational success.
Goal attainment was indicated by the perception of organizational members as to how well they felt that their state was accomplishing the Extension purposes as set forth in the Extension Management Information System.

The national purpose statements were selected as the indicator of effectiveness because of the fact that these thirty five statements form the basis for the development of state objectives. In the seven states studied, state goals differed only slightly from the national purposes, and generally the variations were only in the form of amplifications of the EMIS statements.

Because of the familiarity of the purpose statements, it was possible to use the same items in all seven states, thus allowing for easy comparisons among states. When deemed necessary the statements were followed with a short explanation. Scoring was on the basis of a scale from one to five, ranging from poor to excellent.

The purpose statements fall into the general categories of farm income (items 1-5), marketing, utilization and distribution (items 6-9), international Extension (item 10), safety and disasters (items 11 and 12), Extension 4-H youth programs (items 13-18), human nutrition (items 19 and 20), family living (items 21-24), health (item 25), community development (items 26-30), and natural resources and environment (items 31-35). The items were then randomized when placed in the questionnaire.
The following are the thirty five national purpose statements and the explanations provided that served as the basis for the measure of organizational effectiveness:

1. **INCREASE UNDERSTANDING OF EXTERNAL FACTORS THAT AFFECT THE FARM BUSINESS.**
   (Domestic and foreign outlook; policies and programs affecting farm income, trade, taxation; etc.)

2. **INCREASE FARM DECISION-MAKING AND BUSINESS OPERATION SKILLS FOR MORE EFFECTIVE ENTERPRISE MANAGEMENT.**
   (Business analysis; organization; factors of production; optimum resources combination; etc.)

3. **INCREASE FARM APPLICATIONS OF MACHINE AND STRUCTURE TECHNOLOGY.**
   (Construction; design; maintenance; materials; material handling; animal housing; storage practices; etc.)

4. **IMPROVE PRODUCTION EFFICIENCY THROUGH UTILIZATION OF ANIMAL MANAGEMENT PRACTICES.**
   (Livestock performance testing; culling; animal care; ration formulation; breeding and selection; disease, insect and pest control; etc.)

5. **IMPROVE PRODUCTION EFFICIENCY THROUGH UTILIZATION OF CROP MANAGEMENT PRACTICES.**
   (Seed selection; plant care; soil testing; fertilizer application; irrigation and drainage; harvesting; weed and insect control; etc.)

6. **INCREASE THE EFFECTIVENESS OF INDIVIDUAL AND PRODUCER GROUP MARKETING PRACTICES.**
   (Marketing information; bargaining organizations; cooperatives; marketing orders and agreements; marketing standards; etc.)

7. **INCREASE THE EFFECTIVENESS OF SUPPLY, DISTRIBUTION AND PROCESSING FIRMS AND SYSTEMS.**
   (Assist firms in increasing efficiency; the feasibility, evaluation and establishment of new agribusiness; improve decision-making; coordination of production and marketing; etc.)

8. **ASSIST IN THE DEVELOPMENT AND UTILIZATION OF NEW AND IMPROVED PROCESSES AND PRODUCTS.**
   (Evaluation and application of economic and technological research; and utilization of new and improved products and processes; etc.)
9. IMPROVE CONSUMER UNDERSTANDING OF AGRICULTURAL PRODUCTS ON THE MARKET AND FACTORS DETERMINING AGRICULTURAL PRICES. (Consumer education concerning prices, supplies, qualities of products on the market; factors determining prices at the retail level; etc.)

10. ASSIST OTHER NATIONS IN THE DEVELOPMENT OF EXTENSION TYPE PROGRAMS. (Training of foreign personnel through formal, in-service, on-the-job, observation or practical experience; backstop and support of personnel abroad; etc., not youth programs.)

11. DEVELOP AWARENESS OF THE NEED FOR AND INCREASE THE EFFECTIVENESS OF SAFETY PROGRAMS. (Safe methods of storage and handling of pesticides; chemical residues; farm, home, highway safety.)

12. REDUCE OR PREVENT INJURY, DAMAGE, AND LOSS OF LIFE AND PROPERTY IN THE EVENT OF NATURAL OR MANMADE DISASTERS. (Shelters; emergency medical care; disaster preparedness; etc.)

13. IMPROVE INTERNATIONAL UNDERSTANDING THROUGH EXTENSION 4-H YOUTH PROGRAMS. (Technical and cultural exchange programs, etc.)

14. HAVE YOUTH ACQUIRE KNOWLEDGE AND PRACTICAL SKILLS IN SCIENCE AND TECHNOLOGY. (Mechanics and engineering; home management; financial management; livestock and plant production; etc.)

15. STIMULATE YOUTH IN PERSONAL GROWTH/DEVELOPMENT--PHYSICAL, MENTAL AND BEHAVIORAL. (Self-worth; respect; concern for other persons; personal goals; career exploration; personal appearance; etc.)

16. HAVE YOUTH ACQUIRE THE FEELING AND DEPTH OF UNDERSTANDING TO DEVELOP PERSONAL ATTITUDES TOWARD SELF AND OTHERS MOST LIKELY TO LEAD TOWARD RESPONSIBLE CITIZENSHIP. (Study of government; citizenship; community; etc.)

17. INCREASE THE INVOLVEMENT AND EFFECTIVENESS OF ADULTS AND YOUTH IN VOLUNTEER LEADERSHIP RESPONSIBILITIES IN 4-H-YOUTH PROGRAMS. (Develop leadership skills; etc.)

18. DEVELOP THE OVERALL 4-H-YOUTH PROGRAM. (Strengthen county and state 4-H-Youth development programs.)
19. IMPROVE THE NUTRITIONAL LEVEL OF THE HUMAN DIET THROUGH WORK WITH YOUTH FROM LOW-INCOME FAMILIES IN 4-H TYPE EDUCATIONAL PROGRAMS. (4-H-Youth phase of the Expanded Food and Nutrition Education Program.)

20. IMPROVE THE NUTRITIONAL LEVEL OF THE HUMAN DIET. (Understanding nutrition; buying and selecting food; preservation; and the adult phase of Expanded Food and Nutrition Education Programs.)

21. IMPROVE FAMILY RESOURCE UTILIZATION (FINANCIAL, MATERIAL, PERSONAL AND COMMUNITY) THROUGH MANAGEMENT. (Money management; use of credit; etc.)

22. IMPROVE HUMAN HOUSING AND HOME ENVIRONMENT. (Buying, selling, building, remodeling, etc.)

23. IMPROVE KNOWLEDGE AND SKILLS RELATED TO HUMAN APPAREL. (Clothing; textiles, etc.)

24. IMPROVE INTER-PERSONAL RELATIONSHIPS AND OTHER SOCIAL/PSYCHOLOGICAL COMPETENCIES. (Family relations; community relations; emotional development; etc., not youth programs.)

25. IMPROVE HUMAN HEALTH PRACTICES AND USE OF FACILITIES. (Preventative medicine, health facilities; etc.)

26. IMPROVE VOLUNTEER LEADERSHIP RESPONSIBILITIES IN COMMUNITY PROGRAMS. (Development of adult leadership; leadership skills; recruitment; etc., not youth programs.)

27. IMPROVE COMMUNITY ACTION AND COMMUNITY ORGANIZATION. (Development of community leadership; resource utilization; community problems; etc.)

28. IMPROVE COMMUNITY FACILITIES AND SERVICES. (Water systems; waste disposal systems; recreation facilities; transportation; schools; etc.)

29. ASSIST COMMUNITIES TO DEVELOP AN ECONOMIC BASE FOR BALANCED GROWTH. (Business and industrial development; job creation; etc.)

30. ASSIST IN THE DEVELOPMENT OF MARKETABLE EMPLOYMENT SKILLS. (Manpower programs; youth employment; education and training; vocational education; etc.)
31. PROVIDE INFORMATION OF THE ESTABLISHMENT OR OPERATION OF WATERSHED IMPROVEMENT, SOIL AND WATER CONSERVATION PROJECTS.

32. IMPROVE THE ENVIRONMENT THROUGH APPLICATION OF THE PRINCIPLES AND PRACTICES AFFECTING OUR NATURAL RESOURCES. (Man's relation to his environment; resource management, etc.)

33. INCREASE UNDERSTANDING OF THE EFFECTS OF POLLUTION ON THE ENVIRONMENT AND INCREASE ADOPTION OF POLLUTION CONTROL METHODS.

34. IMPROVE THE MANAGEMENT AND UTILIZATION OF FORESTS, THE PROCESSING AND MARKETING OF FOREST PRODUCTS. (Forest and woodlot management; planting; pruning; insect and disease control; etc.)

35. INCREASE CITIZEN UNDERSTANDING OF AND PARTICIPATION IN PUBLIC ISSUES AFFECTING NATURAL RESOURCES/ENVIRONMENT. (Environmental quality; pollution; water supply and use; waste disposal alternatives; natural resource planning; etc.)

**Job Satisfaction**

There have generally been two approaches to the measurement of job satisfaction in organizational literature (Miller, 1964: 158). One approach has been to structure an instrument that collects information about general satisfaction in the work role of an organization. It attempts to answer the question of how people feel about their jobs. The other approach has been to treat the specific dimensions of satisfaction separately, such as work, supervision, pay, promotion and coworkers. Herzberg grouped the factors into what he called the "satisfiers" and "dissatisfiers" (1957).

Even though it would have been desirable to have been able to identify the sources of satisfaction and dissatisfaction in this study it was concluded that the measure of job satisfaction had to be a
general measure that was brief and easily administered in a mailed questionnaire. The Brayfield-Rothe index of general job satisfaction was chosen for use in this study because it has been shown to be both a reliable and valid index of overall job satisfaction rather than specific aspects of satisfaction, applicable to a wide variety of jobs from both management and employees; brief and easily administered, and pretested within the context of the Cooperative Extension Service organization (Miller, 1964: 188 and Rose, 1971).

The Brayfield-Rothe scale consists of eighteen items. A Likert-type scoring of five choices of agree/disagree was applied to each item.

In previous studies the index has shown a reliability coefficient of .87 with the eighteen items. In order to test the validity of the Brayfield-Rothe index, it was compared with the results of the Hoppock scale, a widely accepted measure of general job satisfaction. The product-moment correlation between scores on the Hoppock scale and the Brayfield-Rothe index was .92, thus indicating a high level of criterion validity (Brayfield and Rothe, 1951).

The eighteen item job satisfaction scale was administered to the sample population and was then evaluated through use of item analysis (Cleaver, 1968). The initial results yielded a correlated split-half correlation of .82, however, four of the items were reflecting low score value difference ratios. Upon inspection of the questionnaires and in light of comments made by various respondents it became evident that there were misinterpretations with respect to these four items.
When these four items were excluded, the correlated split-half correlation rose to .87 with no low individual items.

The following fourteen items were those retained for further analysis:

1. My job is usually interesting enough to keep me from getting bored.
2. It seems that my friends are more interested in their jobs.
3. I consider my job rather unpleasant.
4. I am often bored with my job.
5. I feel fairly well satisfied with my job.
6. Most of the time I have to force myself to go to work.
7. I definitely dislike my work.
8. I feel that I am happier in my work than most other people.
9. Most days I am enthusiastic about my work.
10. Each day of work seems like it will never end.
11. I like my job better than the average worker does.
12. My job is pretty uninteresting.
13. I find real enjoyment in my work.
14. I am disappointed that I ever took this job.

**Role Conflict**

The perception of organizational members as to what an individual's behavior within the group should, or should not be, is role expectation. When these expectations concerning a specific role are incongruous among organizational members, conflict results. The educational functions within the organizational structure of the
Cooperative Extension Service are generally distributed among the positions of state specialist, county agent and area agent (if the state has such a position). Disagreement as to the tasks that should be associated with a position is an indication of conflict within the organization. This study asked the respondents to indicate the level of priority they felt was associated with twenty four task statements for each of the positions. Lack of consensus as to their priority listings will be seen as role conflict.

The twenty four task statements have been identified with the roles of county agents, area agents and state specialists. The tasks can be grouped into three functional areas--program planning, implementation and evaluation. Pilgrim has concluded that there was a lack of agreement as to the importance of many of these tasks with respect to the area agent position in Minnesota (1971). Scoring of the items was on the basis of from one to five, from a very low priority to very high.

The following are the twenty four task statements used to indicate role conflict:

1. Helps identify the target audiences for Extension programs.
2. Has a part in formation of lay advisory planning groups.
3. Assumes leadership in organizing program planning for individual counties.
4. Assumes leadership in organizing program planning on a multi-county basis.
5. Assumes leadership in organizing program planning at the state level.
6. Assists in analyzing problems and opportunities for Extension education programs with Extension personnel.

7. Recommends program alternatives to lay groups that are planning programs.

8. Has a role in determining the educational programs to be included in the annual plan of work made at the county level.

9. Has a role in determining the educational programs to be included in the annual plan of work at the state level.

10. Conducts in-service training activities for Extension personnel.

11. Conducts training activities for lay leaders.

12. Serves as technical consultant, on call to other Extension personnel.

13. Serves as technical consultant, on call to Extension clientele.


15. Takes part in applied research.


17. Prepares technical newsletters and bulletins for distribution to Extension clientele.

18. Makes personal visits to Extension clientele.

19. Assumes leadership in developing multi-county programs.

20. Participates in the evaluation of statewide programs.

21. Participates in the evaluation of multi-county programs.

22. Participates in the evaluation of county programs.

23. Reports Extension program accomplishments to the public.

24. Has a part in recognizing lay leaders who have assisted in programs.
Data Collection

The method of collecting data was a combination of personal interviews, study of documents and mailed questionnaires. Visits were made to all seven states in order to interview the administrative staff in each. With some variations due to availability of personnel and division of responsibilities, the persons interviewed were the director, associate and/or assistant directors for program development and administration, state program leaders, and the person responsible for staff development. The interviews were informal and provided an opportunity to probe, in an in-depth manner, the many facets of a state's staffing pattern. The information gained in the personal interview provided the contextual framework for understanding and making interpretations of the data.

Documents collected and studied included an organizational chart; the state purpose statements; the directory of personnel; a state map with pertinent district boundaries and offices, county sizes and numbers, and the location of the land-grant university; position descriptions; and any studies, reports, histories or position papers that dealt with staffing arrangements. These documents provided the researcher with the official statement of the organization, as well as some research findings concerning staffing in specific states.

The mailed questionnaire, being the primary source of information for the study, was developed in advance of the visit to the states so that it could be taken to each state for review. As a result of the suggestions from each of the states, one part of the
questionnaire was restructured completely, and another added. Care had to be exercised to insure the same interpretation in all states.

Items in the different scales were then randomized and an additional pretest was conducted with twenty five staff members in Ohio who were selected from the study population, but who had not been chosen as part of the sample. Further recommendations were made which resulted in minor changes to improve comprehension of some statements.

The individual questionnaires were identified with a code number and sent with two accompanying cover letters, one from the respondent's Director (except Minnesota, which informed its staff by way of a newsletter) and one from the researcher, along with a return envelope. The questionnaire was mailed on April 6, 1973. After three weeks a follow up letter was sent to those who had not yet returned the questionnaire. At the same time a letter with a list of the names of the nonrespondents went to each Director, or a contact person in each state, to solicit their assistance in encouraging all to respond. All questionnaires were mailed from Ohio and were returned directly to Ohio from the respondent. Data collection was terminated on June 5, 1973, with a 90 per cent overall rate of return.

**Data Analysis**

Null hypotheses were stated and tested to determine whether observed differences were greater than would result by chance. Hypotheses dealing with effectiveness, job satisfaction, complexity and size were tested by the use of one-way analysis of variance. Analysis of
variance (ANOVA) allows for the testing of the null hypothesis of no
difference among more than two groups. This analysis was based on two
estimates of variance:

1. Between group variance, and
2. Within group variance.

The ratio of these two variances was then expressed as an F-value. A
table of F-values was used to determine if the calculated ratio was
large enough to be significant. If the calculated F-value was sig-
nificant this indicated that there was an overall indication of differ-
ence among the groups examined, and thus the null hypothesis was re-
jected.

If significant differences were found, the F-test was followed
with a Scheffe' test(s), as well as an investigation of the group means
and standard deviations. The Scheffe' test is a method of multiple
comparisons used to locate the differences between groups of unequal
N's (Glass and Stanley, 1970: 388-397). The method used for calcula-
tion is presented in Appendix C.

In the analysis of the responses to role perception, ANOVA and
Kendall's Coefficient of Concordance (W) were used. Kendall's W was
developed for determining the relationship among three or more sets of
ranks. The coefficient indicates the degree of agreement, or lack of
agreement, among sets of ranks.

In order to determine the relationship that existed between each
pair of variables which were measured at an interval level, a correla-
tion matrix was constructed. Each variable was correlated with every
other variable by means of the Pearsonian Product-Moment Correlation to provide two things: the magnitude of the relationship and the direction of the relationship.
CHAPTER IV

DESCRIPTION OF STATES AND RESPONDENTS

This chapter contains a description of the patterns of staffing of the seven states included in the study, along with a description of general characteristics of the respondents.

Description of States

Minnesota

The Minnesota Cooperative Extension Service employs 422 professionals in order to carry out an educational program in its eighty-seven counties. There are staff at the county, area and state level within the organization.

The top administrator is the Director. He has an Associate Director and two Assistant Directors, one for programming and a second for personnel and operations. In staff positions are six program directors. They give direction to the areas of (1) agriculture and related industries, (2) home economics and family living, (3) community development, (4) 4-H and youth development, (5) communications and educational aids, and (6) systems development. The line of command for county personnel goes from the Director through the Associate Director to District Extension Directors and on to county staff.
In August of 1972 the state was divided into seven supervisory districts with a District Director and Assistant District Director assigned to each. These persons are office with the state administrative staff of the Extension Service and travel out to their districts. The district directors and assistant directors also give leadership to program development and coordination in their respective districts.

State specialists are housed, when possible, with academic departments in the university and are responsible to their respective department chairmen. Some specialists in home economics and other areas have not yet been able to align themselves with an academic department, and thus are responsible to a program leader.

Minnesota has an area staff of thirty-six workers in the program areas of agriculture, home economics, and community resource development. They are assigned geographical areas of a multi-county dimension that are related to their particular speciality and the demand for it. The assigned areas often do not follow the boundaries of the administrative districts. The area agent is administratively responsible to the district director and is responsible to the state specialist for subject matter accuracy in his area of expertise. Increasingly, area agents in agriculture are being located at the experiment station locations throughout the state. The area agent positions are funded from state and federal sources.

Fifty five per cent of the staff in Minnesota is county staff. These workers carry titles of Extension Agent, Associate Extension Agent, Assistant Extension Agent and Extension Home Economist. They are supported by both area agents and state specialists.
Administrators shared the following thoughts with the researcher. It is felt that area agents are playing an important role in the Extension program in Minnesota. It was pointed out; however, that the number of area agent positions is a direct function of the availability of state and federal funds. With an increase in the number of district directors (from five to seven) and with the addition of assistant district directors, county staff are expected to have more time for program responsibilities. By locating the district directors and assistant directors at the state Extension office, it is thought that they are more involved in the decision-making process of important deliberations. By providing two persons at the district level, it is anticipated that more leadership can be provided to county staff in the area of program planning, implementation and evaluation.

TABLE 1
DISTRIBUTION OF MINNESOTA COOPERATIVE EXTENSION SERVICE STAFF, BY JOB GROUP

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff</td>
<td>230</td>
<td>55</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>122</td>
<td>29</td>
</tr>
<tr>
<td>Area Agent Staff</td>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>422</td>
<td>100</td>
</tr>
</tbody>
</table>
Idaho

The Idaho Cooperative Extension Service serves the needs of its forty four counties by employing 161 professionals. The state utilizes a county, area and state staff in its program delivery system.

The Director of the Cooperative Extension Service in Idaho is also an Associate Dean of the College of Agriculture. His administrative staff consists of four program leaders and four district supervisors. The line of command for county staff goes from the Director, to District Supervisors, to County Chairman, and then to other county staff. Program leaders are in staff positions with respect to the line between the Director's office and county staff.

The state is divided into four supervisory districts with the supervisors officed within their respective districts.

State specialists in agriculture are responsible to the Director through their respective academic department heads. In the areas of home economics, community resource development and youth specialists are responsible to their program leaders and are not attached to subject-matter departments.

Idaho has an area staff in addition to the state and county staff. In fact, there are two types of area workers: the area agent and the area specialist. Both work in multi-county areas. The area specialist positions are financed from state and federal sources and are administratively responsible back through the state specialists. In the agriculture program area this makes the area specialist attached to a subject-matter department. The area specialist is seen
more as a state specialist working in a specific geographic region that is less than the entire state.

The area agent position is, at least in part, financed by the two to four counties in which the person works. They are considered as part of the county staff of each of these counties and have administrative responsibility to the district supervisor. There is no separate job description for the area agent because it is assumed that they will work as do county agents, but in a clearly defined multi-county region. Formally it is assumed that area specialists serve a support function to county agents whereas area agents serve clients directly; however in reality it seems that the method of work of these two positions is tied more to the individual personality of the worker than to the position title.

The area specialist is located in area offices, whereas the area agent is located in one of the county offices in which he works. The area concept is most widely used in the agriculture program area. The 4-H program has four 4-H specialists with one located in each of the four supervisory districts. They are considered as part of the state staff, but in reality work as area specialists. Community resource development has two area specialists and home economics has three.

There is county Extension staff in agriculture and home economics, but no county staff is assigned specifically in 4-H or community resource development, even though county extension agents in agriculture and home economics also carry responsibilities for 4-H and community resource development.
There are four program leaders, one each in the areas of agriculture and natural resources, home economics, 4-H and community resource development. They are responsible directly to the Director for program development activities.

Four district supervisors, each located in his respective district, have administrative responsibilities and are expected to provide program leadership to county staff. They can be seen as middle-level management.

For supervisory purposes the state is divided into four districts, however for programming of area personnel, boundaries vary according to the specific needs of the region. For example, a potato specialist may cover a production area that does not conform to the district boundaries.

According to administrators, there seems to be a plan for area staffing in the future of Extension in Idaho, however certain changes can be expected. Home economics is contemplating going to between-county trading on a trial basis. Area agents may be made area specialists if state and federal funding can be found to replace the county contribution to these positions, thus allowing for more flexibility in the use of these people. It is felt that in times of funding cutbacks area positions are the most vulnerable.

Because of the length of the state, distances and travel budgets are a problem in Idaho. However, fairly extensive use is made of air travel by administrators and state specialists in servicing down-state areas.
<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff</td>
<td>96</td>
<td>60</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>31</td>
<td>19</td>
</tr>
<tr>
<td>Area Staff</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>161</td>
<td>100</td>
</tr>
</tbody>
</table>

Ohio

The Ohio Cooperative Extension Service employs 449 professionals to carry out an educational program in its eighty eight counties. These staff members work at the county, area and state levels.

The Dean of the College of Agriculture and Home Economics is also Director of Extension. The day-to-day operations of the organization are handled by an Associate Director. There are, in turn, six Assistant Directors that are responsible for the four program areas (agricultural industries, resource development and public affairs, home economics and 4-H), plus staff development and program analysis and administration. These six positions are staff positions with respect to county and area workers. The line of command for county staff goes from the Director, though the Associate Director, to Area Supervisors, to County Extension Agent Chairmen and on to other county staff. Area Agents are directly responsible to Area Supervisors.
The State of Ohio is divided into ten areas with area staff and supervisors located centrally in each. Areas are composed of from eight to ten counties and serve not only as supervisory districts, but also as programming subdivisions. Generally, area personnel are assigned to one, and in some cases two, geographical areas.\(^1\) The area boundaries are the same no matter whether personnel be assigned in agriculture, home economics, 4-H, or community resource development.

State specialists, in general, are housed with academic departments at the university and are responsible to their respective department chairmen. Many have joint appointments in teaching and research as well. Twenty-seven per cent of the Extension staff in Ohio are state specialists.

Ohio has forty nine area agents assigned to its ten areas. This provides for about five area workers per each eight to ten county area. All ten areas have area agents in all four programming areas. It is felt that in addition to providing technical expertise closer to clientele, the very presence of more specialized assistance in the form of area agents in closer proximity to county staff encourages more and better program development at the county level.

There is an area supervisor in each of Ohio's ten areas that is charged with administrative matters and program coordination within his respective district. Area supervisors are officed in the area office along with area agents.

\(^1\)Area agents in community resource development and some specialty areas of agriculture have been assigned two areas.
Fifty six per cent of the staff in Ohio is assigned at the county level. One person in each county is designated as County Chairman and all other county staff carry the title of County Extension Agent. The county chairman has administrative and program responsibilities for his county. The county staff is supported in their function by both area agents and state specialists. Administrators feel that personnel in Ohio are quite satisfied with their present staffing arrangement. It seems, however, that the area program is contingent upon a continuation of increased funding from state and federal sources. At the present time vacancies created due to insufficient funding have come out of area agent and state specialist positions. If this continues to occur, insufficient funding could well decide the future of the area approach due to its reliance on state and federal monies and to the necessity of maintaining a certain minimum level of area staff to warrant the expense of an area office and its supporting services.

It is felt that in addition to increased expertise near the clientele, area programming has also provided a vehicle for increased cooperation among counties. So the presence of the area agent tends to increase the effectiveness of both the county staff and the state specialist. In addition, state specialists feel they now have more time for preparation of technical bulletins and newsletters and to stay well informed of new information as it becomes available.
TABLE 3

DISTRIBUTION OF OHIO COOPERATIVE EXTENSION SERVICE STAFF, BY JOB GROUP

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff</td>
<td>250</td>
<td>56</td>
</tr>
<tr>
<td>Area Agent Staff</td>
<td>49</td>
<td>11</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>123</td>
<td>27</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>449</td>
<td>100</td>
</tr>
</tbody>
</table>

Indiana

The Indiana Cooperative Extension Service employs 499 professionals in serving the needs of its ninety two counties. The state utilizes a state specialist staff that backstops a county staff that has multi-county responsibilities. County staff carry the title of Area Agents. The Area Agent title is used for all four programming areas (agriculture, home economics, youth and community development) even though multi-county work takes place principally in agriculture and home economics; some occurs in community development and very little is experienced in youth programs.

The Director is the top administrator of the Extension organization. The line of administrative command to area agents goes from the Director through an Associate Director for administrative management to Area Administrators and on to Area Agents. A second Associate
Director has staff responsibilities for program development and coordination. In addition, there are two Assistant Director positions for programming and personnel. The state is divided into ten administrative areas, with a middle-level management person (area administrator) located in each district. The area administrator has responsibilities for personnel, budget, and other administrative matters; as well as responsibilities for program development, implementation and evaluation.

State specialist staff members are located at Purdue University, are generally officed with academic departments, and are responsible to department chairmen. Youth specialists are an exception in that they are housed together in the state Extension office and are responsible through a state leader of youth programs.

Counties generally have area agents residing in the county and spending the majority of their time within that county. However, in agriculture and home economics, area agents also have a specified speciality area which is utilized not only in his respective county, but also in neighboring counties; and vice versa, other area agents assist in his county in other subject matter areas. This approach has been used some in community development programs and to a small extent in youth programs. An area agent is designated in each county as County Extension Agent, and in addition to his normal area agent responsibilities, he is responsible for county budgeting, the advisory council, office management, etc., of the county office.

Indiana is presently going through the process of re-evaluating their present staffing arrangement. Administrators suggested that
some minor adjustments need to be made. Maybe now that the multi-county approach has been instilled in the minds of the workers, job titles need to more nearly reflect the activities of the worker. Possibly more emphasis needs to be placed on a coordinated county program with more responsibilities being given to the county extension agent. A likelihood exists that the subject-matter specialties of area agents were too specialized in the initial job descriptions. These and other issues are being addressed in an attempt to make an area concept most effective for the needs of Indiana.

**TABLE 4**

**DISTRIBUTION OF INDIANA COOPERATIVE EXTENSION SERVICE STAFF, BY JOB GROUP**

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Agent Staff&lt;sup&gt;a&lt;/sup&gt;</td>
<td>314</td>
<td>63</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>160</td>
<td>32</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>499</td>
<td>100</td>
</tr>
</tbody>
</table>

<sup>a</sup>Indiana uses the title of area agent for county staff with area responsibilities.

**New Jersey**

The New Jersey Cooperative Extension Service employs 190 professionals to carry out an educational program in its twenty one counties. The state utilizes state specialists and county agents.
The county staff in agriculture, and to a limited extent in 4-H, exchange some subject-matter competencies among counties. Both agriculture and 4-H program areas have formalized this arrangement, whereas some trading of expertise across county lines is occurring in home economics with more informal arrangements.

The Director is the chief administrative head of the Cooperative Extension Service in New Jersey. The line of command to county personnel goes from the Director through the Associate Director to Program Leaders, to Senior County Agents and then on to other county staff. The Associate Director also happens to be the Chairman of the Department of Agricultural and Resource Management Agents. There are three other department chairmen within Extension; they are in home economics, 4-H youth development, and agricultural and resource management specialists. These four chairmen are program leaders for their respective program area in development and execution, and as well, carry responsibilities for personnel management and public relations. New Jersey is a small enough state that regional divisions and supervisors are not necessary. This fact seems to allow for one less level in the hierarchical arrangement. If this is, in fact, true one would expect more effective lines of communication and coordination.

State specialist staff members are responsible to their respective program leaders for programming and administration. Those in agriculture who are offioked with academic departments of the university are subject to academic department chairmen for subject-matter
accuracy only. All other matters are handled by their respective Extension department chairman.

Counties have County Extension Agents and Senior County Agents. The Senior County Agent is a representative of the Director and has responsibilities with respect to budgeting and office management, in addition to directing and supervising personnel and programs in his county.

The program areas of agriculture, home economics and 4-H youth have program leaders with specialist and county staff. Resource management, on the other hand, has been combined with agriculture such that the program leader has responsibility for both. Certain county staff are spending part of their time in resource management with support from a small number of specialists.

Administrators feel that area staffing, in the form of trading specialties among counties, is presently being used effectively in the agriculture and resource management program area. County personnel with multi-county responsibilities continue to be called county agents. An area program is on paper in 4-H youth development, but is being utilized to a very limited extent. Home economics has experimented with multi-county work in an informal way and it is anticipated that it will continue to be used in that manner.

The State of New Jersey is a very small state with twenty one counties. Thus, transportation distances do not create the problems that are seen in the large states. New Jersey also has large, high density population areas. This creates considerably different problems from the rural midwest, south and west. For example, the
emphasis in resource management in New Jersey is not in helping rural communities to attract industry, but rather in striving to prevent further industrialization and population growth.

TABLE 5

DISTRIBUTION OF NEW JERSEY COOPERATIVE EXTENSION SERVICE STAFF, BY JOB GROUP

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff&lt;sup&gt;a&lt;/sup&gt;</td>
<td>118</td>
<td>62</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>63</td>
<td>33</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>190</td>
<td>100</td>
</tr>
</tbody>
</table>

<sup>a</sup>Some county personnel have area responsibilities in addition to their county positions.

New Mexico

The New Mexico Cooperative Extension Service employs 146 professionals to carry out an educational program in its thirty two counties. The county is the basic unit in the delivery of services with staff at both the county and state level. The Dean of the College of Agriculture and Home Economics serves as the Director of Extension. The Dean, in turn, delegates the day-to-day operation of the organization to an Associate Director. Administratively, the line of command for county staff goes from the Director to the Associate Director, to
four District Supervisors, to the County Administrative Heads and on to county staff.

In programming there exists an Assistant Director who has responsibility for overall program development and implementation. There are four state program leaders who are responsible to the Assistant Director for the development and implementation of programs in their respective program areas (agriculture, youth development, home economics and community resource development), as well as being administratively responsible for all State Specialists in their program area. The state programming people are in staff positions with respect to the county staff. The state specialists in agriculture and home economics are housed in their academic departments but are administratively responsible to their program leader. State specialists in youth development are all housed in the same office with their state leader, however, responsibilities have been divided geographically (into four regions) and by programs. The three community resource development specialists are located out in the state and operate pretty much on an area basis with geographic and subject-matter responsibility.

Each county has an administrative head who, along with administrative responsibilities, assumes leadership for planning, coordinating and implementing a total county program. Counties generally have programs in all four programming areas (agriculture, home economics, youth development and community resource development) with one or more staff assigned to a county.
The state is divided into two supervisory districts (north and south) with a man and a woman supervisor in each district. District supervisors carry both administrative and program responsibilities. The men supervisors have responsibilities for agriculture and community resource development program areas and the women handle home economics and youth development.

New Mexico has some special types of contractual arrangements with the Bureau of Indian Affairs (BIA) in order to provide special services to the Indian population of the state. In these situations the agents are generally housed in the offices of the BIA.

New Mexico, due to its unique geography, has unparalleled circumstances and problems. Some counties are more than 100 miles long and the University of New Mexico, where the state specialists are located, is more than 400 miles from the northern-most counties of the state. So long distances affect transportation costs, time spent in traveling, effective use of state specialists, etc. Also, most of the state is sparsely populated.

The state has experimented with an area approach on a limited basis in the past and is presently utilizing the area concept in community resource development, however, present plans do not include a move to area staffing. As one administrator put it, "Our counties are so large that our county staff are already covering more area than the area people are in the Midwest."
TABLE 6

DISTRIBUTION OF NEW MEXICO COOPERATIVE EXTENSION SERVICE STAFF, BY JOB GROUP

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff</td>
<td>100</td>
<td>68</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>146</td>
<td>100</td>
</tr>
</tbody>
</table>

Tennessee

The Tennessee Cooperative Extension Service employs 478 professionals to carry on an educational program in its ninety five counties. The county is the basic unit in the delivery of its services. For the purposes of this study the state will be considered to be utilizing a county staffing pattern. County staff are supported by state specialists located at the University of Tennessee. The top administrative officer is the Dean of the Agricultural Extension Service. The Dean, in turn, has three Assistant Deans.

The line of administrative command to county staff goes from the Dean through District Supervisors, to County Extension Leaders and on to other county staff. The state is divided into five supervisory districts with a supervisor located in each. In addition to a supervisor, there are two Associate District Supervisors (one for agriculture and one for home economics) located in each district and charged with responsibilities of program development.
Extension state specialists are generally located in groups of subject-matter specialties with some informal ties to academic departments, but are responsible to their own Extension Section Leaders; who in turn, report directly to an Assistant Dean (one for agriculture and one for home economics). State specialists are not responsible to department chairmen in the College of Agriculture or Home Economics as is the case in some states. Some state specialists are located at Jackson and Nashville in addition to those at Knoxville where the land grant university is located. This is one form of assigning specialists on a regional basis.

Eighty per cent of the Tennessee Cooperative Extension Service staff works at the county level. Each county has an administrative head who carries the title of Extension Leader. He assumes responsibility for administrative matters for personnel within his county and for the coordination of a county program. In addition to the Extension Leader there are three other titles being used at the county level. They are Extension Agent, Associate Extension Agent and Assistant Extension Agent. Personnel are promoted to these differing levels on the basis of performance criteria, experience and training.

State specialists are seen as serving a training function for county staff rather than a direct teaching function with clientele. It is thought that if the specialist can put the subject matter in the proper perspective then the county staff can handle it effectively. Tennessee is a state with a very diversified agriculture, therefore, it is felt that the emphasis needs to be placed on increasing the
county staff rather than expanding the number of specialists at the state or area level at the present time.

Agriculture is clearly the dominant program area within the state. This is reflected in the name of the organization itself (Agricultural Extension Service) and the large number of state and county staff with primary responsibility in the field of agriculture.

**TABLE 7**

**DISTRIBUTION OF THE TENNESSEE COOPERATIVE EXTENSION SERVICE STAFF, BY JOB GROUP**

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff</td>
<td>381</td>
<td>80</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>76</td>
<td>16</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>478</td>
<td>100</td>
</tr>
</tbody>
</table>

**Selected Characteristics of Respondents**

**Percentage Responding**

Of the 2,345 employees of the Cooperative Extension Service of the seven states included in this study, 753 were sampled by mailed questionnaire. Of these 753, 675 responded, for a return rate of 90 per cent. Table 8 shows the number and percentage of respondents by state. It can be noted from this table that all states had a response rate of at least 85 per cent of those sampled; with one state returning as high as 97 per cent.
TABLE 8
PERCENTAGE OF SAMPLE RESPONDING, BY STATE

<table>
<thead>
<tr>
<th>State</th>
<th>Sample Size</th>
<th>Number of Respondents</th>
<th>Percentage Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>138</td>
<td>117</td>
<td>85</td>
</tr>
<tr>
<td>Idaho</td>
<td>95</td>
<td>84</td>
<td>88</td>
</tr>
<tr>
<td>Ohio</td>
<td>137</td>
<td>126</td>
<td>92</td>
</tr>
<tr>
<td>New Mexico</td>
<td>70</td>
<td>63</td>
<td>90</td>
</tr>
<tr>
<td>New Jersey</td>
<td>69</td>
<td>62</td>
<td>90</td>
</tr>
<tr>
<td>Tennessee</td>
<td>127</td>
<td>123</td>
<td>97</td>
</tr>
<tr>
<td>Indiana</td>
<td>117</td>
<td>100</td>
<td>85</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>753</strong></td>
<td><strong>675</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

State and Pattern

The sample of professionals within the Cooperative Extension Service was drawn from seven states. The seven states were: Minnesota, Idaho, Ohio, New Mexico, New Jersey, Tennessee, and Indiana. Table 9 shows the number of respondents from each state. These seven states comprise the following three types of staffing patterns: those with area and county staff, those with county staff with area responsibilities, and those with only county staff. The number and percentage of total of respondents from each pattern are represented in Table 10. There are three states represented in the "area and county" staffing pattern, whereas there are two states in each of the other two patterns.
### TABLE 9
DISTRIBUTION OF RESPONDENTS, BY STATE

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>117</td>
<td>17.3</td>
</tr>
<tr>
<td>Idaho</td>
<td>84</td>
<td>12.4</td>
</tr>
<tr>
<td>Ohio</td>
<td>126</td>
<td>18.7</td>
</tr>
<tr>
<td>New Mexico</td>
<td>63</td>
<td>9.3</td>
</tr>
<tr>
<td>New Jersey</td>
<td>62</td>
<td>9.2</td>
</tr>
<tr>
<td>Tennessee</td>
<td>123</td>
<td>18.2</td>
</tr>
<tr>
<td>Indiana</td>
<td>100</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>675</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>

### TABLE 10
DISTRIBUTION OF RESPONDENTS, BY PATTERN

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area and County Staff</td>
<td>327</td>
<td>48.4</td>
</tr>
<tr>
<td>County Staff with Area Responsibilities</td>
<td>162</td>
<td>24.0</td>
</tr>
<tr>
<td>County Staff</td>
<td>186</td>
<td>27.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>675</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Job Groupings

The job groupings used in this study were county staff, area staff, state specialist staff, and administrative and supervisory staff. The number of respondents in each group are shown in Table 11. The county Extension staff group was the largest, embodying 36 percent of the respondents. The smallest group was that of administrators and supervisors. The distribution of respondents is not representative of the job groups of the population because a larger proportion of small groups were sampled to insure an adequate number of respondents from each group.

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Staff</td>
<td>245</td>
<td>36.3</td>
</tr>
<tr>
<td>Area Staff</td>
<td>129</td>
<td>19.1</td>
</tr>
<tr>
<td>State Specialist Staff</td>
<td>190</td>
<td>28.1</td>
</tr>
<tr>
<td>Administrative and Supervisory Staff</td>
<td>111</td>
<td>16.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>675</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>

Program Area

Within Extension, program responsibilities are often divided into the four categories of agriculture, home economics, youth (4-H) and community resource development. In this study a fifth class of
Administrators and Supervisors is added. In Table 12, agriculture is shown to contain the largest number of respondents, while community resource development contains the smallest. Two respondents did not fit into one of the five categories.

**TABLE 12**

**DISTRIBUTION OF RESPONDENTS, BY PROGRAM AREA**

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>287</td>
<td>42.5</td>
</tr>
<tr>
<td>Home Economics</td>
<td>115</td>
<td>17.0</td>
</tr>
<tr>
<td>Youth (4-H)</td>
<td>121</td>
<td>17.9</td>
</tr>
<tr>
<td>Community Resource Development</td>
<td>55</td>
<td>8.1</td>
</tr>
<tr>
<td>Administration and Supervision</td>
<td>95</td>
<td>14.0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>675</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Tenure**

Tenure is defined as the number of years of Extension experience. Table 13 shows the distribution of respondents according to tenure by five year intervals. The mean years of experience of the respondents was found to be 13.4. More than 23 per cent of the respondents had worked for the Extension Service less than five years.
TABLE 13

DISTRIBUTION OF RESPONDENTS, BY TENURE

<table>
<thead>
<tr>
<th>Tenure (in years)</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>157</td>
<td>23.3</td>
</tr>
<tr>
<td>5 - 9</td>
<td>117</td>
<td>17.3</td>
</tr>
<tr>
<td>10 - 14</td>
<td>97</td>
<td>14.4</td>
</tr>
<tr>
<td>15 - 19</td>
<td>106</td>
<td>15.7</td>
</tr>
<tr>
<td>20 - 24</td>
<td>93</td>
<td>13.8</td>
</tr>
<tr>
<td>25 - 29</td>
<td>78</td>
<td>11.6</td>
</tr>
<tr>
<td>30 - 34</td>
<td>19</td>
<td>2.8</td>
</tr>
<tr>
<td>35 +</td>
<td>7</td>
<td>1.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Age

The distribution of the respondents according to age groups is displayed in Table 14 with a range of from 22 to 69 years. The mean age proved to be 43.2 years, however, the 50 to 59 years old category was found to contain the largest number of respondents.
TABLE 14
DISTRIBUTION OF RESPONDENTS, BY AGE

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>94</td>
<td>14.9</td>
</tr>
<tr>
<td>30 - 39</td>
<td>160</td>
<td>23.7</td>
</tr>
<tr>
<td>40 - 49</td>
<td>182</td>
<td>27.0</td>
</tr>
<tr>
<td>50 - 59</td>
<td>204</td>
<td>30.2</td>
</tr>
<tr>
<td>60 +</td>
<td>30</td>
<td>4.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>100.2</td>
</tr>
</tbody>
</table>

Level of Formal Education

The level of formal education is reported in Table 15 as the highest academic degree completed by the respondents. The categories do not consider work toward a degree that is yet to be received or other forms of non-degree studies. The data in Table 15 show that 37 per cent of the respondents have completed only a Bachelor's degree, whereas 63 per cent report that they have completed an advanced degree beyond the Bachelor's level, with the Master's level being the modal group.

TABLE 15
DISTRIBUTION OF RESPONDENTS, BY HIGHEST ACADEMIC DEGREE COMPLETED

<table>
<thead>
<tr>
<th>Highest Degree</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>250</td>
<td>37.0</td>
</tr>
<tr>
<td>Master's</td>
<td>302</td>
<td>44.7</td>
</tr>
<tr>
<td>Doctor's</td>
<td>122</td>
<td>18.1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Sex

The distribution of respondents according to sex as found in Table 16 shows the respondents to be predominantly male, 73 per cent, with about one out of every four workers being female.

**TABLE 16**

**DISTRIBUTION OF RESPONDENTS, BY SEX**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>491</td>
<td>72.7</td>
</tr>
<tr>
<td>Female</td>
<td>184</td>
<td>27.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Organizational Complexity

The possible range of scores on the organizational complexity scale was from a low of 15 to a high of 74 with a midpoint of 45. The mean score for the total sample was 32.54. It therefore must be concluded that Extension employees, in general, view their organization as being of a low level of complexity. The overall mean score fell well below the midpoint of the scale.

Organizational Effectiveness

The thirty-five purpose statements of organizational effectiveness allow for a range of scores from one to five, with a midpoint of three for each statement. In this scale the mean score was calculated
by item rather than for the entire scale because of missing data that would have been reflected as lower total scores. The mean for the entire sample population was 3.28, or just slightly above the midpoint of the scale.

Job Satisfaction

The range of scores on the fourteen item job satisfaction scale was from 14 to 70, with a midpoint score of 42. The sample mean was 60.55. It therefore can be concluded that, generally speaking, Extension workers are highly satisfied with their jobs.
CHAPTER V
THE FINDINGS

This chapter is devoted to a discussion of the findings with respect to the hypotheses. The discussion will focus on the statistical tests used, the results of the tests and an interpretation of the findings.

Analysis by Staffing Pattern

Hypothesis 1

The Null Hypothesis: There is no difference among the three organizational staffing patterns and their association with organizational effectiveness.

The Findings: The hypothesis of no difference in effectiveness among the three staffing patterns was tested by using one-way analysis of variance (ANOVA). Because of the presence of non-responses in the data, any individual not responding to at least 75 per cent of the items (at least twenty seven items) was excluded from the analysis. Thirty respondents were, as a result, deleted from the analysis of effectiveness. The results of the analysis of variance indicated no significant difference in the effectiveness among the three staffing patterns. The null hypothesis must be accepted.
While the difference between groups was not significant, both area patterns had a higher effectiveness mean score than did the county pattern as can be seen in Table 17. Table 18 presents the results of the ANOVA.

**TABLE 17**

**SUMMARY STATISTICS FOR ANOVA: STAFFING PATTERN COMPARED WITH ORGANIZATIONAL EFFECTIVENESS**

<table>
<thead>
<tr>
<th>Staffing Pattern</th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area and County Staff</td>
<td>313</td>
<td>3.2916</td>
</tr>
<tr>
<td>County Staff with Area Responsibilities</td>
<td>149</td>
<td>3.2862</td>
</tr>
<tr>
<td>County Staff</td>
<td>183</td>
<td>3.2425</td>
</tr>
<tr>
<td></td>
<td>645</td>
<td>3.2764</td>
</tr>
</tbody>
</table>

**TABLE 18**

**ANOVA: STAFFING PATTERN COMPARED WITH ORGANIZATIONAL EFFECTIVENESS**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.2968</td>
<td>2</td>
<td>0.1484</td>
<td>0.7380*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>129.0816</td>
<td>642</td>
<td>0.2011</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>129.3784</td>
<td>644</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the .05 level.
Therefore, in measuring organizational effectiveness in terms of the organizational members' perception of goal attainment, there proved to be no significant differences among the three patterns of staffing being studied. From these results one could conclude that any one of the three staffing arrangements can be used effectively. This thinking was supported by the feeling of administrators in a couple of states that almost any pattern of staffing can be successful if the staff really want to make it work.

There are other possible reasons for not finding any significant differences in the effectiveness scores. The instrument could be questioned as to its validity in the measurement of the concept—effectiveness.

It could also be questioned as to whether the purpose statements, because they are common to all states, are designed to measure the similarities, rather than the differences among states. From comments of respondents it has been suggested that the effectiveness score is closely tied to the amount of activity that is associated with a particular objective. Therefore, since all seven states have accepted the charge of the thirty five purposes and have allocated time and energy to them, it would be expected that their effectiveness scores, when measured in terms of these purposes, would be similar.

It must be remembered that the present responses are the perceptions of the professional staff of the organization, not the clientele, the general population surrounding the organization or an impartial panel of judges. One could argue that organizational members
have a vested interest in seeing that the organization appears effective, or more subtly, that the employee is just more likely to conclude that the organization is doing a good job whether or not this is supported by more impartial judges. Such a bias could conceal important differences.

Hypothesis 2

The Null Hypothesis: There is no difference among the three staffing patterns and their association with organizational complexity.

The Findings: The hypothesis was submitted to testing by ANOVA. The results of the ANOVA indicated that the difference was significant at the .05 level. The null hypothesis is thus rejected. The results of the test are presented in Table 19 and 20.

<table>
<thead>
<tr>
<th>Staffing Pattern</th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area and County Staff</td>
<td>327</td>
<td>32.2202</td>
</tr>
<tr>
<td>County Staff with Area Responsibilities</td>
<td>162</td>
<td>31.7099</td>
</tr>
<tr>
<td>County Staff</td>
<td>186</td>
<td>33.8064</td>
</tr>
<tr>
<td></td>
<td>675</td>
<td>32.5348</td>
</tr>
</tbody>
</table>
TABLE 20

ANOVA: STAFFING PATTERN COMPARED WITH ORGANIZATIONAL COMPLEXITY

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>433.3886</td>
<td>2</td>
<td>221.6943</td>
<td>4.2579*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>34988.5432</td>
<td>672</td>
<td>52.0663</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>35431.9319</td>
<td>674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .05 level.

Even though there are significant differences with respect to complexity they are not in the direction suggested in the previous discussion. The mean scores in Table 19 indicate that state organizations with area staffing patterns are perceived as being less complex than are those with a county pattern.

In a Schaffe' post hoc paired comparison the significant differences appeared between each of the two area patterns and the county pattern, but not between the two area patterns themselves.

With an alteration in the concept of complexity in the analysis of the scale, the dimensions that remain now more strongly reflect a vertical power distribution within the organization. This is a somewhat different interpretation than was given in the discussion of the variable complexity in Chapter II. An interpretation of complexity as a distribution of authority within the organizational hierarchy suggests the importance of the concept of decentralization in its effect
on a staff member's perception of his role within the organizational structure. It may be that even though area staffing often is associated with more hierarchical levels, more specialization and division of labor, it is a form of decentralization of authority. With area staff located in close proximity to county staff and in close communication with state staff, they may be providing a link in the organization that reduces the feeling of isolation at the county level. County staff may now consider that they have the necessary expertise at their disposal and that they no longer have to "go it alone." The area pattern where county staff also have area responsibilities showed the lowest mean complexity score. This could be the result of the fact that both the county and area roles are embodied in a single individual, thus reducing problems of communication and coordination among counties. This has the same net effect of reducing the feeling of isolation at the lower levels of the organization.

Hypothesis 3

The Null Hypothesis: There is no difference among the three staffing patterns and their association with the level of employee job satisfaction.

The Findings: The hypothesis was tested by ANOVA. The results of the ANOVA indicate that the difference between groups was significant at the .05 level. The null hypothesis of no difference was rejected. The complete results are reported in Tables 21 and 22.
### TABLE 21
SUMMARY STATISTICS FOR ANOVA: STAFFING PATTERN COMPARED WITH JOB SATISFACTION

<table>
<thead>
<tr>
<th>Staffing Pattern</th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area and County Staff</td>
<td>327</td>
<td>60.4893</td>
</tr>
<tr>
<td>County Staff with Area Responsibilities</td>
<td>162</td>
<td>61.6543</td>
</tr>
<tr>
<td>County Staff</td>
<td>186</td>
<td>59.6935</td>
</tr>
<tr>
<td></td>
<td>675</td>
<td>60.5496</td>
</tr>
</tbody>
</table>

### TABLE 22
ANOVA: STAFFING PATTERN COMPARED WITH JOB SATISFACTION

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>335.2006</td>
<td>2</td>
<td>167.6003</td>
<td>4.2546*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>26471.8868</td>
<td>672</td>
<td>39.3927</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>26807.0874</td>
<td>674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .05 level.

The mean scores indicate that employees in the pattern in which county staff have area responsibilities is associated with the most highly satisfied workers, the pattern with both county and area staff is slightly lower and the county staffing pattern demonstrated the lowest level of job satisfaction. A post hoc Scheffe' test showed
that the significant difference occurred between the pattern in which county staff have area responsibilities and the county pattern.

Higher levels of satisfaction are anticipated in area staffing arrangements because of the increased level of specialization among area agents and the added assistance provided county personnel with the presence of an area staff. As was reported in the "Area Agent Study," area agents have greater satisfaction due to increased specialization and increased confidence placed in them by clientele groups (1965).

By comparing the directions of the mean scores for organizational complexity and job satisfaction in Tables 19 and 21 an inverse relationship is shown. They will be correlated to show the direction and strength of the relationship later in this chapter.

Hypothesis 4

The Null Hypothesis: There is no difference among staffing patterns and their association with the degree of role conflict in the organization.

The Findings: Role conflict was indicated by lack of agreement as to the level of priority assigned to tasks in the roles of county agent, state specialist and area agent (if there was such a position). It has been suggested that role conflict exists in the form of differing expectations held by the different job groups for these roles. Role conflict would be more likely to be associated with area staffing arrangements.
Two methods were used in the investigation of role conflict: ANOVA by respondent job groups in each state and Kendall's Coefficient of Concordance (W) comparing the priority ranking associated with each task statement by each job group.

The mean scores as to the task priorities assigned by each of the job groups to the positions being investigated were submitted to ANOVA. A summary of the findings are presented in Table 23. It can be noted that in the case of only one position in one of the states was significant difference in role perception found among the respondent job groups (the county agent position in Minnesota). It must be concluded that, except for this one isolated instance, no significant level of role conflict was present in any of the states.

The analysis was carried out at the state rather than at the pattern level because role definitions take place within a state organization. As would be expected, and can be seen in Table 23, the mean scores for the same roles differ among states.

So as to determine whether the mean scores were actually masking relative differences in specific task priorities the data were then analyzed using Kendall's Coefficient of Concordance. The Kendall W indicates the degree of agreement, or lack of agreement, among more than two rankings. The rankings in this case are by the members of the job groups and the roles being considered are those of the state specialist, area agent and county agent. The mean scores indicated by the job groups for each task statement for each role and state were ranked and the rank order correlation computed. The W
<table>
<thead>
<tr>
<th></th>
<th>Mean Score by Job Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>County Agent</td>
<td>Area Agent</td>
</tr>
<tr>
<td><strong>Minnesota</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.5257</td>
<td>3.6349</td>
</tr>
<tr>
<td>Area Agent</td>
<td>3.4912</td>
<td>3.7661</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.8083</td>
<td>3.7806</td>
</tr>
<tr>
<td><strong>Idaho</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.4570</td>
<td>3.5772</td>
</tr>
<tr>
<td>Area Agent</td>
<td>3.6717</td>
<td>3.8275</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.7706</td>
<td>3.9733</td>
</tr>
<tr>
<td><strong>Ohio</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.3507</td>
<td>3.3356</td>
</tr>
<tr>
<td>Area Agent</td>
<td>3.5973</td>
<td>3.7993</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.7558</td>
<td>3.6214</td>
</tr>
<tr>
<td><strong>New Mexico</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.3536</td>
<td>---</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.4672</td>
<td>---</td>
</tr>
<tr>
<td><strong>New Jersey</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.5114</td>
<td>---</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.9154</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>County Agent</td>
<td>Area Agent</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Tennessee</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.6120</td>
<td>--b</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.5838</td>
<td>--b</td>
</tr>
<tr>
<td><strong>Indiana</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.2382</td>
<td>--b</td>
</tr>
<tr>
<td>County Agent</td>
<td>3.6888</td>
<td>--b</td>
</tr>
</tbody>
</table>

*a* Significant at the .01 level.

*b* No such position.

*c* Some with area responsibilities.

*d* Even though the title of area agent is used in Indiana for personnel with both county and area responsibilities, for the purposes of this study it was concluded that their primary function was that of a county agent.
figures are presented in Table 24 by role and state. The range is from a low of .734 with respect to the area agent position in Ohio to a high of .970 with the county position in New Jersey. However, these differences in the coefficients are of very minor importance because all of the coefficients indicate significant agreement at the .0001 level.

<table>
<thead>
<tr>
<th>State</th>
<th>State Specialist</th>
<th>Area Agent</th>
<th>County Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>.946</td>
<td>.739</td>
<td>.953</td>
</tr>
<tr>
<td>Idaho</td>
<td>.954</td>
<td>.770</td>
<td>.924</td>
</tr>
<tr>
<td>Ohio</td>
<td>.960</td>
<td>.734</td>
<td>.946</td>
</tr>
<tr>
<td>New Mexico</td>
<td>.926</td>
<td>-- b</td>
<td>.938</td>
</tr>
<tr>
<td>New Jersey</td>
<td>.970</td>
<td>-- b</td>
<td>.959c</td>
</tr>
<tr>
<td>Tennessee</td>
<td>.953</td>
<td>-- b</td>
<td>.944</td>
</tr>
<tr>
<td>Indiana</td>
<td>.967</td>
<td>-- b</td>
<td>.915c</td>
</tr>
</tbody>
</table>

\(^a\)All significant at the .001 level.

\(^b\)No area agent position.

\(^c\)Some with area responsibilities.

\(^d\)Even though the title of area agent is used in Indiana for personnel with both county and area responsibilities, for the purposes of this study it was concluded that their primary function was that of a county agent.
The only observable differences in the W coefficients are with respect to the area agent position in those states with both area and county staff. The Kendall W's for area agent positions are consistently lower than for the positions of county agent and state specialist. This indicates that there is somewhat less agreement as to the task priorities of this role.

With no significant level of role conflict identified in any of the three staffing patterns, it is impossible to test the hypothesis. Likewise it becomes impossible to relate role conflict and the variables organizational effectiveness, size, complexity and job satisfaction, as was previously planned.

There could be many possible explanations of why no role conflict was found in any of the patterns. First, it is possible that no significant level of role conflict really existed. This conclusion would contradict the findings of Pilgram (1971) and Kunzru (1971) with respect to the area agent position. The Pilgram study and the present study were both conducted in Minnesota utilizing similar task statements, but reached different conclusions. The major difference in design was that Pilgram was soliciting responses about only the area agent role, whereas in this study the respondents were asked to respond to three roles at the same time. It may be that by asking for an indication of task priority for all three positions at once the response on one role affects the responses on the other two. The design of the questionnaire encouraged comparison between roles on any one item. This procedure has the advantage of providing a contextual framework
for the respondent, but it does seem to restrict the variability of the responses.

One also could fault the instrument for containing task statements that are too general and that are too readily identified with one of the roles. This could be a possible explanation for it not reflecting differences in role perception. Also, a bias was possibly introduced in the structuring of the statement where the state, area and county levels of consideration were designated in the statement.

**The Intercorrelations**

**The Null Hypothesis:** Organizational size is not related to organizational effectiveness.

**The Findings:** The relationship between size and effectiveness was tested in two ways. First, the sizes of the seven state Extension staffs were dichotomized into large and small and the difference was tested by ANOVA. In those states selected for the study there was a logical division according to size. Those in the small category ranged from 141 to 157 full time equivalent (FTE) professionals and those in the category termed large ranged from 395 to 490 FTE's. The results of the ANOVA indicated no significant difference between the two groups. However, the result was very close to being significant at the .05 level (.07). When comparing mean scores, the large organizations proved to be more effective. Summary results are presented in Tables 25 and 26.
### TABLE 25

**SUMMARY STATISTICS FOR ANOVA: ORGANIZATIONAL EFFECTIVENESS COMPARED WITH ORGANIZATIONAL SIZE**

<table>
<thead>
<tr>
<th>Size</th>
<th>Number</th>
<th>Effectiveness Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>195</td>
<td>3.2290</td>
</tr>
<tr>
<td>Large</td>
<td>450</td>
<td>3.2969</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>645</strong></td>
<td><strong>3.2764</strong></td>
</tr>
</tbody>
</table>

### TABLE 26

**ANOVA: ORGANIZATIONAL EFFECTIVENESS COMPARED WITH ORGANIZATIONAL SIZE**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.6271</td>
<td>1</td>
<td>0.6271</td>
<td>3.1320*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>128.7512</td>
<td>643</td>
<td>0.2002</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>129.3783</strong></td>
<td><strong>644</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the .05 level.

Organizational size and effectiveness were also correlated by means of the Pearson Product Moment Correlation. A correlation coefficient of .0779 was obtained, which is significant at the .05 level. This coefficient indicates that there is a positive relationship between organizational size and effectiveness. It was suggested in
earlier discussion that size and effectiveness are inversely related in a professional service-type organization.

Two possible explanations can be given for this positive relationship. First, with an increase in size follows a potential for increased specialization and division of labor, which Price relates positively with an increase in effectiveness (1968: 16-24). Secondly, because the effectiveness score on any particular item seems to be related to the amount of activity devoted to that purpose, an increase in the effectiveness score may be only a reflection of increased activity within a larger organization.

The correlation coefficient and significance level are presented in Table 27.

Hypothesis 6

The Null Hypothesis: Organizational complexity is not related to organizational size.

The Findings: The relationship between size and complexity was tested by ANOVA and they were shown to be positively correlated. Large and small organizations were compared on the basis of perceived complexity. The results of the ANOVA indicated a significant difference at the .01 level. The null hypothesis must be rejected. Tables 28 and 29 summarize these findings.
<table>
<thead>
<tr>
<th></th>
<th>Effectiveness</th>
<th>Job Satisfaction</th>
<th>Complexity</th>
<th>Size</th>
<th>Tenure</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>675</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.251605</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>675</td>
<td>675</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity</td>
<td>-0.187050</td>
<td>-0.428966</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
<td>0.0000</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>675</td>
<td>675</td>
<td>675</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.077938</td>
<td>-0.042339</td>
<td>0.125546</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0403</td>
<td>0.2713</td>
<td>0.0015</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>675</td>
<td>675</td>
<td>675</td>
<td>675</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>0.049551</td>
<td>0.053723</td>
<td>-0.099860</td>
<td>0.047627</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.1958</td>
<td>0.1598</td>
<td>0.0093</td>
<td>0.2143</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>674</td>
<td>674</td>
<td>674</td>
<td>674</td>
<td>674</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.029354</td>
<td>0.101337</td>
<td>-0.111636</td>
<td>-0.043424</td>
<td>0.759072</td>
<td>1.000000</td>
</tr>
<tr>
<td></td>
<td>0.5434</td>
<td>0.0086</td>
<td>0.0041</td>
<td>0.2606</td>
<td>0.0001</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>670</td>
<td>670</td>
<td>670</td>
<td>670</td>
<td>669</td>
<td>670</td>
</tr>
</tbody>
</table>

^aThe first number in each cell is the correlation coefficient, the second is the significance level and the third is the number of observations.
TABLE 28
SUMMARY STATISTICS FOR ANOVA: ORGANIZATIONAL COMPLEXITY COMPARED WITH ORGANIZATIONAL SIZE

<table>
<thead>
<tr>
<th>Size</th>
<th>Number</th>
<th>Complexity Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>209</td>
<td>31.4163</td>
</tr>
<tr>
<td>Large</td>
<td>466</td>
<td>33.0365</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>32.5348</td>
</tr>
</tbody>
</table>

TABLE 29
ANOVA: ORGANIZATIONAL COMPLEXITY COMPARED WITH ORGANIZATIONAL SIZE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>378.7673</td>
<td>1</td>
<td>378.7673</td>
<td>7.2721*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>35053.1645</td>
<td>673</td>
<td>52.0849</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>35431.9319</td>
<td>674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .01 level.

Organizational complexity and size were also positively correlated. They showed a Pearson Product Moment Correlation of .1255 which is significant at the .0015 level as can be seen in Table 27.

It was anticipated that size and complexity would be positively related. Even though there is disagreement in the literature as to
how they are related, the results of this study show a positive relationship, though the $r$ is quite small.

**Hypothesis 7**

The **Null Hypothesis**: There is no relationship between employee job satisfaction and organizational size.

The **Findings**: The null hypothesis was tested by ANOVA and by correlation. The results of the ANOVA show that there is no significant difference between small and large size organizations with respect to the level of job satisfaction. The results are demonstrated in Tables 30 and 31.

**TABLE 30**

**SUMMARY STATISTICS FOR ANOVA: JOB SATISFACTION COMPARED WITH ORGANIZATIONAL SIZE**

<table>
<thead>
<tr>
<th>Size</th>
<th>Number</th>
<th>Job Satisfaction Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>209</td>
<td>60.9426</td>
</tr>
<tr>
<td>Large</td>
<td>466</td>
<td>60.3734</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>675</strong></td>
<td><strong>60.5496</strong></td>
</tr>
</tbody>
</table>

**TABLE 31**

**ANOVA: JOB SATISFACTION COMPARED WITH ORGANIZATIONAL SIZE**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>46.7464</td>
<td>1</td>
<td>46.7464</td>
<td>1.1756*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>26760.3410</td>
<td>673</td>
<td>39.7628</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>26807.0874</strong></td>
<td><strong>674</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant at the .05 level.
The correlation coefficient supported the ANOVA finding of no difference, as can be seen in Table 27. The null hypothesis is accepted.

A negative relationship between organizational size and employee job satisfaction was expected. The contention of Price that the needs of employees are more fully met in smaller organizations may not apply to the situation of Extension (1968: 190). Even the largest state Extension organizations would be considered small and personal when compared with a huge industrial plant. Perhaps the size factor has not yet had an effect on employee satisfaction in Extension.

Hypothesis 8

**The Hypothesis:** There is no relationship between organizational effectiveness and organizational complexity.

**The Findings:** The hypothesis between effectiveness and complexity was tested through the calculation of a Pearson Product Moment Correlation. As can be seen in the correlation matrix in Table 27, effectiveness and complexity are inversely related. The correlation coefficient is -.1871 which is significant at the .0001 level.

This finding was predicted based on the vertical differentiation dimension of the measure. When employees feel that they are removed from the sources of power and do not have an impact on the decision-making process, the overall organizational effectiveness is reduced. This effect tends to offset any increase in effectiveness that may be gained by increased specialization and division of labor.
Hypothesis 9

The Hypothesis: There is no relationship between the level of employee job satisfaction and the degree of organizational complexity.

The Findings: The hypothesis was tested by the significance level of the Pearson Product Moment Correlation. Table 27 reports that the correlation coefficient between job satisfaction and organizational complexity was -.4290 and was significant at the .0001 level. Thus the null hypothesis was rejected.

Complexity when viewed as hierarchical differentiation within the authority structure of the organization was negatively associated with employee job satisfaction. The relationship was in the direction hypothesized. Therefore as complexity increases one could expect job satisfaction to decrease.

Hypothesis 10

The Hypothesis: There is no relationship between organizational effectiveness and the level of employee job satisfaction.

The Findings: The hypothesis of no relationship between effectiveness and job satisfaction was tested by means of the Pearson Product Moment Correlation. The two variables proved to have a correlation coefficient of .2516, which is significant at the .0001 level, and is demonstrated in Table 27.

The finding is in the direction hypothesized. It can be concluded that employee satisfaction and morale are positively related to the effectiveness of the organization.
Analysis by State

In addition to analyzing the variables complexity, effectiveness and job satisfaction by pattern, the analysis is repeated here by state. Even though an analysis at the state level was not planned, further insight was gained from the results.

Hypothesis 11

The Null Hypothesis: There is no difference among the seven state Extension organizations and their association with organizational effectiveness.

The Findings: The hypothesis of no difference was tested by ANOVA. Again, any respondent answering less than 75 per cent of the items was excluded from the analysis. The results of the ANOVA indicated a significant difference among the states as to organizational effectiveness. Therefore, the null hypothesis is rejected. As can be seen in Table 33 the difference is significant at the .01 level.

In a post hoc Scheffe' test of paired comparisons the significant differences appeared between Ohio and New Mexico and between Tennessee and New Mexico. The mean scores for these states can be seen in Table 32.

This finding is interesting inasmuch as no differences were found in the analysis of organizational effectiveness by staffing pattern. It must be concluded that the difference in effectiveness is not related to the type of pattern of staffing that they are using.
TABLE 32

SUMMARY STATISTICS FOR ANOVA: ORGANIZATIONAL EFFECTIVENESS, BY STATE

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>57</td>
<td>3.3386</td>
</tr>
<tr>
<td>Indiana</td>
<td>92</td>
<td>3.2537</td>
</tr>
<tr>
<td>Minnesota</td>
<td>114</td>
<td>3.2184</td>
</tr>
<tr>
<td>Idaho</td>
<td>76</td>
<td>3.2302</td>
</tr>
<tr>
<td>Ohio</td>
<td>123</td>
<td>3.3973</td>
</tr>
<tr>
<td>Tennessee</td>
<td>121</td>
<td>3.3017</td>
</tr>
<tr>
<td>New Mexico</td>
<td>62</td>
<td>3.1269</td>
</tr>
<tr>
<td>TOTAL</td>
<td>645</td>
<td>3.2764</td>
</tr>
</tbody>
</table>

TABLE 33

ANOVA: ORGANIZATIONAL EFFECTIVENESS, BY STATE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.0744</td>
<td>6</td>
<td>0.6791</td>
<td>3.4575*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>125.3040</td>
<td>638</td>
<td>0.1964</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>129.3784</td>
<td>644</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .01 level.
Hypothesis 12

The Null Hypothesis: There is no difference among the states and their association with organizational complexity.

The Findings: The hypothesis of no difference was tested by means of ANOVA. The results indicate a very significant difference in complexity by state at the .0001 level. The null hypothesis must be rejected. The results of the test are presented in Tables 34 and 35.

TABLE 34

SUMMARY STATISTICS FOR ANOVA: ORGANIZATIONAL COMPLEXITY, BY STATE

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>62</td>
<td>29.1613</td>
</tr>
<tr>
<td>Indiana</td>
<td>100</td>
<td>33.2900</td>
</tr>
<tr>
<td>Minnesota</td>
<td>117</td>
<td>30.2991</td>
</tr>
<tr>
<td>Idaho</td>
<td>84</td>
<td>31.8333</td>
</tr>
<tr>
<td>Ohio</td>
<td>126</td>
<td>34.2619</td>
</tr>
<tr>
<td>Tennessee</td>
<td>123</td>
<td>34.1789</td>
</tr>
<tr>
<td>New Mexico</td>
<td>63</td>
<td>33.0794</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>32.5348</td>
</tr>
</tbody>
</table>
TABLE 35
ANOVA: ORGANIZATIONAL COMPLEXITY, BY STATE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2115.7328</td>
<td>6</td>
<td>352.6221</td>
<td>7.9702*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>33316.1990</td>
<td>668</td>
<td>49.8745</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>35431.9319</td>
<td>674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .0001 level.

In a Scheffe' post hoc test significant differences between states were observed between Minnesota and Tennessee, Minnesota and Ohio, Ohio and New Jersey, New Jersey and Tennessee, and New Jersey and Indiana. Even though significant differences were found in complexity by pattern of staffing earlier in the discussion, in the present discussion by state the results are less clear. In a paired comparison of states two of the five significant differences were found between states of the same staffing pattern.

Therefore it must be concluded that other variables in addition to staffing pattern are having an effect on the indication of complexity of the organization. As can be seen in the correlation matrix in Table 27 other variables have been shown to be correlated with complexity. As was stated earlier, the size of the organization and the job satisfaction of the respondent are highly correlated with
complexity. Also the age and tenure of the respondent are shown to be inversely related to his indication of organizational complexity.

Hypothesis 13

The Null Hypothesis: There is no difference among the states and their association with the level of employee job satisfaction.

The Findings: The null hypothesis was tested by ANOVA. The results of the ANOVA indicate that a difference among the states with respect to job satisfaction does exist and is significant at the .001 level. The results of the ANOVA are reported in Tables 36 and 37.

TABLE 36

SUMMARY STATISTICS FOR ANOVA: JOB SATISFACTION, BY STATE

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>62</td>
<td>63.9032</td>
</tr>
<tr>
<td>Indiana</td>
<td>100</td>
<td>60.2600</td>
</tr>
<tr>
<td>Minnesota</td>
<td>117</td>
<td>61.4957</td>
</tr>
<tr>
<td>Idaho</td>
<td>84</td>
<td>60.6667</td>
</tr>
<tr>
<td>Ohio</td>
<td>126</td>
<td>59.4365</td>
</tr>
<tr>
<td>Tennessee</td>
<td>123</td>
<td>60.3577</td>
</tr>
<tr>
<td>New Mexico</td>
<td>63</td>
<td>58.3968</td>
</tr>
<tr>
<td>TOTAL</td>
<td>675</td>
<td>60.5496</td>
</tr>
</tbody>
</table>
### TABLE 37

ANOVA: JOB SATISFACTION, BY STATE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Groups</td>
<td>1264.1819</td>
<td>6</td>
<td>210.6970</td>
<td>5.5102*</td>
</tr>
<tr>
<td>Between Groups</td>
<td>25542.9055</td>
<td>668</td>
<td>38.2379</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>26807.0874</td>
<td>674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the .0001 level.

As with organizational complexity significant differences were found with respect to staffing pattern, however, when compared by state the clarity is somewhat clouded. Some of the states that represented the same staffing patterns exhibited both high and low levels of employee job satisfaction. This is evident in Table 36 where the states are grouped according to staffing pattern. In a post hoc paired comparison New Jersey proved to be significantly different from New Mexico, Ohio, Indiana and Tennessee in the level of job satisfaction. So again it must be concluded that variables other than just staffing pattern were influencing the level of job satisfaction. Two such variables identified in this study were complexity of the organization and the age of the respondent (see Table 27). The inverse relationship between complexity and job satisfaction can be seen in Tables 34 and 36.
Analysis by Characteristics of Respondents

In this section, consideration will be given to selected factors capable of influencing the respondent scores on organizational effectiveness, organizational complexity, and job satisfaction. The findings will be condensed into summary tables for each factor: job group, program area, education level, age, tenure, and sex.

Job Group

Tables 38 and 39 report the mean scores of the variables by job group of the respondent and the results of the ANOVA. In each case the hypothesis is that there is no significant difference by job groups. The results indicated that there was no significant difference with respect to organizational effectiveness but there were significant differences in organizational complexity and job satisfaction. Higher complexity scores are reported by respondents at lower levels of the organization. Furthermore, these same respondents indicated a lower level of job satisfaction. Those at the higher levels of the organization, i.e., administrators and supervisors, responded with low levels of complexity and a high level of satisfaction.

Program Area

A relationship of no differences is assumed for purposes of testing by ANOVA. The results according to program area are reported in Tables 40 and 41. No significant differences are found in the perception of organizational effectiveness or job satisfaction with respect to the program area of the respondent, however, both are near to being
### TABLE 38

**MEAN SCORES OF ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY RESPONDENT JOB GROUP**

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Effectiveness</th>
<th>Complexity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Agent</td>
<td>3.3125</td>
<td>33.1551</td>
<td>59.7551</td>
</tr>
<tr>
<td>Area Agent</td>
<td>3.2276</td>
<td>33.7597</td>
<td>59.8837</td>
</tr>
<tr>
<td>State Specialist</td>
<td>3.2887</td>
<td>32.3579</td>
<td>61.2895</td>
</tr>
<tr>
<td>Administration and</td>
<td>3.2360</td>
<td>30.0450</td>
<td>61.8108</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Means</td>
<td>3.2764</td>
<td>32.5348</td>
<td>60.5496</td>
</tr>
</tbody>
</table>

### TABLE 39

**ANOVA: ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY JOB GROUP**

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>1.3557</td>
<td>0.2541</td>
</tr>
<tr>
<td>Complexity</td>
<td>6.3746</td>
<td>0.0005</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>4.1854</td>
<td>0.0063</td>
</tr>
</tbody>
</table>
significant at the .05 level. Those persons who work in agriculture and home economics tend to rate the effectiveness of the organization at a higher level and those in community resource development rate it the lowest.

**TABLE 40**

**MEAN SCORES OF ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY RESPONDENT PROGRAM AREA**

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Effectiveness</th>
<th>Complexity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>3.3199</td>
<td>32.6063</td>
<td>60.6620</td>
</tr>
<tr>
<td>Home Economics</td>
<td>3.3038</td>
<td>33.4435</td>
<td>60.6957</td>
</tr>
<tr>
<td>4-H (Youth)</td>
<td>3.2410</td>
<td>34.0413</td>
<td>59.0248</td>
</tr>
<tr>
<td>Community Resource Development</td>
<td>3.1779</td>
<td>30.2909</td>
<td>61.2182</td>
</tr>
<tr>
<td>Administration and Supervision</td>
<td>3.2336</td>
<td>30.3053</td>
<td>61.5579</td>
</tr>
<tr>
<td>Overall Means</td>
<td>3.2739</td>
<td>32.5348</td>
<td>60.5496</td>
</tr>
</tbody>
</table>
TABLE 41

ANOVA: ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY RESPONDENT PROGRAM AREA

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>2.1799</td>
<td>0.0541</td>
</tr>
<tr>
<td>Complexity</td>
<td>5.9570</td>
<td>0.0001</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>2.0925</td>
<td>0.0638</td>
</tr>
</tbody>
</table>

Workers in 4-H youth programs are most dissatisfied of any, with administrators and supervisors being the most highly satisfied. This could be explained by the fact that the 4-H youth position is seen in some states as a "training ground" before being promoted to one of the other program areas. Employees in the youth program area also tend to be the youngest.

The ANOVA indicates a significant difference in perceived complexity by program area.

Workers in youth and home economics programs view the organization as most complex, whereas those in community resource development and administration and supervision see it as least complex. In interviews state leaders in youth and home economics program areas indicated to the researcher that they did not feel they were getting the same support as does agriculture. This feeling could be reflected in their complexity scores, since it is a reflection of power distribution in the organization. It may be that community resource development
workers see the organization as less complex because most of them are
at a higher level in the organization, with only a few at the county
level, and because the field is newer and thus receiving more attention
at the present time.

The inverse relationship between perceived organizational com-
plexity and job satisfaction is evident in Table 40.

Level of Education

The variables effectiveness, complexity and job satisfaction by
education level were tested by ANOVA. The results are reported in
Tables 42 and 43.

There proved to be no significant difference in organizational
effectiveness scores when compared by education level of the respon-
dents. However, both complexity and job satisfaction were significant.
Level of education was found to be inversely related to the complexity
score of the respondent and directly related to the level of job satis-
faction. Workers with high levels of education did not view the or-
ganization as complex and enjoyed a high level of job satisfaction,
and the reverse was true for those with lower levels of educational
attainment.

Age

The age of the respondent was correlated with perceived organi-
zational effectiveness, organizational complexity and job satisfaction a
as shown in Table 27.
### TABLE 42

**MEAN SCORES OF ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY LEVEL OF EDUCATION OF THE RESPONDENT**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Effectiveness</th>
<th>Complexity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>3.3118</td>
<td>32.9160</td>
<td>60.0960</td>
</tr>
<tr>
<td>Master's</td>
<td>3.2397</td>
<td>32.6789</td>
<td>60.3046</td>
</tr>
<tr>
<td>Doctor's</td>
<td>3.3012</td>
<td>31.2623</td>
<td>62.1066</td>
</tr>
<tr>
<td>Overall Means</td>
<td>3.2764</td>
<td>32.5348</td>
<td>60.5496</td>
</tr>
</tbody>
</table>

### TABLE 43

**ANOVA: ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY LEVEL OF EDUCATION OF THE RESPONDENT**

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>1.6033</td>
<td>0.1858</td>
</tr>
<tr>
<td>Complexity</td>
<td>3.2745</td>
<td>0.0204</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>3.1458</td>
<td>0.0242</td>
</tr>
</tbody>
</table>
The correlation coefficient between age and effectiveness was .0328 which was significant. The correlation between age and complexity was -.1116, which is significant at the .01 level. It is an inverse relationship indicating that younger respondents tended to rate the organization as being more complex than did older ones.

The level of job satisfaction was found to be positively related to the age of the respondent. The correlation coefficient of .1013 was significant at the .01 level. The young tended to be less satisfied, the older more satisfied with their job.

The correlation coefficients are supported by the ANOVA findings. Effectiveness did not prove to be significant but complexity and job satisfaction did at a significant level. The results are reported in Tables 44 and 45.

**TABLE 44**

**MEAN SCORES OF ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY AGE GROUPINGS OF RESPONDENTS**

<table>
<thead>
<tr>
<th>Age Groupings</th>
<th>Effectiveness</th>
<th>Complexity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>3.3060</td>
<td>34.6064</td>
<td>57.7979</td>
</tr>
<tr>
<td>30 - 39</td>
<td>3.2701</td>
<td>33.2250</td>
<td>60.6625</td>
</tr>
<tr>
<td>40 - 49</td>
<td>3.2533</td>
<td>31.3242</td>
<td>60.7582</td>
</tr>
<tr>
<td>50 - 59</td>
<td>3.2771</td>
<td>32.0931</td>
<td>60.8578</td>
</tr>
<tr>
<td>60 +</td>
<td>3.3710</td>
<td>32.5667</td>
<td>62.3667</td>
</tr>
<tr>
<td>Overall Means</td>
<td>3.2769</td>
<td>32.5284</td>
<td>60.5627</td>
</tr>
</tbody>
</table>
TABLE 45

ANOVA: ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY AGE GROUPINGS OF RESPONDENTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>0.5308</td>
<td>0.7164</td>
</tr>
<tr>
<td>Complexity</td>
<td>3.7870</td>
<td>0.0050</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>2.6342</td>
<td>0.0327</td>
</tr>
</tbody>
</table>

Tenure

The years of experience with Extension were correlated with the three variables of effectiveness and complexity of the organization and satisfaction of the employee. As reported in Table 27 the correlation coefficients for effectiveness and job satisfaction were not significant, however, tenure correlated with perception of complexity was significant at the .01 level. The relationship was found to be inverse in nature, thus indicating that those relatively new employees of the organization perceived it as more complex.

These findings were substantiated with the mean scores and ANOVA tests reported in Tables 46 and 47. When the respondents were grouped by years of experience and the complexity scores investigated, there appeared present the inverse relationship as identified in the correlation coefficient, except for the group that has been with Extension for thirty years or more. With this group there was a sharp increase
in perceived complexity to a level even higher than the most inexperienced group. This may be a reflection of a feeling of rejection felt by persons who are nearing retirement in a system that has "passed them by."

<table>
<thead>
<tr>
<th>Tenure Groupings</th>
<th>Effectiveness</th>
<th>Complexity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 9</td>
<td>3.2806</td>
<td>33.5985</td>
<td>60.0365</td>
</tr>
<tr>
<td>10 - 19</td>
<td>3.2491</td>
<td>31.9951</td>
<td>60.9901</td>
</tr>
<tr>
<td>20 - 29</td>
<td>3.3120</td>
<td>31.1696</td>
<td>60.9064</td>
</tr>
<tr>
<td>30 +</td>
<td>3.1997</td>
<td>34.1154</td>
<td>60.1153</td>
</tr>
<tr>
<td>Overall Means</td>
<td>3.2759</td>
<td>32.5193</td>
<td>60.5475</td>
</tr>
</tbody>
</table>

**TABLE 47**

**ANOVA:** ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY TENURE GROUPINGS OF RESPONDENTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>F-Ratio</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>0.8570</td>
<td>0.5343</td>
</tr>
<tr>
<td>Complexity</td>
<td>4.8626</td>
<td>0.0028</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>1.1575</td>
<td>0.3249</td>
</tr>
</tbody>
</table>
Sex

The relationship between perception of organizational effectiveness, complexity and job satisfaction by sex of the respondent is tested by ANOVA. The results are reported in Tables 48 and 49. The results indicated that there were no significant differences in effectiveness or job satisfaction but there was a significant difference in perception of complexity. The F-ratio of 12.3728 was significant at the .001 level. Females viewed the organization as much more complex than did males. This, most likely is the reaction of females in a male dominated organization. Complexity, it must be remembered, is a reflection of power distribution within the hierarchical levels of the organization, the upper echelons of which are made up principally of males in Extension.

In the interviews conducted in each of the states the need for more female administrators and supervisors was mentioned frequently.

### TABLE 48

<table>
<thead>
<tr>
<th>Sex</th>
<th>Effectiveness</th>
<th>Complexity</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>3.2705</td>
<td>31.9389</td>
<td>60.5010</td>
</tr>
<tr>
<td>Females</td>
<td>3.2924</td>
<td>34.1250</td>
<td>60.6793</td>
</tr>
<tr>
<td>Overall Means</td>
<td>3.2764</td>
<td>32.5348</td>
<td>60.5496</td>
</tr>
</tbody>
</table>
TABLE 49
ANOVA: ORGANIZATIONAL EFFECTIVENESS, ORGANIZATIONAL COMPLEXITY AND JOB SATISFACTION, BY SEX OF THE RESPONDENT

<table>
<thead>
<tr>
<th>Variables</th>
<th>F-Ratio</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>0.3028</td>
<td>0.5893</td>
</tr>
<tr>
<td>Complexity</td>
<td>12.3728</td>
<td>0.0008</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.1069</td>
<td>0.7430</td>
</tr>
</tbody>
</table>

Summary

The following is in brief form a summary of the results reported in this chapter. Organizational effectiveness was not found to be related to the type of staffing pattern being utilized by the state. Significant differences were found among some of the states but they were not related to staffing arrangements. Differences by staffing pattern were found with respect to the perceived complexity of the organization and level of job satisfaction of the professional workers. Both area patterns reported higher satisfaction and lower complexity scores than did the county pattern. No significant level of role conflict was perceived in any of the patterns. It can be concluded from these findings that the variable staffing pattern seems to be more highly related to the job related concerns of the individual (his relative power position and satisfaction), than to the performance of the organization as a whole.
The consistent interrelationships appearing between some of the dependent variables are noteworthy. There was a negative relationship between the perceived complexity of the organization and the level of job satisfaction of the respondent. A similar inverse relationship was found between perceived complexity and the level of effectiveness of the organization as indicated by the respondent. A positive relationship was shown between the job satisfaction of the respondent and how effective he perceives the organization to be. The size of the organization and its perceived complexity were positively related. Even though not consistent with the other interrelation, a slight positive relationship was found between the size of the organization and its effectiveness.

Three other findings relating personal characteristics to the dependent variables were significant. The age of the respondent was positively related to his level of job satisfaction, his age was inversely related to his perceived complexity of the organization, and likewise, his tenure was negatively correlated with his complexity score.

When the results of the study were fit back into the model of organizational change in Chapter II (see Figure 1), the interaction effect was evident. Organizational size and complexity were shown to be related to organizational effectiveness, job satisfaction was related to effectiveness, complexity and staffing pattern were related to job satisfaction, and age and tenure were related to perceptions of complexity. Interaction is thus shown between structural and actor
variables, between actor and task variables, and between structural and task variables.

Specifically with respect to staffing patterns, as a structural variable, it was shown to be associated with the actor variable, job satisfaction, but not related to the task variable, organizational effectiveness.
CHAPTER VI
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The Cooperative Extension Service is concerned with how best to service changing clientele needs. One method that is being adopted for improving effectiveness of the organization is the area staffing approach. This arrangement utilizes professional staff on a multi-county basis and has as its primary objective the placement of specialists closer to clientele.

The present study was undertaken because of the trend of many states toward area programming. Administrators have indicated interest in research findings that could give guidance as they move from one organizational staffing arrangement to another.

With the overall purpose of analyzing the advantages and disadvantages of area agent staffing when compared with staffing by county units, an Extension Service research project was undertaken. This particular aspect of the total study concerned itself with the organizational considerations of staffing patterns.
Objectives

The objectives of this study were the following:

1. To investigate the relationship between selected measures of organizational structure and the type of staffing pattern.

2. To analyze the relationship between organizational effectiveness and the type of staffing pattern.

3. To analyze the relationship between job satisfaction of personnel and the type of staffing pattern.

4. To identify and compare the degree of role conflict within the roles of the county agent, area agent and state specialist positions as they relate to the type of staffing pattern.

5. To investigate the relationship between the variables organizational structure, organizational effectiveness, job satisfaction and role conflict and the following characteristics of the respondents:
   a. Job Group (county, area, state specialist, administration and supervision)
   b. Program Area (agriculture, home economics, 4-H and community resource development)
   c. Tenure
   d. Age
   e. Level of Education
   f. Sex

Methodology

The study was conceptualized in terms of organizational staffing pattern as the principal independent variable while the four dependent variables were organizational structure, organizational effectiveness, job satisfaction and role conflict. Seven state Cooperative Extension Service organizations were selected to represent three different types of staffing patterns.

1. County staff with area responsibilities -- New Jersey and Indiana.
2. County and area staff -- Minnesota, Idaho and Ohio

3. Single county staff only -- Tennessee and New Mexico

Information was collected by means of a visit to each state for the purpose of interviewing the administrative staff, an investigation of official documents of each organization, and a mailed questionnaire. The primary instrument for data collection was the mailed questionnaire. A sample of the professional staff of Extension in the seven states was selected as a stratified random sample. The selection of the sample was random from within the job groups of each state. Larger portions of certain job groups were sampled to insure an adequate number of respondents from each. The sample consisted of 753 individuals and proved to be 32 per cent of the total staff of the seven states. Of those sampled, 675 responded for a 90 per cent rate of return.

The questionnaire consisted of six major parts. The first section asked for background information of the respondents, which provided measure for some of the independent variables of the study. The second part consisted of the thirty five Extension Management Information System purpose statements. As a measure of effectiveness, the respondents indicated how well they felt each purpose was being attained in their state. The third part of the questionnaire consisted of sixteen items of the Brayfield-Rothe index of overall job satisfaction. A fourth section contained a list of thirty six items concerning organizational complexity. A fifth part contained twenty four task statements concerning role perception. A final open-ended
section of the questionnaire allowed respondents to express their feelings as to the strengths and weaknesses of their present staffing arrangement and to suggest any changes that would increase its effectiveness.

The scales indicating organizational complexity and job satisfaction were checked for validity and were analyzed for reliability by means of the Cleaver program for internal consistency. In the complexity scale fifteen items were selected for further analysis and for job satisfaction fourteen of the original eighteen items were retained.

Most null hypotheses were stated and tested by analysis of variance. If significant differences were found, the F-test was followed with a Scheffé test to locate specific differences between two groups. Kendall's Coefficient of Concordance was used to compare the rankings of task statements assigned in the analysis of role perception. Pearson's Product Moment Correlation Coefficient was used to indicate the strength and direction of relationships between the dependent variables, as well as those personal characteristics that were measured at an interval level.

The Findings

The findings are summarized as they relate to each of the dependent variables of the study. When findings relate to more than one variable, they will be reported under each. Unless otherwise indicated, the findings were at a statistically significant level.
Organizational Effectiveness

1. No significant differences were found among the three staffing patterns with respect to the effectiveness as perceived by the employees of the organization. Though not statistically significant, the two area patterns (county staff with area responsibilities and county and area staff) showed larger effectiveness mean scores than did the county pattern.

2. Significant differences in effectiveness were found among the seven states studied. The two states with the highest mean effectiveness scores were from one area pattern and the county pattern. Therefore it must be concluded that differences that were reflected by the states find their source in factors other than the staffing pattern.

3. Effectiveness scores were found to be negatively related to organizational complexity. A worker who viewed the organization as simple in nature tended to perceive the organization as being more effective than did a respondent who felt the organization was complex.

4. Though an inverse relationship was hypothesized, the size of an organization was shown to be positively related to its effectiveness. This finding was inconsistent with the negative relationship found between complexity and effectiveness and the positive correlation found between size and complexity. This fact may be a reflection of increased specialization and division of labor, or simply of increased activity, in a larger organization.
5. Organizational effectiveness scores were shown to be positively related to respondent job satisfaction. An employee with a high level of job satisfaction tended to perceive the organization as being more effective than an individual with a low level of job satisfaction.

6. There were no significant differences in perceived organizational effectiveness with respect to the job group of the respondent.

7. No significant differences were found in the perception of organizational effectiveness with respect to the program area of the respondent.

8. There proved to be no significant difference in perceived organizational effectiveness according to the educational level of the respondent.

9. There were no significant differences in perception of organizational effectiveness with respect to the age of the respondent.

10. No significant differences were found in the organizational effectiveness scores with respect to the tenure of the respondent.

11. No significant differences were found in the level of organizational effectiveness as indicated by male and female respondents.

Organizational Structure

Complexity

1. Significant differences by staffing pattern were found with respect to the perceived complexity of the organization. The differences were between the two area patterns and the county pattern, but
not between the two area patterns themselves. The pattern in which county staff have area responsibilities reported the lowest complexity score, the pattern with county and area staff was the next highest, while the county pattern registered the highest complexity score.

2. There were significant differences among the seven states and their association with organizational complexity. In a paired comparison of states, significant differences were found between states of the same staffing pattern. Therefore since differences were found between staffing patterns and between some states within the same pattern, it must be concluded that other variables in addition to the pattern of staffing affect the perception of complexity of the organization.

3. The complexity of an organization was shown to be inversely related to the organization's effectiveness. It has been suggested that when employees feel that they are removed from the sources of power and do not have an impact on the decision-making process, the overall organizational effectiveness is reduced (previously discussed).

4. The size of an organization was shown to be positively related to its level of complexity. As the organization grows in size, it becomes more complex.

5. The level of employee job satisfaction was found to be inversely related to organizational complexity. As complexity of the organization increases, one could expect satisfaction of the workers to decrease.
6. With respect to job group in the organization, higher complexity scores were reported by respondents at lower levels of the organization.

7. Workers in the program areas of youth and home economics view the organization as most complex, whereas those in community resource development and administration and supervision see it as least complex.

8. The level of education of the respondent was found to be inversely related to his complexity score concerning the organization in which he worked.

9. An inverse relationship was found between the age of the respondent and his indication of organizational complexity. Younger respondents tended to rate the organization as more complex than did older ones.

10. The number of years of tenure of the respondent was inversely related to his perception of organizational complexity. Relatively new employees of the organization perceived it as most complex.

11. There was a significant difference in perception of organizational complexity according to the sex of the respondent. Females viewed the organization as being much more complex than did males.

**Size**

1. The size of the organization was found to be positively correlated with its effectiveness (previously discussed).

2. A significant positive relationship was found between organizational size and its degree of complexity (previously discussed).
3. Though the magnitude of the coefficient was not statistically significant, organizational size was negatively related to the level of job satisfaction of the employees. As size increases, satisfaction declines.

Job Satisfaction

1. Significant differences were found among the three staffing patterns with respect to the level of job satisfaction of the employees. The mean scores showed that workers in the pattern in which county staff have area responsibilities were the most highly satisfied, the pattern with both county and area staff was slightly lower and the county pattern demonstrated the lowest level of job satisfaction.

2. Significant differences in employee job satisfaction were found among the seven states studied. Some of the ones that represent the same staffing patterns exhibited both high and low levels of job satisfaction, so it must be concluded that variables other than staffing pattern alone were influencing the level of job satisfaction.

3. The level of employee satisfaction was shown to be positively related to the effectiveness of the organization (previously discussed).

4. Organizational complexity was found to be inversely related to employee job satisfaction (previously discussed).

5. Though not statistically significant, a negative relationship was shown between organizational size and job satisfaction (previously discussed).
6. There were significant differences in level of employee job satisfaction when compared by job groups. Employees at the state level indicated a higher level of job satisfaction than those at the county and area levels. Satisfaction increased as personnel attained higher positions in the hierarchy of the organization.

7. No significant differences were found in the level of job satisfaction with respect to the program area of the respondent. Though not statistically significant, employees of the 4-H (youth) program area expressed the lowest level of satisfaction with their jobs, and state administrative personnel the highest.

8. The level of education of the respondent proved to be positively related to his level of job satisfaction. Workers with higher levels of education enjoyed a high level of job satisfaction, while the reverse was true for those with lower levels of educational attainment.

9. The level of job satisfaction was found to be positively related to the age of the respondent. Younger employees tended to be less satisfied with their jobs and older ones were more highly satisfied.

10. No significant differences were found in the level of employee job satisfaction with respect to the number of years of tenure of the respondent.

11. No significant differences were found in the level of employee job satisfaction between male and female respondents.
Role Conflict

The researcher set out to compare the degree of role conflict in the three staffing patterns. Past studies suggested that role conflict existed in the form of differing expectations held by persons in the different job groups with respect to a specific role within the organization. When respondents were asked to rate the priority of certain tasks for a specific role, it was anticipated that there would be disagreement among the job groups of the respondents.

As it resulted, no significant level of role conflict was identified in any of the seven states. Since the presence of conflict was a basic assumption of the analysis and since none was found, it was not feasible to test the hypothesized relationships.

Findings as Related to Theory

Four different approaches are commonly used to study organizational change. They are described in terms of structural, technological, actor and task variables (Leavitt, 1965). Three of the four approaches were tested in this study, along with their interactions. Staffing changes were seen as alterations in the structural dimension of organizations. This study concentrated on the staffing pattern’s concomitant changes.

Leavitt suggested that efforts to effect change, whether they start with people, structure, task or technology, must deal with the other variables. Findings of the present study lend support to this interaction model. A change in the structural variable in the form of staffing arrangements was found to be related to the actor variable
job satisfaction. Also, job satisfaction was found to be related to the task variable effectiveness, however the structural variable was not shown to be related directly to the task variable. Staffing pattern was shown to be related to the perceived complexity of the organization, a variable that indicated the respondent's feelings of involvement in the decision-making process.

Generally from these findings, it can be concluded that changes in staffing arrangements are more highly related to the individual and how he feels about his work role than to the performance of the organization as a whole. Likewise, organizational performance is closely tied to the level of job satisfaction of the worker and his perception of his role.

It would appear that the causal chain is not going directly from the structural to the task variable, but rather by way of the intervening variable and then on to the task variable. The present findings indicate that to increase effectiveness an administrator needs to be concerned with the fulfillment of the personal needs of the workers, and that structural changes may be one method for effecting improved personnel satisfaction. This becomes a process of changing structure to change people to improve task performance.

**Recommendations**

The following recommendations are the consequences of not only the foregone analysis but also insight derived from the interviews conducted and documents studied in each state.
1. The present study concerned itself with only the organizational members' assessment of staffing arrangements. Future studies need to be concerned with the reaction of clientele groups, the general population, funding sources, legislators, cooperating agencies, etc. as to their satisfaction with and perception of the effectiveness of the area versus the county approach.

2. The approach used in this study for measuring organizational effectiveness needs to be compared with other methods. Possibly a better instrument can be developed utilizing a more indirect method of measurement, rather than the formal goals of the organization.

3. The variable complexity as a multi-dimensional concept needs to be reassessed. More work is also needed in perfecting an instrument that measures a perception of structural complexity.

4. The job satisfaction scale as refined in the present study was shown to be quite reliable. Further work needs to be done in analyzing the relationship between job satisfaction and other factors, such as personnel evaluation results.

5. Along with the general job satisfaction scale of the present study, a study identifying the sources of satisfaction and dissatisfaction of workers would be very helpful in assessing the advantages and disadvantages of area staffing.

6. The concept of role conflict needs further investigation in light of conflicting findings. The method for measuring role conflict needs to be evaluated with one possibility being the development of an attitudinal scale for reflecting the amount of organizational conflict.
7. A study needs to be carried out in order to analyze the effect of increased specialization and division of labor that results in area programming.

8. Studies such as the present help to provide insight into the factors related to changes in staffing arrangements, but because of the specific nature of the needs in each state organization, an in-depth study of staffing needs to be carried out in each state before actual changes are executed.

9. Four dependent variables were selected for investigation in the present study; future work needs to be done in analyzing other factors as they might be related to staffing changes. Some worth considering are:

   a. Sources and methods of financing
   b. Efficiency in terms of a cost-benefit analysis
   c. Travel time and costs
   d. Support facilities necessary
   e. Clientele population--size and density
   f. Geographical size of state and counties
   g. Delineation of districts or areas
   h. Job titles
   i. Criteria in selection of personnel for area programs
   j. Training needs for area staff
   k. Involvement of staff and clientele in making staffing changes.

10. Because the program areas of agriculture, home economics, 4-H (youth) and community resource development seem to have unique
problems, it would be helpful to determine the specific staffing needs of each program area.

11. Many state organizations have two lines of command--one for administrative matters and another for programming concerns. A study needs to be made to assess changes needed in the administrative and programming structure of the Extension organization in order to clarify and simplify these relationships.

12. The role of the area agent needs to be studied in terms of:
   a. The relationship with county and state specialist personnel.
   b. The administrative and programming relationship with academic departments.
   c. The administrative relationship with district supervisors.

13. The role of the district supervisor needs to be evaluated in terms of:
   a. Conflicting responsibilities for administration and programming.
   b. Whether a single supervisor is sufficient in light of his administrative and programming responsibilities.
   c. Whether a man and a woman both need to be assigned to a district.
   d. Whether he should be located at the state office or cut in his respective district.
14. Since it was found that females viewed the Extension organization as being more complex than did males, a study needs to be conducted in order to explain this finding.

15. Staffing arrangements need to be studied in light of new types of programs in urban areas, in those directed toward low income clientele and in those utilizing paraprofessionals.

16. The analysis of the variables in the present study was comparative in nature, between staffing patterns and between states. The researcher recommends that the data collected be further analyzed at the state level so as to be able to supply each of the seven states with an internal analysis with respect to the variables studied.

17. A longitudinal study is necessary to analyze the effects of area staffing arrangements on the effectiveness of the organization, the structural complexity, the job satisfaction of the workers and the degree of role conflict in the organization over a more extended period of time.
APPENDIX A

INSTRUMENTATION
March 30, 1973

Dear Colleague:

The Federal Extension Service has asked Ohio to carry out a national study concerning the various Extension staffing patterns being used throughout the United States. New Jersey has been selected as one of seven states to participate in the study.

The purpose of the research is to provide information concerning the relationship of organizational structure, goal achievement, job satisfaction and role perception, to the type of pattern of staffing being utilized by different states.

Paul D. Warner, from the Ohio Cooperative Extension Service, visited our State during the month of February for the purpose of talking with our administrative staff. He intends to follow with a questionnaire to a sample of all staff.

We feel that the information gained from this study will be helpful to us and other states in evaluating organizational patterns.

Your cooperation with Mr. Warner will be appreciated.

Sincerely yours,

[Signature]

John L. Gerwig
Director

Dear Colleague:

The Federal Extension Service has asked Ohio to carry out a national study concerning the various Extension staffing patterns being used throughout the United States. Indiana has been selected as one of seven states to participate in the study.

The purpose of the research is to provide information concerning the relationship of organizational structure, goal achievement and job satisfaction to the type of pattern of staffing being utilized by different states.

Paul D. Warner, from the Ohio Cooperative Extension Service, visited our state during February for the purpose of talking with our administrative staff. He intends to follow with a questionnaire to a sample of all staff.

We feel that the information gained from this study will be helpful to us and other states in evaluating organizational patterns. Your cooperation with Mr. Warner will be appreciated.

Sincerely yours,

H. G. Diesslin
Director

HGD/jls
March 27, 1973

Dear Colleague:

The Federal Extension Service has asked Ohio to carry out a national study concerning the various Extension staffing patterns being used throughout the United States. Idaho has been selected as one of seven states to participate in the study.

The purpose of the research is to provide information concerning the relationship of organizational structure, goal achievement and job satisfaction to the type of pattern of staffing being utilized by different states.

Paul D. Warner, from the Ohio Cooperative Extension Service, visited our state during March for the purpose of talking with our administrative staff. He intends to follow with a questionnaire to a sample of all staff.

I feel that the information gained from this study will be helpful to us and other states in evaluating organizational patterns. Your cooperation with Mr. Warner will be appreciated.

Sincerely yours,

[Signature]

James L. Graves
Director of Extension Service
April 6, 1973

To: Selected Extension Faculty

Dear Colleague:

The Federal Extension Service has asked Ohio to carry out a national study concerning the various Extension staffing patterns being used throughout the United States. Ohio has been selected as one of seven states to participate in the study.

The purpose of the research is to provide information concerning the relationship of organizational structure, goal achievement, job satisfaction and role perception to the type of pattern of staffing being utilized by different states.

Paul D. Warner, a Ph.D. candidate in Rural Sociology and Research Associate in the Office of Staff Development and Program Analysis, has interviewed our administrative staff and intends to follow with a mailed questionnaire to a sample of all staff.

We feel that the information gained from this study will be helpful to us and other states in evaluating organizational patterns. Your cooperation with Mr. Warner will be appreciated.

Sincerely yours,

[Signature]

Orlo L. Musgrave
Associate Director

jph
To: Selected Agricultural Extension Staff Members

Dear Co-worker:

Tennessee is cooperating with Mr. Paul Wamer from the Ohio Extension Service and Extension Service, USDA, in a national study of various Extension staffing patterns. You, along with about 80 other Tennessee staff members, were selected to participate in the study by completing the enclosed questionnaire.

Mr. Wamer's letter, which is also enclosed, indicates the purpose of the study and gives instructions for completing and returning the questionnaire.

We feel the study may provide information helpful in Tennessee. Your cooperation with Mr. Wamer will be appreciated.

Yours very truly,

William D. Bishop
Dean

Enclosures
March 27, 1973

Dear Colleague:

The Federal Extension Service has asked Ohio to carry out a national study concerning the various Extension staffing patterns being used throughout the United States. New Mexico has been selected as one of seven states to participate in the study.

The purpose of the research is to provide information concerning the relationship of organizational structure, goal achievement and job satisfaction to the type of pattern of staffing being utilized by different states.

Paul D. Warner, from the Ohio Cooperative Extension Service, visited our state during March for the purpose of talking with our administrative staff. He intends to follow with a questionnaire to a sample of all staff.

We feel that the information gained from this study will be helpful to us and other states in evaluating organizational patterns. Your cooperation with Mr. Warner will be appreciated.

Sincerely yours,

[Signature]

Eugene Ross
Associate Director
Of Extension Service

rt

cc O. F. Baca
   Jack Wallace
   Alice Haddock
   Mildred Latini
No cover letter from the Extension Director accompanied the questionnaire in Minnesota. The respondents were informed of the study by means of the Director's newsletter.
April 6, 1973

To: Selected Extension Faculty

Dear Extension Colleagues:

You have been selected to represent Idaho in an Extension Service research project. Its purpose is to gather information on the organizational staffing patterns being utilized by various states. As the enclosed letter indicates, the study is part of a larger national study requested by the Extension Committee on Organization and Policy and has the full support of Director Graves. Since only a sample of persons is being selected from the Idaho Cooperative Extension Service, it is very important that we get a good response.

Experience has shown that it will take only about fifteen minutes to complete the enclosed questionnaire. The code number in the top right hand corner makes it unnecessary to have your name appear on the questionnaire. This procedure is used solely to enable us to follow up and thus obtain a higher percentage return.

Please note that the term "area agent" in this questionnaire refers in a general way to Extension personnel that work in a multi-county area. In Idaho this includes both the area agent and the area specialist positions.

Thank you for your willingness to participate in this study. The results should provide useful and timely information to states as they grapple with the problem of how best to organize their resources to meet the needs of clientele.

Prepared by:
Paul D. Warner
Research Associate
Staff Development and
Program Analysis

[Signature]
Richard E. Young
Leader
Studies and Evaluation

Enc.
April 27, 1973

Dear Extension Colleague:

About three weeks ago we asked your help with a research project concerning Extension staffing. As of this date our records show that we have not had a reply from you. If you haven't already returned the questionnaire, it would be very helpful if you would take a few minutes and do so at your earliest convenience.

Again we want to stress the importance of returning the completed questionnaire since only a sample has been selected to represent your state.

We appreciate very much the time that you have taken to complete the questionnaire. Thank you for your cooperation.

Sincerely,

[Signature]
Richard E. Young
Leader, Studies & Evaluation

Agriculture / Home Economics / Community and Natural Resource Development / 4-H — Youth
QUESTIONNAIRE

We are conducting a national study concerning the patterns of organizational staffing within the Extension Service. We ask your cooperation in completing the following questionnaire. We hope that the instructions are sufficiently clear; however, please read the directions carefully at the beginning of each part, since Parts II through V have different scaling methods.

Part I

1. Please indicate the category in which your present position may be classed (check only one).
   ____ County Extension Staff    ____ State Extension Specialist
   ____ Area Agent                ____ Extension Supervisory Administrative Staff

2. Indicate the area of work in which you spend the majority of your time (check only one).
   ____ Agriculture             ____ Community Resource Development
   ____ Home Economics          ____ Administration and Supervision
   ____ Youth (4-H)

3. Number of years employed by Extension. ____________

4. Your age. ____________ years.

5. Please check the highest level of formal education you have completed.
   ____ Bachelor's                ____ Master's
   ____ Doctor's                  ____ Other (specify) ______________________

6. Sex (check one)
   ____ Male
   ____ Female
Part II

The following are purposes of the Cooperative Extension Service as stated in the National Extension Management Information System. You may recognize some as being similar to the goals of your state Extension Service. Please indicate the extent to which you feel the educational efforts of the Cooperative Extension Service in your state are fulfilling each purpose by circling the appropriate number.

7=Excellent 6=Very Good 5=Good 4=Fair 3=Poor

1. DEVELOP THE OVERALL 4-H YOUTH PROGRAM (Strengthen county and state 4-H Youth development programs.) .................................................. 5 4 3 2 1

2. INCREASE UNDERSTANDING OF THE EFFECTS OF POLLUTION ON THE ENVIRONMENT AND INCREASE ADOPTION OF POLLUTION CONTROL METHODS ...... 5 4 3 2 1

3. IMPROVE VOLUNTEER LEADERSHIP RESPONSIBILITIES IN COMMUNITY PROGRAMS (Development of adult leadership; leadership skills; recruitment; etc., not youth programs.) .................................................. 5 4 3 2 1

4. IMPROVE HUMAN HEALTH PRACTICES AND USE OF HEALTH FACILITIES (Preventative medicine, health facilities; etc.) .................................................. 5 4 3 2 1

5. IMPROVE THE NUTRITIONAL LEVEL OF THE HUMAN DIET (Understanding nutrition; buying and selecting food; preservation; and the adult phase of Expanded Food and Nutrition Education Programs.) .............. 5 4 3 2 1

6. IMPROVE THE NUTRITIONAL LEVEL OF THE HUMAN DIET THROUGH WORK WITH YOUTH FROM LOW-INCOME FAMILIES IN 4-H TYPE EDUCATIONAL PROGRAMS (4-H Youth phase of the Expanded Food and Nutrition Education Program.) .................................................. 5 4 3 2 1

7. PROVIDE INFORMATION ON THE ESTABLISHMENT OR OPERATION OF WATERSHED IMPROVEMENT, SOIL AND WATER CONSERVATION PROJECTS .................................................. 5 4 3 2 1

8. IMPROVE FARM PRODUCTION EFFICIENCY THROUGH UTILIZATION OF ANIMAL MANAGEMENT PRACTICES (Livestock performance testing; culling; animal care; ration formulation; breeding and selection; disease, insect and pest control; etc.) .................................................. 5 4 3 2 1

9. HAVE YOUTH ACQUIRE THE FEELING AND DEPTH OF UNDERSTANDING TO DEVELOP PERSONAL ATTITUDES TOWARD SELF AND OTHERS MOST LIKELY TO LEAD TOWARD RESPONSIBLE CITIZENSHIP (Study of government; citizenship; community; etc.) .................................................. 5 4 3 2 1

10. ASSIST COMMUNITIES TO DEVELOP AN ECONOMIC BASE FOR BALANCED GROWTH (Business and industrial development; job creation; etc.) .................. 5 4 3 2 1

11. IMPROVE COMMUNITY ACTION AND COMMUNITY ORGANIZATION (Development of community leadership; resource utilization; community problems; etc.) .................................................. 5 4 3 2 1
12. IMPROVE FAMILY RESOURCE UTILIZATION (FINANCIAL, MATERIAL, PERSONAL AND COMMUNITY) THROUGH MANAGEMENT (Money management; use of credit; etc.) .......................................................... 5 4 3 2 1

13. IMPROVE HUMAN HOUSING AND HOME ENVIRONMENT (Buying, selling, building, remodeling, etc.) .......................................................... 5 4 3 2 1

14. IMPROVE THE ENVIRONMENT THROUGH APPLICATION OF THE PRINCIPLES AND PRACTICES AFFECTING OUR NATURAL RESOURCES (Man's relation to his environment; resource management; etc.) ........................................... 5 4 3 2 1

15. ASSIST IN THE DEVELOPMENT AND UTILIZATION OF NEW AND IMPROVED PROCESSES AND PRODUCTS (Evaluation and application of economic and technological research; and utilization of new and improved products and processes; etc.) .......................................................... 5 4 3 2 1

16. IMPROVE KNOWLEDGE AND SKILLS RELATED TO HUMAN APPAREL (Clothing; textiles; etc.) .......................................................... 5 4 3 2 1

17. INCREASE THE EFFECTIVENESS OF SUPPLY, DISTRIBUTION AND PROCESSING FIRMS AND SYSTEMS (Assist firms in increasing efficiency; the feasibility, evaluation and establishment of new agribusiness; improve decision-making; coordination of production and marketing; etc.) .......................................................... 5 4 3 2 1

18. INCREASE THE EFFECTIVENESS OF INDIVIDUAL AND PRODUCER GROUP MARKETING PRACTICES (Marketing information; bargaining organizations; cooperatives; marketing orders and agreements; marketing standards, etc.) .......................................................... 5 4 3 2 1

19. DEVELOP AWARENESS OF THE NEED FOR AND INCREASE THE EFFECTIVENESS OF SAFETY PROGRAMS (Safe methods of storage and handling of pesticides; chemical residues; farm, home, highway safety) ........... 5 4 3 2 1

20. IMPROVE FARM PRODUCTION EFFICIENCY THROUGH UTILIZATION OF CROP MANAGEMENT PRACTICES (Seed selection; plant care; soil testing; fertilizer application; irrigation and drainage; harvesting; weed and insect control; etc.) .......................................................... 5 4 3 2 1

21. IMPROVE CONSUMER UNDERSTANDING OF AGRICULTURAL PRODUCTS ON THE MARKET AND FACTORS DETERMINING AGRICULTURAL PRICES (Consumer education concerning prices, supplies, qualities of products on the market; factors determining prices at the retail level; etc.) ....... 5 4 3 2 1

22. ASSIST COMMUNITIES IN THE DEVELOPMENT OF MARKETABLE EMPLOYMENT SKILLS (Manpower programs; youth employment; education and training; vocational education; etc.) .......................................................... 5 4 3 2 1

23. INCREASE THE INVOLVEMENT AND EFFECTIVENESS OF ADULTS AND YOUTH IN VOLUNTEER LEADERSHIP RESPONSIBILITIES IN 4-H YOUTH PROGRAMS (Develop leadership skills; etc.) .......................................................... 5 4 3 2 1
24. IMPROVE INTER-PERSONAL RELATIONSHIPS AND OTHER SOCIAL/PSYCHOLOGICAL COMPETENCIES (Family relations; community relations; emotional development; etc; not youth programs) .......................... 5 4 3 2 1

25. IMPROVE THE MANAGEMENT AND UTILIZATION OF FORESTS, THE PROCESSING AND MARKETING OF FOREST PRODUCTS (Forest and woodlot management; planting; pruning; insect and disease control; etc.) .................. 5 4 3 2 1

26. IMPROVE COMMUNITY FACILITIES AND SERVICES (Water systems; waste disposal systems; recreation facilities; transportation; schools; etc.) ......................................................... 5 4 3 2 1

27. IMPROVE INTERNATIONAL UNDERSTANDING THROUGH EXTENSION 4-H YOUTH PROGRAMS (Technical and cultural exchange programs, etc.) ................. 5 4 3 2 1

28. INCREASE FARM DECISION-MAKING AND BUSINESS OPERATION SKILLS FOR MORE EFFECTIVE ENTERPRISE MANAGEMENT (Business analysis; organization; factors of production; optimum resources combination, etc.) ..................................................... 5 4 3 2 1

29. REDUCE OR PREVENT INJURY, DAMAGE, AND LOSS OF LIFE AND PROPERTY IN THE EVENT OF NATURAL OR MANMADE DISASTERS (Shelters; emergency medical care; disaster preparedness; etc.) .................. 5 4 3 2 1

30. INCREASE UNDERSTANDING OF EXTERNAL FACTORS THAT AFFECT THE FARM BUSINESS (Domestic and foreign outlook; policies and programs affecting farm income, trade, taxation; etc.) .................. 5 4 3 2 1

31. ASSIST OTHER NATIONS IN THE DEVELOPMENT OF EXTENSION TYPE PROGRAMS (Training of foreign personnel through formal, in-service, on-the-job, observation or practical experience; backstop and support of personnel abroad; etc., not youth programs) ............. 5 4 3 2 1

32. HAVE YOUTH ACQUIRE KNOWLEDGE AND PRACTICAL SKILLS IN SCIENCE AND TECHNOLOGY (Mechanics and engineering; home management; financial management; livestock and plant production; etc.) .......... 5 4 3 2 1

33. STIMULATE YOUTH IN PERSONAL GROWTH/DEVELOPMENT—PHYSICAL, MENTAL AND BEHAVIORAL (Self-worth; respect; concern for other persons; personal goals; career exploration; personal appearance; etc.) ... 5 4 3 2 1

34. INCREASE CITIZEN UNDERSTANDING OF AND PARTICIPATION IN PUBLIC ISSUES AFFECTING NATURAL RESOURCES/ENVIRONMENT (Environmental quality; pollution; water supply and use; waste disposal alternatives; natural resource planning; etc.) ................. 5 4 3 2 1

35. INCREASE FARM APPLICATIONS OF MACHINE AND STRUCTURE TECHNOLOGY (Construction; design; maintenance; materials; material handling; animal housing; storage practices, etc.) .......................... 5 4 3 2 1
Part III

Some jobs are more interesting and satisfying than others. Please circle the response following each statement that best describes how you feel about your job.

SA=Strongly Agree  A=Agree  U=Undecided  D=Disagree  SD=Strongly Disagree

1. My job is like a hobby to me........................................... SA A U D SD

2. My job is usually interesting enough to keep me from getting bored......................................................... SA A U D SD

3. It seems that my friends are more interested in their jobs..... SA A U D SD

4. I consider my job rather unpleasant................................. SA A U D SD

5. I enjoy my work more than my leisure time........................... SA A U D SD

6. I am often bored with my job......................................... SA A U D SD

7. I feel fairly well satisfied with my job............................ SA A U D SD

8. Most of the time I have to force myself to go to work............ SA A U D SD

9. I am satisfied with my job for the time being...................... SA A U D SD

10. I feel that my job is no more interesting than others I could get. SA A U D SD

11. I definitely dislike my work........................................ SA A U D SD

12. I feel that I am happier in my work than most other people...... SA A U D SD

13. Most days I am enthusiastic about my work....................... SA A U D SD

14. Each day of work seems like it will never end..................... SA A U D SD

15. I like my job better than the average worker does................ SA A U D SD

16. My job is pretty uninteresting...................................... SA A U D SD

17. I find real enjoyment in my work.................................. SA A U D SD

18. I am disappointed that I ever took this job........................ SA A U D SD
Part IV

The following is a list of statements concerning organizations and behavior within organizations. Please circle the response following each statement that best describes how you feel about your organization.

SA=Strongly Agree  A=Agree  U=Undecided  D=Disagree  SD=Strongly Disagree

1. I feel that I am my own boss in most matters. ................. SA A U D SD
2. Extension is moving toward increased specialization. ............ SA A U D SD
3. Rules are rigidly enforced without regard for the individual. ... SA A U D SD
4. Employees are free to use their own judgment in handling various problems. ........................................... SA A U D SD
5. I feel that I know top administrators well. ....................... SA A U D SD
6. Promotions are based entirely on how well a person does his job. SA A U D SD
7. How things are done around here is left pretty much up to the person doing the work. .................................. SA A U D SD
8. One thing people like around here is the variety of work. ....... SA A U D SD
9. People feel as though they are constantly being watched to see that they obey all the rules. .............................. SA A U D SD
10. Whatever situation arises, we have procedures to follow in dealing with it. ........................................... SA A U D SD
11. Most of the directives from my superior are verbal rather than written. ................................................. SA A U D SD
12. Too much effort is spent on the evaluation of job performance. SA A U D SD
13. There can be little action until a supervisor approves a decision. SA A U D SD
14. There is no longer a role for the generalist in Extension. ....... SA A U D SD
15. Most people here make their own rules on the job. ............... SA A U D SD
16. Going through the proper channels is constantly stressed. ....... SA A U D SD
17. Administrators here stick pretty much to themselves. .......... SA A U D SD
18. Too much stress is put on improving technical competency by attaining advanced degrees. ......................... SA A U D SD
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<tbody>
<tr>
<td>19.</td>
<td>A person who wants to make his own decisions would quickly become discouraged here.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
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<td>20.</td>
<td>Many positions within Extension are becoming too specialized to be effective.</td>
<td>SA</td>
<td>A</td>
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<td>21.</td>
<td>Nothing is said if you come to work late occasionally.</td>
<td>SA</td>
<td>A</td>
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<td>22.</td>
<td>Red tape isn't often a problem in getting a job done.</td>
<td>SA</td>
<td>A</td>
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<td>23.</td>
<td>I frequently have an opportunity to visit informally with top administrators.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
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<td>24.</td>
<td>There isn't much chance for a promotion unless you are &quot;in&quot; with the boss.</td>
<td>SA</td>
<td>A</td>
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<td>25.</td>
<td>Increasingly, small matters have to be referred to someone higher up for a final answer.</td>
<td>SA</td>
<td>A</td>
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<td>26.</td>
<td>Most job descriptions are very specific.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
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<td>27.</td>
<td>The employees are constantly being checked upon for rule violations.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
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<td>28.</td>
<td>We spend too much time in meetings scheduled by Extension administrators.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
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<td>29.</td>
<td>Administrators seem remote and inaccessible.</td>
<td>SA</td>
<td>A</td>
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<td>30.</td>
<td>You get a raise according to how well you are liked.</td>
<td>SA</td>
<td>A</td>
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<td>31.</td>
<td>Most decisions I make have to have my boss's immediate approval.</td>
<td>SA</td>
<td>A</td>
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<td>32.</td>
<td>There is a tendency to follow the letter of the law rather than the spirit.</td>
<td>SA</td>
<td>A</td>
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<td>33.</td>
<td>We spend too much time doing routine paper work.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
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<td>34.</td>
<td>Employees are periodically evaluated to see how well they are doing.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
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<td>35.</td>
<td>Orders from higher up are followed unquestioningly.</td>
<td>SA</td>
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<td>36.</td>
<td>We are to follow strict operating procedure at all times.</td>
<td>SA</td>
<td>A</td>
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Part V.

The following is a list of task statements that have been found to be related to the responsibilities of state specialists, area agents and county agents. We want your reaction as to the level of priority you feel each task occupies in each of the three positions. Please indicate the rating of each statement by circling the appropriate number: 5 = Very High Priority and 1 = Very Low Priority, with 4, 3 and 2 being at equal intervals between the two extremes.

<table>
<thead>
<tr>
<th>Task Description</th>
<th>State Specialist</th>
<th>Area Agent</th>
<th>County Agent</th>
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<tbody>
<tr>
<td>Helps identify the target audiences for Extension programs</td>
<td>5 4 3 2 1</td>
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<td>Has a part in formation of lay advisory planning groups</td>
<td>5 4 3 2 1</td>
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<td>Assumes leadership in organizing program planning for individual counties</td>
<td>5 4 3 2 1</td>
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<td>Assumes leadership in organizing program planning on a multi-county basis</td>
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<td>Assumes leadership in organizing program planning at the state level</td>
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<td>Assists in analyzing problems and opportunities for Extension education programs</td>
<td>5 4 3 2 1</td>
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<td>Recommends program alternatives to lay groups that are planning programs</td>
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<td>5 4 3 2 1</td>
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<td>Very</td>
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<td>8.</td>
<td>Has a role in determining the educational programs to be included in the annual plan of work made at the county level</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>9.</td>
<td>Has a role in determining the educational programs to be included in the annual plan of work at the state level</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>10.</td>
<td>Conducts in-service training activities for Extension personnel</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>11.</td>
<td>Conducts training activities for lay leaders</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>12.</td>
<td>Serves as technical consultant, on call to other Extension personnel</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>13.</td>
<td>Serves as technical consultant, on call to Extension clientele</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>14.</td>
<td>Helps formulate Extension recommendations for research</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>15.</td>
<td>Takes part in applied research</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>16.</td>
<td>Directly teaches Extension clientele</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td></td>
<td>Level of Priority</td>
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<td>17.</td>
<td>Prepares technical newsletters and bulletins for distribution to Extension clientele</td>
<td>State Specialist</td>
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<td>County Agent</td>
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<td>18.</td>
<td>Makes personal visits to Extension clientele</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>19.</td>
<td>Assumes leadership in developing multi-county programs</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>20.</td>
<td>Participates in the evaluation of statewide programs</td>
<td>State Specialist</td>
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<td>Area Agent</td>
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<td>County Agent</td>
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<td>21.</td>
<td>Participates in the evaluation of multi-county programs</td>
<td>State Specialist</td>
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<td>County Agent</td>
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<td>22.</td>
<td>Participates in the evaluation of county programs</td>
<td>State Specialist</td>
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Part VI.

1. Please state your opinion(s) as to the strengths and weaknesses of the present staffing pattern in your state.

STRENGTHS: 

WEAKNESSES: 

2. What changes in the staffing arrangements would you suggest so as to increase the effectiveness of Extension in your state?

Please return the questionnaire in the enclosed envelope to:

Staff Development and Program Analysis
109 Agricultural Administration Building
The Ohio State University
2120 Fyffe Road
Columbus, Ohio 43210

Thank you for your cooperation.

Richard E. Young
Leader, Studies and Evaluation
Part V of the questionnaire was altered slightly in different states. The same task statements were used, however respondents answered with respect to different roles. In the states of Minnesota, Idaho and Ohio respondents answered with respect to the roles of state specialist, area agent and county agent; in New Jersey, New Mexico and Tennessee the state specialist and county agent roles were responded to; and in Indiana respondents answered with respect to the state specialist and area agent roles.
APPENDIX B

RELIABILITY OF SCALES
The Cleaver program of item analysis uses the Rundquist-Sletto technique to evaluate Likert-type attitudinal scales with respect to internal consistency item analysis. First, the program separates the sample into two halves, low and high, on the basis of total scale scores. The means, standard deviations and scale value differences are then computed. The scale value difference (SVD) is the difference between the low-half mean and the high-mean of an item. It represents the internal consistency of an item with other items in the scale.

Secondly, for computation of the maximum possible scale value difference (MPSVD) the sample is again divided into a low and high half, but this time the division is made on the basis of individual item responses. The MPSVD is the difference between the low-half mean and the high-half mean for each item when the division is made on the basis of responses to that item. The MPSVD is a measure of the discriminating power of an item when it is considered by itself, rather than as a part of the scale.

The scale value difference ratio (SVDR) is the ratio of the SVD to the MPSVD and is interpreted as the percent of the maximum possible discriminating power of the item when combined with the other items of the scale.

The following abbreviations are used in the accompanying tables:

ITEM - The item number corresponds to the number of the statement in the questionnaire.

LO MEAN - Mean of the low-half.

HI MEAN - Mean of the high-half.

TOT MEAN - Mean of the total sample.
LO STDV    - Standard deviation of the low-half.
HI STDV    - Standard deviation of the high-half.
TOT STDV   - Standard deviation of the total sample.
LO ND      - No data in the low-half.
HI ND      - No data in the high-half.
TOT ND     - No data in the total sample.
SVD        - Scale value difference.
C.R.       - Critical ratio.
MPSVD      - Maximum possible scale value difference.
SVDR       - Scale value difference ratio.
RSPIT      - Split-half product moment correlation coefficient.
RCORR      - Correlated split-half correlation coefficient
             (Spearman-Brown formula).
CD COUNT   - Card count (if N is an odd number, one observation
             is excluded from the analysis).
N          - Sample size.
ND         - No data.
### Internal Consistency Item Analysis for Job Satisfaction Scale

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**Rsplit** | **RCorr** | **CD** | **COUNT** | **N** | **ND**
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APPENDIX C

SCHETTE TEST
The Scheffe' (S) method of multiple comparisons is a post hoc test used to identify those groups contributing to the significant difference found in the ANOVA. A rejection of the null hypothesis merely means that all group means cannot be assumed to be equal, however the decision to reject the null hypothesis tells nothing about which groups differ from other groups. The purpose of the Scheffe' test is to isolate those groups that are responsible for the rejection of the hypothesis of no differences.

The S-method was chosen for this study because of its applicability when groups of unequal n's are being compared.¹

The formula used to calculate S when comparing groups a and b was the following:

\[ S_{ab} = \sqrt{(J-1) (F)} \sqrt{\frac{1}{N_a} + \frac{1}{N_b}} \ (MS_w), \]

where J is the number of groups in the ANOVA,

F is the desired F-value given the degrees of freedom,

N is the number of observations in each group, and

MS_w is the mean square within groups.

To be significant the resulting S-value must be smaller than the difference of the means of the two groups.

BIBLIOGRAPHY


