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PERCEPTIONS OF NINE CHANGE AGENT ROLES AND RELATED WORK VARIABLES BY COUNTY EXTENSION AGENTS IN THE MINNESOTA AGRICULTURAL EXTENSION SERVICE--1985

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PERCEPTIONS OF NINE CHANGE AGENT ROLES
AND RELATED WORK VARIABLES
BY COUNTY EXTENSION AGENTS IN THE
MINNESOTA AGRICULTURAL EXTENSION SERVICE -- 1985

A Dissertation
Submitted to the Graduate Faculty of the
Louisiana State University and Agricultural and Mechanical College
in partial fulfillment of the requirements for the degree of Doctor of Education
in
The Department of Extension and International Education

by Jared Melville Smalley
B.A., University of Minnesota, 1959
M.S., Moorhead (Minn.) State University, 1976
December, 1985
ACKNOWLEDGEMENTS

The Author pays tribute to many persons for helping him realize a dream for attaining a doctoral degree at mid-career.

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For me, this has been a very pleasant time in life, and the memories of the campus with its Memorial Tower and beautiful Live Oaks will remain vividly etched in my mind forever.
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ABSTRACT

The major focus of this dissertation study was on the self-expectations of Minnesota County Extension Agents as they carry out nine change agent roles in their educational work. Impetus for the study came from a 1984 report that indicated 70.5 percent of these agents felt emotional strain due to "expect too much of self."

Data was collected regarding the nine roles and six work-related variables by mail questionnaire. A total of 230 usable responses were received from the 248 agents on active duty during May, 1985.

The major findings of the study were generalized as follows:

1. The most positive aspects of agent self-expectations come from carrying out the roles of teaching problem solving skills, good program development, working with volunteers, and remaining flexible to meet the needs of Extension clientele.

2. The most negative aspects of agent self-expectations come from attempting to deal with issue education and accessing the total University; while perceptions regarding alternative delivery systems tend to remain ambiguous.

3. Agents self-expectations regarding self-development and risk taking can be either positive or negative as a personal motivator depending upon past experiences in the Extension organization.

4. Agent strain and reports of "expect too much of self" can be anticipated when there is a combination of high levels of commitment to the organization, involvement with their jobs, internal work motivation, and feelings of intrinsic reward from task accomplishment.
5. Lack of feedback on goal effort may be contributing to the feelings of strain associated with agent self-expectations, despite specific and difficult goals, and good participation in goal setting, which should aid in the agents achieving their work expectations.

It was concluded that administrators should consider the high level of self-expectations as a positive indicator of dedication to the Extension organization, and rather than focus on the strain, there is need to give leadership that clarifies the mission and goals with each agent. Concerns and pressures regarding accountability could be reduced by improved communication and counseling techniques between supervisor and agent. Recommendation was made for more research on agent feedback.
I. INTRODUCTION

Situation. The Minnesota Agricultural Extension Service is an informal education organization which has a strategic goal of helping people help themselves by acquiring research-based information and developing problem solving skills in the areas of agriculture, home economics-family living, 4-H youth development, and community and natural resource development at the county level in Minnesota.

The structure of the organization includes three categories of professional staff: State - administrators, program leaders, subject matter specialists, and support staff; District - supervisors of fieldstaff, and area agents with multi-county responsibilities; and Local - County Extension Agents who serve at the county level.

The focus of this study is only on the County Extension Agents, who include some 250 men and women professionals with bachelors and advanced degrees. They are employed in 91 County Extension Offices which are located in all 87 of Minnesota's counties.

Statement of Problem. This study is the outgrowth of a 1984 report on Minnesota County Extension Agents: Stress, Coping and Adaptation by Dr. Hamilton McCubbin and Dr. Joan M. Patterson of the Family Stress and Coping Project, College of Home Economics, University of Minnesota, St. Paul.

The focus of the study is on the category identified in the report as "expect too much from self." This was the second greatest stressor (70.5%) noted by County Extension Agents, compared to 75.0% for the top stressor which was attributed to clientele needs/demands.
In reviewing the results of the McCubbin study, the Extension Management Council (top five Extension administrators), was able to appreciate the underlying reasons for the job-related stress and strain identified as "clientele needs/demands," but indicated the need for further research regarding the factors related to the less well-understood category "expect too much from self."

Upon hearing of the Council's interest, this researcher asked the group for authorization to do a dissertation study that would attempt to provide further insight on a number of organizational factors relating to "self" as the second most frequent stressor.

**Purpose of Study.** In January, 1985, following approval to do the study, this researcher proceeded to design the research effort for submission to the doctoral committee for consideration. Operational objectives for the study were stated as follows:

1. Determine the most important change agent roles that the Extension organization expects Minnesota County Extension Agents to carry out, and measure their relative importance among these agents.

2. Acquire appropriate, validated scales to measure several work-related variables that appear to have a bearing on self-expectations of the County Extension Agents as they carry out their roles.

3. Collect data to infer or generalize about the concept "expect too much from self."

Members of the doctoral committee gave approval to the dissertation study with the understanding that the results apply only to the County Extension Agents in Minnesota, and should not be generalized to the agents in the other 49 states.
Significance of the Study. The value of this study to the Agricultural Extension Service in Minnesota is that it provides a status report on the perceptions of County Extension Agents at a point in time (May, 1985) when there is much concern about burnout of educational professionals by the stress and strain brought about by increased organizational expectations of staff in response to federal, state and county demands for more accountability, and shrinking dollar support by public funding bodies.

The questions this study attempts to answer through collection and interpretation of the data from the agents are phrased as follows:

1. Assuming that self-expectations for work by Minnesota County Extension Agents flow from the nine change agent roles identified in this study, to what extent do they rate these roles highly and to what extent do they place differing values on each of the roles?

2. Assuming that self-expectations of the agents also flow from the work-related variables included in this study, to what extent do Minnesota County Extension Agents:
   a) Express a commitment to the Extension organization?
   b) Perceive effective goal setting for their positions?
   c) Report feelings of job-related tension?
   d) Indicate involvement with their jobs?
   e) Have high levels of internal motivation?
   f) Give evidence of motivation through intrinsic rewards?

3. In reflecting upon the relative importance attributed to the change agent roles and responses to the work-related scales, what new picture can we create regarding "expect too much of self" by Minnesota County Extension Agents in terms of supervision and future leadership?
FIGURE 1
COMPONENTS OF THE CONCEPT "EXPECT TOO MUCH OF SELF"
BY MINNESOTA COUNTY EXTENSION AGENTS

GOAL SETTING

COMMITMENT TO ORGANIZATION     JOB-RELATED TENSION

CHANGE AGENT ROLES

JOB INVOLVEMENT     INTRINSIC MOTIVATION

INTERNAL WORK MOTIVATION
II. REVIEW OF THE LITERATURE

This section provides background on the Extension organization, discusses the role of the change agent, and looks at the individual needs of Minnesota County Extension Agents based on relevant theoretical constructs from dissertation study in the fields of Extension Education, Management and Sociology at Louisiana State University.

The Organization

The Cooperative Extension Service (CES) in the United States is the result of federal-state-county relationships that began with the Smith-Lever Act of 1914. CES is designed with a self-help philosophy that extends the research base of the land-grant university in agriculture, home economics-family living, 4-H youth, and community resource development to the people of the various states. Clientele of CES are men, women, children and the groups they form in society during the course of human interaction.

The mission of the Cooperative Extension Service is to provide relevant education in an informal setting to help people improve themselves and their institutions. Measures of success in reaching the mission include increased agricultural production and adoption of approved farm management practices, improved approaches to meeting the needs of the family (nutrition, clothing, home management), growth experiences for youth, and development of personal and group skills in problem solving and decision making to maintain the vitality of both rural and urban communities in our nation.
In striving to reach the mission, a federal-state-local structure was created for administration and program delivery. Funding is provided by the U.S. Congress, the state legislatures, and county/parish units of government. There are also some private donations.

The Federal Extension Service is part of the U.S. Department of Agriculture, and has staff that focus on specific programs in agriculture, home economics, 4-H youth, and resource development. They provide guidelines and encourage specific types of educational programs.

The state level, which is called the Agricultural Extension Service in Minnesota, includes administrators, program leaders, subject matter specialists, area agents, and district supervisors (called DPLs in our state). Resources in programming flow from this level to the counties and are matched with local dollars (office space, secretary support, supplies, travel, and part of the agents' salaries).

County Extension Agents carry out educational programs at the local level based on the expressed needs of the clientele. The agents are college-trained men and women with specific responsibilities relating to agriculture, home economics-family living, 4-H youth development, and community and natural resource development.

In this day and age of federal-state-local demands for accountability, there is much focus on efficient and effective delivery of relevant educational programs by the Extension Service to increase visibility, document accomplishments, and justify continued funding at all three levels of the system. These demands cause increased stress levels for both the organization and individual staff members, and result in efforts to improve Extension's image through emphasis on innovation and better educational programming by the agents.
The Change Agent

In Minnesota, the role of an Extension change agent is considered both universal and specific within the field staff position of County Extension Agent by the Agricultural Extension Service.

Universally, the role of being an educational change agent is part of every county level position in the state. This concept of helping people change was part of the Smith-Lever legislation at the federal level during the first quarter of the century. Specifically, the Minnesota system went beyond the foundational base of agriculture, home economics, and 4-H to create a change agent unit called Community and Natural Resource Development (CNRD).

The CNRD Program Area includes several part-time subject matter leaders, the equivalent of 20 positions in state specialist ranks, and several area agents with multi-county responsibilities. There is only one county position identified as full-time CNRD, and several with 50 percent designation. The balance of the County Extension Agents in Minnesota have only minor percentages of specific CNRD assignments, which are defined as change agent efforts in community and natural resource development beyond what would normally be expected in their roles as a County Extension Agent in the three major program areas of the Extension organization (Agriculture, Home Economics, 4-H).

As a change agent, the County Extension Agent carries out a process to identify with local clientele the educational needs over a given period of time (one to four years); puts together the resources of Extension, the University, and the local community in implementing educational programs; and is responsible for evaluating the impact of
the learning experience as a basis for improving agent performance in
the future, and documenting the results for review by funding bodies
at the county, state and federal levels.

**Change Agent Theory.** The concept of the change agent and change
target involving planned change deals with a systemic linkage of the
County Extension Agent and the clientele to achieve some goal. The
extent to which the goal or goals are achieved depends upon both per­
ceptual and rational processes of the individuals and groups involved.
By definition, we are looking at a situation where two or more persons
are interacting toward a goal with shared symbols and expectations.
In addition, both the change agent and the change target belong to so­
cial systems (Verma, 1984).

If we take for a hypothetical example a situation where a County
Extension Agent (as a change agent) would attempt to work with a group
that wishes to develop low-income housing in a community, we would see
two distinct elements and processes of social systems come into play
related to the planned change effort.

First, the Extension change agent is a member of the Extension
Service, a system that has a mission and philosophy that centers on
helping people to help themselves through informal education. Exten­
sion has ties at the federal-state-local levels. As an individual, the
change agent is part of a community, a member of a family, and is in­
volved in a variety of church and school systems. Each system the
change agent is a member of has its own membership, norms, goals and
sanctions related to individual and group behavior. Although mostly
professional norms come into play in his/her interaction with the
group interested in low-income housing, the other systems remain part
of the agent's background and operating environment.

Second, the members of the change target group belong to the same social system, the community in this instance, but they are also members of families, clubs, organizations, etc. The norms, knowledge, beliefs and socialization acquired as members of these social systems impinge directly and indirectly on their involvement in the low-income housing effort, and impacts on their ability to look objectively at the issues involved.

Among the issues that might surface are: (1) Is it right to help low-income persons attain better housing? (2) What are the costs, both human and economic? (3) Are there other alternatives? (4) What are the consequences of action versus non-action? (5) Where should such a housing development be located?

In terms of a social system, the situation and potential interaction between change agent and change target would bring into play the norms held by group members, attempts for boundary maintenance, use of position, power and rank between group members as they discuss, debate and move toward a decision that could result in social change in the community (Verma, 1984).

The extent to which the original perceived "gap" in housing needs for low-income persons will hold up depends on many factors involving group dynamics, and the interaction with the change agent. Planned change in this context refers to an orderly, rational approach by the change agent to create an atmosphere for full discussion and decision making by the group.

To further elaborate, the linkage between the change agent and the change target in the above example came about in one of three ways:
(1) the change agent saw an apparent need for low-income housing in the community and created awareness that led to the group meeting, (2) a member of the group had requested the change agent's assistance, or (3) a third party brought the group and the change agent together.

Theorists Kurt Lewin, Ronald Lippitt, and Warren G. Bennis each provide insights on the role of the change agent in the context of the housing example, as follows:

Lewin (1935:30-39) helps us view the change agent's role in three aspects: (1) helping the group look at the need for housing development, and attempting to "unfreeze" the group to the extent they would explore the alternatives and consequences; (2) moving the group to a new level of awareness that would result in action, and (3) helping "freeze" the group at the new level where they would take action to implement a low-income housing program in the community.

Lippitt (1958:71-89) adds a relationship dimension to the above process, and describes a trusting-helping interaction that is established because of the expertise of the change agent and the goals of the group members. He also notes that at some point in time the relationship would need to be terminated. This may come about as a result of conflict which leads to non-action being taken, or in the opposite situation where the group takes action to move on with the housing program and the change agent disengages during or after implementation.

Bennis calls the ideal relationship between the change agent and the change target a deliberate process with mutual interest and collaboration leading to a .5/.5 power ration (1969:145-153).

The writings on social context by George M. Beal, resistance forces by Gerald Zaltman, and the change process in individuals de-
scribed by Everett M. Rogers are noted here in closing comments on the role of the change agent in planned change.

The Beal model is especially important to the understanding of planned change because it provides 31 steps as check points, including 13 points at which a change agent can evaluate the process (Beal and Blount, 1971). Basically, the model indicates that change agents work with the following considerations: (1) the overall social system, the history of the system, and the relevant part of the system that is to be changed; (2) as interest converges and the change agent works with a group (or individual) to create planned change, they involve people in initiating, legitimation and diffusion efforts to move the process forward; (3) once the group has made a decision, there are stages for setting objectives, checking resources, and formulating a plan of action, which may or may not involve the change agent further. However, he or she may continue working with the group in mobilizing resources, launching the plan or helping them analyze and evaluate their actions.

Zaltman (1984:64-181) helps us explore resistance forces and relevant change agent strategies. He notes that factors of resistance include: (1) not wanting to change, (2) violation of accepted norms of the community, (3) not having resources to make change or explore the alternatives further, and (4) other factors relating to the community power structure. Strategies range from re-educative use of facts to coercion, where force is applied. Coercion as a strategy is not acceptable to the social system of the County Extension Agent and the Extension philosophy, regardless of the goals of the group.

If the nature of the proposed change is too complex for re-educat-
ive techniques, the change agent will need to develop both persuasive and facilitative strategies to educate the group and help them determine the action to take, according to Zaltman. If the situation develops into hostile conflict within the group, the change agent may mediate the interaction between group members, or in some instances be expelled by the group if trust is lost.

The change process for individuals is best described by Rogers (1964) with his paradigm for innovative change that discusses the adoption or rejection of change. Dissatisfaction or dissonance (a state of disequilibrium) may cause desire to change. The relevance of Rogers' model is that it helps change agents focus on four elements as attempts are made to introduce innovation through education. The elements or stages of the model include: (1) knowledge - involves personality characteristics of the individual including norms and past experiences; (2) persuasion - involves the acceptability of the proposed change by the social system and the benefits of making the change; (3) decision - comes at the point where the individuals adopts or rejects the change; and (4) confirmation - describes the stage where, if adopted, the change can be replaced in the future by new ideas, discontinued due to dissatisfaction, or continued; and, if initially rejected, there is a chance for later adoption or continued rejection.

Change Agent Roles. Nine distinct and independent change agent roles have been identified for this dissertation study to aid in the understanding of Minnesota County Extension Agents self-expectations in the workplace. These roles are drawn from an organizational document developed by Dr. Norman A. Brown (1980) during his tenure as Dean and
Director of the Minnesota Agricultural Extension Service. The roles as they apply to County Extension Agents are defined as follows:

1. Teach Problem Solving Skills - The process of providing Extension clientele with skills that help them solve their own problems.

2. Alternative Delivery Systems - The process of developing approaches for assisting Extension clientele in addition to meetings and one-to-one consultations.

3. Interest in Issues - The process of keeping aware of issues at the state, regional (i.e. neighboring states) and national levels that also have impact on Extension clientele at the county level.

4. Involve Volunteers - The process of recruiting, selecting, training and giving volunteers a significant role in the delivery of Extension educational programs.

5. Good Program Development - The process of identifying educational needs with Extension clientele, setting priorities, implementing and evaluating learning experiences, and reporting results.

6. Remain Flexible to Meet Needs - The process of remaining in touch with and reacting to the immediate and changing needs of Extension clientele.

7. Access Resources of Total University - The process of going beyond the Extension-related units of the University of Minnesota (including its branches) to acquire information and expertise to meet the needs of Extension clientele at the county level.

8. Self-Development Plan - The process of maintaining and improving subject matter and personal skills to continue your effectiveness as a County Extension Agent.

9. Educational "Risk" Taker - The process of trying new educa-
tional approaches and attempting to work with non-traditional clientele where there is "risk" in terms of the educational outcomes not being successful.

Role No. 1. As an educational change agent, Minnesota County Extension Agents are expected to help people help themselves. This role implies a mutual process whereby student and agent (as teacher) grow together, and requires an understanding of how people learn under given situations.

As an educator, the agent uses a learning approach that helps the learner understand and interpret the world in which he or she lives. This process takes into account individual differences, variation in levels of understanding, and involves many other factors to develop problem solving skills.

In applying educational concepts from Gagne (Gassie, 1985: Spring Semester, the Extension educator is (1) a planner, (2) a manager, (3) a motivator, (4) a selector of media, and (5) an assessor of results. As a planner, the agent identifies educational needs, sets general objectives, and prepares for the learning process. As a manager, the agent takes into account the individual differences and gives direction to the learning process. As a motivator, the agent considers the learning curve and attempts to maintain high motivation through constant feedback to the learner. As a selector of media, the agent deals with method, materials and delivery of content. As an assessor, the agent does both formative (means) and summative (ends) evaluations to check the educational process and make improvements for future learning experiences for Extension clientele. Thus the problem solving role goes far beyond just being an information giver.
Role No. 2. Historically, the Extension change agent has relied heavily on one-to-one consultations and scheduled educational meetings to reach clientele. Demographic changes, including rural to urban migrations of people, the advent of television, and the movement of more women into the workforce have all had impact on the delivery of educational programs to Extension clientele.

A number of articles in the Journal of Extension in recent years have discussed the need for clearly focused educational programs that use a variety of approaches to meet today's needs of men, women and youth.

Jacquelyn M. Cole (1981:27-31) indicates that teaching methods in Extension should be selected carefully and specifically and should emanate from a knowledge base that addresses all facets of the learning situation. Extension change agents need to focus on how to teach, select and apply a variety of techniques to enhance the learning experience; and an understanding of behavioral sciences is essential as a guide to selecting teaching methods.

Effective use of modern technology has long been a concern of Extension professionals, according to Jerry W. Robinson (1972:35-43), and the development of learning modules represents an attempt to package educational materials that provide flexible use by clientele. The development of these materials has proved both beneficial as an alternative delivery method, and added new costs to the organization, notes Gerald R. McKay (1971:18-23).

Special efforts have also been made to improve the readability of Extension publications, including reduced reading levels for both youth (Reyburn, 1979:10-13) and adult audiences (Nehiley, 1980:11-17). Staff
development efforts in Minnesota have included training agents to use radio and television effectively as alternative delivery systems. More recently, agents are beginning to develop expertise with the computer.

**Role No. 3.** Dealing with public issues that impact on the local community is one area where there is growing concern by the Extension change agent. Local attitudes toward issues often result in conflict and controversy, which implies that the agent needs to develop skills to work through tense educational situations.

Culbertson (1968:79-84) noted that Extension workers need to understand what conditions must exist before attitude is a good predictor of behavior. Social psychologists indicate attitudes involve: (1) an attitude object which is defined by the attitude holder, (2) a set of beliefs the object is either good or bad, and (3) a tendency to behave psychologically toward the object so as to keep or get rid of it. Three dimensions of attitude include: intensity - does the attitude holder have a genuine choice to accept or reject the attitude object; knowledge level - are problems viewed from several perspectives rather than a narrow viewpoint; and resistance to change - a measure of how strongly the attitude is held. Research shows that attitudes high in intensity and knowledge level often lead to strong feelings by issue participants, and can result in high resistance to change.

**Role No. 4.** Volunteers have always been an essential part of Extension educational efforts at the county level, especially in the 4-H Program Area, which has tended to involve the whole family in educational projects. Because of the increasing competition for the volunteer's time in local communities, special training efforts have been made with agents to develop skills to recruit volunteers, train
and retain their services by the Extension organization.

Quarrick (1965:42-51) advised change agents 20 years ago that it is important to understand how intrinsic rewards play a key role in human effort. He noted that need motivation and incentive work together to affect human behavior. Some people have high achievement needs; while others have high affiliation needs. An effective change agent develops program efforts that allow either type to meet its needs within the volunteer framework of the local program.

In addition to 4-H youth programs, Extension volunteers also contribute their efforts to agriculture, home economics and community development by serving on planning and advisory committees.

**Role No. 5.** Good program development is the fundamental cornerstone for every educational change agent at the local level. Numerous books and articles have been written regarding this role.

J. Paul Leagans (1964:89-96) indicated that effective Extension education is an intended effort, carefully designed to fulfill certain specifically predetermined and presumably important needs of people. He emphasized that in every human and physical situation there are always (1) the facts, (2) people's understanding of the facts, (3) people's attitude or value judgments about the facts, and (4) people's actions related to the facts. For him, an educational need represented an imbalance or gap between what is and what ought to be, and the entire process of Extension education implied a need for change.

The use of individual values forms the basis of a framework for identifying important needs in the community, and helps set priorities for the Extension educator, according to Laverne Forest (1973:24-33). In adapting the Loomis Model to the Extension change agent, he listed
seven value types that the educator needed to consider in analyzing an educational situation: (1) social-psychological, (2) economic, (3) physiological and health, (4) socio-political, (5) educational, (6) environment and natural resources, and (7) ecological relationships. In applying this typology to program development, the change agent is required to answer questions relating to the people's present knowledge level, their feelings, expectations and resources available to conduct an adequate educational program.

Other authors emphasize the importance of good program development by the change agent. Caffarella (1982:6-11) indicated that program development flows from two types of educational needs: (1) prescriptive usually organizational in origin, and (2) motivational - a need deficiency relative to a specific, individually-defined goal. Waddel (1976:5-7) reported the need for a concept approach to program planning by the change agent that should focus more on teaching overall concepts because of the fast pace of new information, changes in clientele situations, and the need to be more flexible as educators. Udell (1975:14-21) and McKenna (1981:9-13) noted the need for on-going program evaluation as part of the agent's program development process to aid in reaching specific goals and showing impact of Extension educational efforts.

Role No. 6. Remaining flexible to meet the needs of clientele has many connotations for the Extension change agent. These include the implication that they will manage their time wisely; that they will set priorities that enable them to focus their energies; and that they will be readily able to respond to clientele at a moment's notice. The McCubbin stress study (1984) found clientele needs/demands caused
the highest amount of reported strain (75% of sample) among Minnesota County Extension Agents. McCubbin (p. 15-17) indicated the demands had no boundaries nor time limits as clientele expected the agents to be on call 24 hours a day. These perceptions, along with the high dedication by the agents, resulted in self-expectations that were not possible to be fulfilled.

Role No. 7. As a professional educator, there are expectations that the County Extension Agent will draw heavily from the research base of the University of Minnesota, a land-grant institution. Agents have demonstrated high use of the resources within the Institute of Agriculture, Home Economics and Forestry, but have tended not to access other parts of the University system. Administrators in Extension continue to emphasize the need for agents to draw resources from the total system.

Role No. 8. Self-development is a more personal role expectation of the County Extension Agent. This starts with organizational orientation and flows through one's entire career as an agent. In Minnesota, Extension has two categories: training - required development sessions that agents must participate in to maintain professional and subject matter skills, and staff development - sessions that are developed to meet expressed needs of agents for personal skill improvement. The latter allows voluntary participation.

Role No. 9. Taking educational "risk" to reach non-traditional Extension clientele has taken on new meaning for agents since passage of the Civil Rights legislation by the U.S. Congress in 1964. Extension writers (Spitze, 1969:95-103; Bielema, 1983:3-9) note that knowing how to communicate with hard-to-reach learners is important for agents
to master, and that programs for these audiences require extra effort in order to be successful. Fear of failure is a real concern of the agents in these situations.

**Individual Needs of Extension Agents**

Many County Extension Agents join the Minnesota Agricultural Extension Service directly from college, and in most cases it is their first full-time job. As a result, they are both trying to meet their own expectations for self-fulfillment and the organizational expectations to deliver quality Extension educational programs.

During the recruitment stage, District Program Leaders (DPLs) tend to look for individuals with solid educational backgrounds in agriculture, home economics, youth and community activities, in addition to an interest in people and a desire to succeed. Candidates for agent positions received a glimpse of the job expectations (and in some cases decided not to seek employment in Extension), but in many cases moved into the selection process with only a foggy notion of what the work was all about, including the change agent role.

Successful candidates soon found that they learned about the job in bits and pieces through new agent orientation, peers and co-workers, and the DPL for their program area. The socialization process was quick, usually incomplete, and somewhat of a shock as clientele demands became a driving force in their lives.

Demands...demands...demands...who do you listen to? The clientele? Co-workers and peers? District Program Leader? They all seem to be saying different things about process, programs and priorities. "Don't panic and you'll survive," your co-workers and peers
tell you. "Hang in there! You've got good potential and can do the job," the DPL encourages. Some new agents panic and leave Extension the first year; most persevere and look for positive feedback from the organization to keep them going as they strive for personal goals, and attempt to become Extension professionals.

The extent to which the field staff succeed as change agents and excel in carrying out the nine change agent roles comes down to three important aspects that are best described in Edward Lawler's expectancy theory (1973) in terms of: (1) the agents' feelings of competence and ability to meet the job expectations, (2) their perception of the rewards, both internal and external, that they will receive for meeting the expectations of the organization, and (3) the belief that if they have the ability, and receive the rewards, it will bring satisfaction.

Feelings of competence and ability are important to meeting the psychological needs of the County Extension Agent. In some cases, they find subject matter training does not match the needs of their clientele very well. Suddenly they find need for better interpersonal skills like public speaking, listening and one-to-one consultations. Each agent has his or her own growth needs, and wants to succeed. Some lack self-esteem; others have high needs for achievement or affiliation. Competence and ability to meet demands of the clientele are essential to the mission, goals and survival of the Minnesota Agricultural Extension Service.

Rewards for being a change agent at the county level include: External - salary, fringe benefits, travel and praise, and Internal - control of own destiny, personal growth and a feeling of achievement. The value of each type of reward is determined by the individual. In
some cases both younger and older workers share the same value for a certain reward; in other cases, their perceptions of the value may differ greatly.

The third aspect of the expectancy theory, job satisfaction, is also important as a motivational factor. Frustration and job seem to fall on the same continuum, and County Extension Agents experience both as they work with clientele, co-workers, peers and the District Program Leader to identify educational needs, create learning experiences, and make a meaningful contribution to the Extension organization.

A number of studies have been done related to the perceptions of workers and what motivates them to perform effectively. Organizations that understand the needs of individuals and develop structures that help workers succeed in accomplishing both personal and work goals will be highly successful.

Research and writings by Abraham Maslow and Frederick Herzberg provide much insight on the growth needs of a County Extension Agent.

Maslow identified a hierarchy of five human needs which he described as deficiency and growth needs (Steers, 1984:140). Deficiency needs include: (1) physiological, the lowest needs that involve food, water and sex; (2) safety needs for freedom from threat, both physical and emotional, and (3) belongingness needs to be loved, have friendships and be accepted by peers. Growth needs involve: (4) esteem and self-worth including recognition and appreciation of personal efforts, and (5) the highest need - self-fulfillment in reaching your full potential as an individual.

Maslow's needs theory implies that the Extension organization in Minnesota should understand what motivates County Extension Agents as
individuals, and try to create work situations where field staff can meet both their personal growth needs as well as attain the goals of the Agricultural Extension Service.

Herzberg (1966:44-78) helps us further understand the basic and psychological needs of the County Extension Agent with his Motivation Hygiene concept. He noted that individuals make an attempt to avoid pain, and described psychological growth needs as self-awareness, knowing more, relationship knowledge and creativity. His work also focused on effectiveness in ambiguous situations and real growth of the individual.

Factors related to satisfaction and dissatisfaction of workers was the prime emphasis of Herzberg's research. He applied the term "hygiene" to describe the environment in which work was done, and looked at what motivated or detracted from a person's desire to do a good job. Strong determiners of job satisfaction included: achievement, recognition, work itself, responsibility and advancement. The dissatisfiers involved company policies, supervision, salary, interpersonal relations on the job, and working conditions.

Richard M. Steers (1984) covers a number of significant points on self and the perceptual understanding that apply to County Extension Agents as workers. These include:

Locus of Control - Each County Extension Agent has a perception about the extent to which he or she has control over the situation they work in. Persons with an Internal Locus believe they have control in determining their work load and using their abilities to reach personal and Extension goals. The opposite, External Locus, is the perception that workers have little control over their own destiny.
Expert Power - Studies show that one of the highest motivators is the feeling of confidence in one's abilities and skills to master the job no matter how difficult it may seem.

Communication - A key factor to attaining organizational goals is effective and timely positive feedback to a worker. Recognition of achievement is important. (If an organization expects educational "risk" taking, then the organization must encourage and support efforts that involve risk.)

Path-Goal - Among the various leadership models, the path-goal model would be beneficial for use with County Extension Agents. This approach helps the worker understand the organizational expectations, learn the essential steps to be successful change agents, and assists them in succeeding at their job.

Reinforcement - This is the psychological component of feedback, and helps County Extension Agents understand their jobs through a sequence of positive suggestions and recognition, and negative cues that identify areas where attitudes and actions of the worker need modification.

Extrinsic-Intrinsic Rewards - Many studies show that money as an extrinsic reward is at best a secondary motivator, and in some cases a dissatisfier. Proper management of the external rewards like salary, fringe benefits and special travel opportunities is important. Basic understanding of intrinsic rewards such as feelings of having achieved a goal is essential to effective supervision of the agents.

Self-Efficacy. Of special note in looking at the self-expectations of County Extension Agents as they carry out the change agent roles is the theory and research related to the concept of self-effi-
cacy. Albert Bandura (1982:122-147) indicates that perceived self-efficacy is concerned with judgments of how well one can execute courses of action required to deal with prospective situations. Workers tend to develop self-knowledge through their experiences. A series of positive successes helps build a sound perception of high self-efficacy in coping with stress and career pursuit. Perceptions of low self-efficacy have the reverse effect.

Bandura's studies indicate that the higher the level of employee self-efficacy the more supervisors can predict high levels of performance and goal accomplishment. Thus, increased mastery of the change agent roles and development of related skills would tend to help County Extension Agents persist until they perceived they had succeeded with a goal-oriented task. The way in which workers set goals is important. Setting proximal sub-goals that are attainable step by step builds self-efficacy, and makes it possible to reach the larger or more distal goals that the agent is striving towards.

Merit System. Although the Minnesota Agricultural Extension Service has always had some form of reward system for County Extension Agents, it was not until the spring of 1981 that a formal merit system was created to stimulate excellence and quality in programming through carrying out the change agent roles. The Assistant Directors for the program areas are responsible for the overall implementation of the merit system, but the actual merit process is conducted by the 12 District Program Leaders (DPLs).

The role of the DPLs in performance evaluation of the agents is to observe each field staff member during the calendar year, review written documentation provided by the agent, and make written recom-
mendations to higher administration on the performance rating for the individual. After confirmation of the rating, the DPL schedules a personal feedback session with the agent to report the merit rating, and reinforces the new performance goals for the individual for the coming year. Merit ratings for Minnesota County Extension Agents range from 7 down to 1 and are defined as follows:

- **7 - OUTSTANDING:** Innovation, evidence of risk, outstanding initiatives, and outcomes
- **6 - VERY GOOD:** Program creativity, excellence in implementation
- **5 - GOOD:** Evidence of programming beyond maintenance level
- **4 - ACCEPTABLE:** Maintenance level of programming with a degree of quality
- **3 - POOR:** Inadequate maintenance of on-going programs
- **2 - PROBATION:** Six months to bring up performance
- **1 - UNACCEPTABLE:** Begin termination procedure

An appeals procedure was also established for the agents in the event they felt the organization had been unfair in assessing their contributions. About 10 to 15 agents appealed during each of the first three years of the merit system, and their situation was reviewed by a special committee appointed by the Director's Office. Only about 10 percent of the cases resulted in improved merit scores above those originally assigned by the supervisor. Salary increases at the end of the year are based on the merit score.

Edward E. Lawler (as reported in Porter & Steers, 1979:525-536) indicates that a merit system based on pay must: (1) create a belief among employees that good performance will lead to higher pay, (2) con-
tribute to the importance of pay, (3) minimize the perceived negative consequences of performing well, and (4) create a condition so positive outcomes other than pay will be seen to be related to good performance. Supervisor and agent trust is the key factor in the success of a merit system. Efforts to keep pay levels secretive may cause some problems for organization attempting to reach goals through a performance evaluation system.

Extension-Related Research

During the course of the literature review, four Extension-related research papers were studied to gain further insights related to the change agent roles and self-expectations of Minnesota County Extension Agents. These included:


Chauhan Study. The overall purpose of the Chauhan study was to measure the perceived effectiveness of Community Resource Development (CRD) committees as part of the change agent process in Louisiana. The
findings revealed that both agents and members perceived that the committees were largely effective in achieving their purposes and functions in giving direction to the special change agent projects at the parish level. The Chauhan study noted that the agent (and his or her enthusiasm) was the primary force in making the committee function well in that they organized, planned and implemented educational change programs in close collaboration with the lay committee. A need was voiced for more educational materials by Extension regarding the development of community services and facilities.

**Little Study.** The overall purpose of the Little study was to determine whether there were significant differences in the perceptions of the Extension program development process by agents, the unit committee chairperson, and Extension supervisors. In looking at the degree of consensus of agreement by the three groups, the study found no differences regarding the need for agents to master educational concepts and develop competencies to carry out the change agent role of effective program development at the local level. Some statistical differences were noted between rural and urban agents' response to the questions on concepts and competencies, and attributed to a difference in program experiences by county agents plus demographic factors.

**Fugler Study.** The primary purpose of the Fugler study was to obtain detailed information regarding job satisfaction, need-deficiencies, and motivation of Extension agents which would be made available for use by supervisors to better deal with the motivational function of their personnel resource development efforts. Findings about job satisfaction showed relatively high satisfaction by the agents, no differences between male and female agents, and the most dissatisfied
agents tended to be in the 4-H program area. Considering all agents, it was found that overall job satisfaction increased with age and years since last promotion. Among the significant need deficiencies identified by the Fugler study were social and esteem deficiencies as 4-H men increased in age, years of service and salary differences increased; and security and self-actualization deficiencies by women agents as salary differences increased.

**Potts Study.** The primary purpose of the Potts' study was to evaluate the County Extension Agent merit performance appraisal system in Ohio. Findings revealed that agents in general did not view performance appraisal as stressful; however, half the agents indicated they had some concern that the key objectives set by their supervisor to aid future performance was of minimal value. Other concerns included a lack of counseling skills by the supervisor. Reports by supervisors noted a concern about the merit scoring system's lack of discriminability between the various levels of performance, and concern that some agents could not write measurable objectives that were realistic. Study recommendations included correction of scoring flaws in the system, and replacement of the appraisal interview in its present form with a series of supervisor-agent counseling interviews throughout the year to improve communication and agent performance.

**Related Work Variables**

In studying the change agent roles and the self-expectations of Minnesota County Extension Agents, six related work variables were identified for this study, and will be described in the following order: (1) organizational commitment, (2) goal setting, (3) job-related
tension, (4) job involvement, (5) internal work motivation, and (6) intrinsic motivation.

Organizational Commitment. Measurement of employee commitment to work organizations has focused on both behaviors and attitudes in recent years. Mowday, Steers & Porter (1979:224-226) define commitment as an attitude state in which an individual identifies with an organization in an exchange relationship between services provided and rewards received. Commitment theory reflects three related factors: (1) a strong belief in and acceptance of the organization's goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization. Employees who are deeply committed to an organization will exhibit all three of these behaviors. As an attitude, commitment is seen as more stable than expressions of job satisfaction because the latter focus on specific task environments rather than the overall response to the organization.

Goal Setting. As a cognitive theory of motivation, goal setting is very complex in nature. Steers (1984:171) indicates that people set goals concerning their future behaviors and these goals influence actual behavior. Edwin A. Locke and Gary P. Latham (1984:5-9) describe a goal as the object or aim of an action, and note that human resource development at the organizational level requires goal setting to produce maximum effectiveness and efficiency.

Strategic goals define the business or service provided by the organization, identify its strengths and weaknesses, analyze the environment, identify threats and opportunities, and give direction to the organization. They have a longer time span and are usually phrased in
The primary purpose of goal setting with individuals is to increase their motivational level toward work tasks. Goals contribute to a person's performance by directing attention and action, mobilizing energy and effort, increasing persistence and developing individual task strategies (Locke & Latham, 1984:27-40).

Steers, in his doctoral dissertation work during the 1970s, identified a number of task-goal attributes that help define the dimensions of an employee's work tasks (Steers & Porter, 1979:510-519). These attributes include: goal specificity, goal difficulty, participation in goal setting, feedback on goal effort, peer competition, and goal acceptance.

Goal Specificity - Most research findings indicate that goal specificity is directly related to increased performance by workers. Goals that are specific and challenging lead to better performance. Locke, et al. (1981, 129-131) noted that subsequent research has supported Locke's 1968 theory that specific, challenging goals do lead to higher output than vague goals like "do your best." Steers reported (1975:400) that individual differences needed to be taken into account as high need achievers responded more readily to specific goals, while low need achievers reacted more to participation in goal setting. The attribute of goal specificity was also found to be positively related to job satisfaction and job involvement (Steers, 1976:10).

Goal Difficulty - Locke, et al. (1981:127-129) reported that in a review of research studies support for Locke's 1968 findings that a positive relationship existed between goal difficulty and task performance (assuming sufficient ability). Steers and Porter (1979) also
verify that studies have consistently shown that difficult goals lead to higher levels of performance, compared to easier goals. Steers (1976:14) notes that "goal difficulty, more than any other attribute represents a statement concerning the degree of effort that is required for goal attainment." He also points out that difficult goals are especially important for high need achievers, but these goals lose their motivational potential without proper reinforcement (1984:172).

Participation - Locke and Latham (1984:111) indicate that participation in setting goals, although it may help with goal acceptance, is not mandatory for goal setting to be effective. They found participation to only motivate higher performance when specific goals are set; however, participation may provide workers with confidence they can attain the goals (pp. 4-19). Latham and Yukl (1975:824-825) reported that participation is effective in some situations but not in others. Steers and Porter (1979:383 & 514) noted that participation in goal setting could be used to build commitment to the organization, but results depend heavily on the personality traits of the individual. Locke, et al. (1981:137) noted participation helped reduce resistance to change.

Feedback - Both learning and motivational theories emphasize that feedback must be given to individuals to maximize their abilities and capacities. Feedback cues tell a person how well he or she is doing a job at the time the work is being done, while summary feedback tells the person about total performance. Locke and Latham (1984:15-85) state that feedback is essential to goal setting and improvement of performance, as little learning takes place without feedback or knowledge of results. Steers (1976:10) found that feedback was related to
job satisfaction, but not related to job involvement. Research studies involving safety rule training, goal setting and knowledge of results (Wallin and Reber, 1984:558; Wallin and Chhokar, 1984:529) found that greater increases in performance could not be attained or maintained without regular feedback to the employees.

Peer Competition - Competition is considered a special form of goal setting in which the performance of another person serves as the goal. Locke and Latham (1984:53) note that competition can inject an element of excitement and challenge into a job and promote pride in accomplishment. Steers (1984:174) raises some cautions about competition, noting that increased amounts of output often occur at the expense of quality. In a study of supervisory performance, Steers (1975:399) reported no relationship between competition and goal performance for low need achievers, and a negative effect on performance for high need achievers because "external pressure to perform may indeed only serve to distract his attention away from his own self-energized goal-directed efforts."

Acceptance of Goals - Locke et al. (1981:143) indicate that goal acceptance and commitment are similar though distinguishable concepts. Commitment implies determination to try for a goal. Acceptance implies that a worker has agreed to commit him or herself to a goal assigned by another person. Steers (1984:174) points out that congruence on task goals and the person's aspiration level toward the goal influences performance. He notes: "The fact that the managers accept the goals is clearly no reason to believe the employees will accept them." Erez et al. (1985:50-66) found that goal acceptance increased with participation, and influenced performance because of the acceptance.
Job-Related Tension. Kahn, Wolfe, Quinn and Snoek (1964) did extensive studies in looking at the nature, causes and consequences of organizational stress in terms of role conflict and role ambiguity. They define role conflict as the feeling of being caught in the middle between two conflicting persons or factions; whereas role ambiguity deals with uncertainty about how supervisors view employee's work, opportunities for advancement, scope of responsibility, and expectation that others have for job performance by the individual.

The authors (pp. 44-89) note that key factors for job-related tension include clarity of job definition, uncertainty about limits of own authority, expectations of others, conflicting demands from role senders, and amount of pressure for changing either the quality or the quantity of work. Among the consequences for role stress are lowered morale for the worker due to loss of self-esteem, increased anxiety because of uncertainty, and general feelings of futility. Evaluative feedback is seen as essential to building the self-confidence of the worker, and overcoming the emotional aspects of role conflict and role ambiguity in the workplace.

Job Involvement. The degree to which a person identifies psychologically with work, or the importance of work in total self-image is referred to as job involvement. Lodahl and Kejner (1965:24-33) emphasize that job involvement is the "internalization of values about the goodness of work or the importance of work in the worth of the person, and perhaps it thus measures the ease with which the person can be further socialized by an organization." The authors indicated that job involvement appeared factorially independent of other job attitudes, is relatively stable over time, affected little by changes in the work or-
ganization, and somewhat related to social nearness of other workers. A job-involved person is one for whom work is a very important part of life, and contributes heavily to self-esteem. However, Lodahl and Kejner noted (p. 25) that being job involved does not necessarily mean that workers are happy with their jobs. They concluded that job involvement was a multi-dimensional attitude that could be scaled with adequate but not high reliability.

Internal Work Motivation. Hackman and Oldham (1975:159-170) did much study of the factors relating to worker motivation with their Job Diagnostic Study. Among personal outcomes found in the research was internal work motivation, which they defined as the extent to which the employee is self-motivated to perform effectively on the job, and experiences positive internal feelings from performing well, and negative internal feelings when doing poorly. Major focus of the study was on five core job dimensions, and three critical states that related to on-the-job outcomes, and had impact on worker motivation.

Job dimensions were described as follows:

Skill Variety - The degree to which a job requires a variety of different activities in carrying out the work, and allows for using a number of skills and talents of the employee.

Task Identity - The degree to which the job requires completion of a whole and identifiable piece of work from beginning to a visible outcome.

Task Significance - The degree to which the job has a substantial impact on the lives or work of other people either within the organization or the clientele and the external environment.

Autonomy - The degree to which the job provides substantial free-
dom, independence, and discretion to the employee in scheduling the work and determining procedures to be used in carrying it out.

Feedback - The degree to which carrying out the work activities required by the job results in the employee obtaining direct and clear information about the effectiveness of his or her performance.

In addition, Hackman and Oldham (p. 162) described two supplementary dimensions: Feedback from agents - the degree to which the employee receives clear information about his or her performance from supervisors and co-workers, and Dealing with others - the degree to which the job requires them to work closely with other people in carrying out the work activities.

The authors described the critical psychological states for an employee as: (1) Experienced meaningfulness of the work - the degree to which they experience the job as one which is generally meaningful, valuable and worthwhile; (2) Experienced responsibility for work outcomes - the degree to which the employee feels personally accountable and responsible for the results of the work he or she does; (3) Knowledge of results - the degree to which the employee knows and understands, on a continuous basis, how effectively he or she is performing on the job.

**Intrinsic Motivation.** Studies by Lawler and Hall (1970:305-312) focused on intrinsic motivation as a function of the degree to which a person feels the satisfaction of a higher order need is dependent on job performance of the individual. They found that intrinsic motivation was both a function of job holder characteristics and job characteristics. Important factors included a chance for the employee to use abilities, be creative, and do the things he or she does best.
Sociological Concepts

In addition to the social change process discussed earlier in this chapter, two other concepts from Sociology give further focus to the role of the County Extension Agent in educational change. These include the concepts of innovation and the ethics of development.

Innovation. Everett M. Rogers (1983:7-24) defines social system as a set of interrelated units that are engaged in joint problem solving to accomplish a common goal. He notes that for many years the Cooperative Extension Service acted as a centralized diffusion system for disseminating information that resulted in technical innovations in the agricultural sector (example hybrid seed corn). However, in recent years, a number of relatively decentralized diffusion systems (including non-experts) have been found to represent an appropriate alternative to centralized diffusion for farm ideas in a number of situations.

The dilemma for Extension is two-fold and related. First, the rapid changes in technology and the improvement of communication techniques have resulted in increased demands by clientele because of their awareness of agricultural and consumer innovations which has put pressure on County Extension Agents to be "experts" instead of generalists in their field. Second, as a result of dissatisfaction being voiced by the farm sector and a growing urbanization of the nation's population, some serious questions are being raised about the viability of the Extension organization as an educational change unit in this day and age.

Earlier, it was noted that the stages of the adoption of new ideas by individuals involves knowledge, persuasion, decision and confirmation (Rogers, 1964). In organizations, diffusion innovation process
is divided into two categories: initiation and implementation (Rogers, 1983:347-370). Initiation involves agenda-setting and matching. Implementation involves redefining/restructuring, clarifying and routinizing. Rogers emphasizes that the sequence of these stages must be followed in order with each stage involving a particular range of events, actions and decisions made at various points.

Initiation involves information-gathering, conceptualizing, and planning for the adoption of the innovation. It features agenda-setting where an organizational problem is recognized, defined and an innovative idea is sought as a possible solution; and matching where the fit between the need identified, the agenda, and the idea are tailored to meet the organizational need.

Implementation involves the events, actions and decisions that need to occur to put the innovation into use. It includes redefining the idea to fit the particular situation and modifying the structure of the organization to accommodate the idea. This stage also clarifies the innovative idea to give meaning to staff members. If successful adoption occurs, the identity of the innovation disappears, and it becomes an on-going part of the organization.

Open systems theory tells us that an organization, like Extension, is in constant interaction with its environment, which provides resources for survival, receives organization outputs, and returns feedback to let the organization know about the quality of its product (Jenkins, 1984). It is important to understand this environmental setting when proposing innovation within the organization, giving direction and feedback to County Extension Agents, and diffusing new ideas with Extension clientele.
Ethics of Development. In recent years, an increasing focus has been given to the ethics of development. Peter L. Berger (1976) puts this discussion in the context of who benefits and who decides when pursuing development through human change at the domestic and international levels. "Every human being knows his own world better than any outsider, including the expert who makes policy (p. xiii)," Berger contends, and goes on to emphasize that within the "myth of growth" the change agent has recommended changes in the name of progress that often have not been beneficial for the individual at both domestic and international levels (pp. 18-21). He urges change agents to weigh the human costs of development, and assure cognitive participation of the target clientele if we are going to have meaningful development.

One of the criticisms of the land-grant university (of which the Extension Service is a part) by James Hightower (1973) was that much research and extension of information was tied to commercial interests to the detriment of farmers and persons in the rural areas of the United States. Among the Paradox of Success (1984) that flowed from this development was crop over production and low farm prices that have added to the farm sector crisis of today.

Additional Concepts

Social organizations like the Minnesota Agricultural Extension Service differ from business organizations in terms of the expectations of society, and the extent to which they can quantify attainment of goals. The principles of education, management and leadership that have special application to the change agents in the Extension organization include the following:
Education. Among the models for Extension education is the framework developed by Ralph W. Tyler (1949). This approach to curriculum development, which makes change agents think in terms of the learner, flows from basic questions like: what is the purpose of what is being taught, what are the specific objectives (in terms of behavior outcomes) that the learner should attain, how do you effectively organize the learning experience, and how do you know you have reached the objectives (formative and summative evaluation).

As part of the Tyler approach, the role of the educator is to (1) identify what is the current ability and understanding of the intended learner as a basis for initial instruction, (2) develop a sequence of steps that repeat the essential information related to the objectives, (3) broaden the learning experience (continuity) to allow for more complex interaction with the subject matter, and (4) develop situations where the learners can integrate the new knowledge with practical application to their work (or real life).

Robert F. Mager (1984) provides additional insights on how the change agent can prepare instructional objectives to move learners in desired directions; while Norman E. Gronlund (1978) gives focus to using taxonomies of educational objectives regarding the cognitive, affective and psychomotor domains. Again the focus is on how people learn, and helping the change agent design learning experiences.

In looking at the education of adults, Malcolm S. Knowles (1980) indicates the single, most effective teaching device available to teachers is the example of their own behavior. He urges the Extension educator to dialogue with books, and create an atmosphere of self-directed study that is established within a climate of mutual inquiry.
Management. Concepts from management that appear to give additional focus to the study of the educational change agent will be discussed at this point in the following order: (1) control process, (2) work ethic, (3) cognitive approach, (4) conditioning, (5) counseling, (6) conflict, and (7) stress and strain.

1. Control Process - Every organization needs a good control process to be efficient and effective in meeting its goals (Harris, 1985; Podsakoff, 1982; Soileau, 1985). The following six aspects of this process have direct application to Extension work:

   Determination of organizational objectives,
   Establishing desired performance standards for each position,
   Measuring actual performance against expected performance,
   Communicating results back to the individual,
   Taking corrective action, and
   Rewarding, penalizing or ignoring behavior.

   Among the many functions of the control process are: integrating and coordinating the efforts of individuals; providing protection, feedback and equitable distribution of rewards and penalties; and enhancing communication between supervisors and workers.

   Three stages of dealing with the control process include: you will perform, you should perform (what and why to do), and you must perform (penalties, threats). Corrective action involves oral reprimand, written reprimand, penalty (and possible discharge). Disciplinary action should be immediate, impersonal, consistent with warning.

2. Work Ethic - There is much concern about the status of the work ethic in America (L. Jones, 1980). Some management observers feel that the old dedication to work is lacking in the younger generation.
Others note the desire for achievement is no less in younger workers, but that their expectations in the workplace are different. Work expectations of younger people tend to focus more on self-fulfillment through their jobs, participation in decisions relating to their work, and fairness in treatment. The older generation tends to live two separate lives; one at work and one at home.

Studies of the Baby Boom Generation (born 1946-1964) have noted that this group is more mobile and better educated, and has a better self-concept, as well as more money to spend than their older counterparts. Some pressures are expected to increase between age groups during the next 10 years as the younger generation pushes for positions of responsibility, and the older generation decides to extend their working careers to age 65, 70 or beyond.

3. Cognitive Approach - There are two basic approaches to motivation described in the literature: cognitive and acognitive (Steers, 1984; Behling, 1976; Miner, 1980).

The cognitive approach is based on the belief that workers are basically goal oriented. They strive to accomplish specific things. Workers are aware of the goals they are trying to fulfill. They make what they believe to be rational decisions regarding their work efforts. Both Equity Theory and Expectancy Theory are based on this concept.

The acognitive approach is stimulus-response oriented. It is based on the belief that what people want is not important. Reinforcement of their good actions is the key to this concept. The theory developed by B. F. Skinner and others fall in this category.

In Extension work, only the cognitive approach is of real value to the educational change agent. Writers in this area indicate that
managers need to keep the individual in a high motivational state to be successful with the cognitive approach. They propose a balance that: (1) lines up the personal and organizational goals so they coincide, (2) provides attractive incentives that pull an individual's behavior in the right direction, (3) allows for individual differences, and (4) rests on the understanding that promised rewards must be given when earned or satisfaction cannot occur.

In the cognitive context, each employee weighs the probability of successfully completing the job, puts a value on the incentive, makes a decision to act or refrain from acting, evaluates the outcome, and then determines the satisfaction (which comes after performance).

4. Conditioning - In management, teaching is defined as conveying ideas, skills, procedures and behaviors. Conditioning is described as trying to insure that the desired type of work behavior will be developed or continued, and the undesirable behaviors will be eliminated. This involves equipping staff with correct attitudes, skills and knowledge to carry out the roles of the position (Harris, 1985; Wanous, 1984; Miner, 1980; Steers, 1984).

Conditioning of an individual in an organization is based on a sequence of training needs that include: (1) organization analysis to determine the mission and goals, (2) operational analysis to determine the needed activities, knowledge and skills required to carry out the organizational goals, and (3) individual analysis to review the knowledge, skills and abilities of each employee.

Four techniques are involved in conditioning and behavior reinforcement. These are described as:

Positive Reinforcement - After a desired behavior is exhibited,
an attractive reward is given (thus strengthening the behavior).

Extinction - No reinforcement of any kind is given after a behavior (which influences its discontinuance).

Negative Reinforcement - After a desired behavior is exhibited, an unattractive consequence is removed.

Punishment - After an undesired behavior, a penalty is applied to weaken this type of behavior.

5. Counseling - Organizations are finding that counseling is becoming increasingly important in developing the full potential of employees (Steers, 1984; Harris, 1985). There are three types of counseling techniques: directive, nondirective and integrative.

Directive - This is counselor centered. The counselor does most of the talking and controls the discussion. Counselors ask questions and offer solutions.

Nondirective - Counselee centered with the counselor indicating interest, serving in a supportive role, and encouraging the worker to talk about what he or she has on their mind.

Integrative - Neither counselor nor counselee dominates the discussion. There is equal give and take with both asking questions and offering solutions.

There seems to be much support to going the nondirective route when County Extension Agents are counseled by District Program Leaders. Key elements of this technique include: (a) trying to get feelings out into the open, (b) trying to establish the facts, and (c) trying to get solutions from the counselee's perspective.

6. Conflict - Controversy and conflict within an organization is expected between individuals in the workplace, but management needs
to deal with tense situations in a constructive manner (House & Rizzo, 1972: Harris, 1985: Soileau, 1985). There are four main types of conflict in organizations: (1) goal conflict – differences in desired outcomes, (2) cognitive conflict – differences in ideas and opinions, (3) affective conflict – where feelings and emotions are not compatible, and (4) behavioral conflict – doing something that is not acceptable to others.

A number of organizational factors contribute to conflict, including ambiguity over who has authority or responsibility, status differences, linking of tasks, scarce resources, performance systems, and individual differences. Effective conflict resolution requires strategies that are problem solving in nature to identify causes, alternatives, consequences, and best possible solutions.

7. Stress and Strain - Management articles describe stressors as things that create pressure on individuals because they feel they have little or no control over a person or situation. The personal reaction to a stressor is called a strain in the individual (Bhagat, 1985; Brookings, 1985; Nicola, 1984; Keenan, 1985; Sailer, 1982; and Schuler, 1980).

There are four general categories of stressors: (1) time stress – the feeling that something must be done before a certain deadline, (2) anticipatory stress – generalized fear about an upcoming event, (3) situational stress – finding oneself in a threatening situation, and (4) encounter stress – anxiety about dealing with one or more persons that are perceived as difficult to work with.

Work overload and work underload (as extremes) are seen as contributing to stress forces on the individual. These include factors
like temperature, noise, variety on the job, accountability, and mental challenge. Most comfort is found in zones between the extremes.

Stress experts note that an optimum level of stress is desirable in a healthy organization, but extremes result in employee irritation, anger, discomfort, and health problems for the individual. Supervisors can help reduce stress levels by opening up communication lines, avoiding rigid application of rules, and creating an atmosphere of trust and fairness.

Leadership. This chapter has reviewed the literature relevant to this dissertation in terms of the Extension organization, change agent theory, role expectations and individual needs of Minnesota County Extension agents, related work variables, and Sociology, Education and Management concepts that impinge directly and indirectly on the self-expectations of the agents to carry out their roles effectively.

In concluding the review, it is essential to focus on the essence of leadership as it pertains to the effectiveness of the agent. A good definition for leadership regards it as influencing and shaping the direction of other individuals. This implies that leadership transcends the concept of management (which has the focus on getting individuals and groups together to do the work of the organization). Therefore, the essence of leadership is to activate, stimulate, motivate and direct individuals and groups in an organization to achieve goals established for the "good" of that organization (Soileau, 1985; Stogdill, 1974; Yukl, 1977; McElroy, 1982).

James MacGregor Burns (1978) noted two basic types of leaders; transactional and transformational. He described the transactional leader as one who excels in "deal making" between individuals. This
implies a short-term relationship in which the persons engage to barter or exchange resources based on their individual motives. Once the deal is completed the transaction ends, and one or both of the individuals go off to transact other deals.

In comparison, Burns indicated that the transforming leader engages in an exploitation approach that involves converting wants of the individual in an organization into needs that match the expectation of the leader in striving to reach the mission and goals. This process implies a mutual relationship that motivates the worker to achieve certain purposes, as it focuses on the "greater good" of reaching a new level of achievement. Burns tends to prefer this type of leader.

Among the consequences of transactional leadership are abuse by, and unfair advantage for the transactors over other persons who can not operate in that fashion within the organization. On the other hand, there are some ethical questions regarding manipulation of individuals by the transforming leader who makes use of basic wants, beliefs and values, and molds them in the direction of goals he/she wishes to attain in the name of the organization.

Regardless of the type of leader, Peters (1982) indicates there are seven key elements that leaders must emphasize in striving to develop organizational excellence (and maximize the effectiveness of the educational change agent). These include: (1) being measurement and performance oriented, (2) acknowledging that the person doing the job knows more about it than you do, (3) trusting the people you work with, (4) communicating face to face, (5) carrying on intensive training to develop the persons in the organization, and (6) putting some fun in the employee's work enroute to organizational goals.
III. METHODOLOGY

"Perceptions of Nine Change Agent Roles and Related Work Variables by County Extension Agents in the Minnesota Agricultural Extension Service - 1985" is a descriptive study of the most important roles and most appropriate work variables that could help explain the self-expectations the agents have of themselves.

This study is an outgrowth of research done in 1984 by Hamilton McCubbin and Joan Patterson on "Minnesota County Extension Agents: Stress, Coping and Adaptation," which described expectations of clientele as the greatest stressor (75%) and "expect too much of self" as the second most frequent response (70.5%) about what was causing feelings of strain in the agents. The focus is on the latter aspect.

The operational objectives that give impetus to the methodology for this study are as follows:

1. Determine the most important change agent roles that the Extension organization expects County Extension Agents to carry out, and measure their relative importance among these agents.

2. Acquire appropriate, validated scales to measure several work-related variables that appear to have a bearing on the self-expectations of County Extension Agents as they carry out their roles.

3. Collect data to infer or generalize about the concept "expect too much of self."

Change Agent Roles. The nine change agent roles identified in this study are drawn from an October 1980 document issued by Director
Norman A. Brown as a "Proposal for Restructuring and Policy Change" of the Minnesota Agricultural Extension Service, and defined below:

1. Teach Problem Solving Skills

The process of providing Extension clientele with skills that help them solve their own problems.

2. Alternative Delivery Systems

The process of developing approaches for assisting Extension clientele in addition to meetings and one-to-one consultations.

3. Interest in Issues

The process of keeping aware of issues at the state, regional (i.e. neighboring states) and national levels that also have impact on Extension clientele at the county level.

4. Involve Volunteers

The process of recruiting, selecting, training and giving volunteers a significant role in the delivery of Extension educational programs.

5. Good Program Development

The process of identifying educational needs with Extension clientele, setting priorities, implementing and evaluating learning experiences, and reporting results.

6. Remain Flexible to Meet Needs

The process of remaining in touch with and reacting to the immediate and changing needs of Extension clientele.

7. Access Resources of Total University

The process of going beyond the Extension-related units of the University of Minnesota (including its branches) to acquire information and expertise to meet the needs of Extension clientele at the county level.

8. Self-Development Plan

The process of maintaining and improving subject matter and personal skills to continue your effectiveness as a County Extension Agent.

9. Educational "Risk Taker"

The process of trying new educational approaches and attempting to work with non-traditional clientele where there is "risk" in terms of the educational outcomes not being successful.
Initial verification of the nine change agent roles was made based on the researcher's experience as an acting district supervisor for 33 months during 1978-81, conversations with several district program leaders in the Minnesota system, and outside validation by direct contacts with two district supervisors from other states (i.e. Dr. Alvia Fugler of Louisiana Cooperative Extension Service, and Dr. Maurice Cole of Florida Cooperative Extension Service.)

Two instruments were developed by the researcher to measure the relative importance of the nine change agent roles as perceived by Minnesota County Extension Agents (Appendix A).

The first instrument listed the nine roles and requested the respondent to rate them on a four point scale from (1) seldom or never important to (4) very important. Means for each role were analyzed to describe the relative importance as perceived by the County Extension Agents that responded. A principal factor analysis with a varimax rotation was done to explore clusters of roles, and provide a correlation matrix that verified role independence. Factors were analyzed using the Statistical Package for the Social Sciences (SPSS) at Louisiana State University (Appendix D).

The second instrument developed by the researcher listed the nine roles and requested respondents to rank them from (9) least important to (1) most important with each role given a different number. The analysis of variance was done for the ranking scale using the Statistical Analysis System (SAS) at Louisiana State University. A .05 level of significance was established for all the scales in this study.

Six independent variables were selected by the researcher for use with the ranking analysis and the work-related variables chosen for
this study. The independent variables used included the following personal characteristics of the County Extension Agents in Minnesota:

1. PROGRAM AREA - Agriculture, Home Economics, 4-H Youth
2. TOTAL YEARS with Minnesota Agricultural Extension Service
   0 to 5       6 to 10       11 to 20       21 and Over
3. COUNTY EXTENSION DIRECTOR (CED) - Yes or No
4. DEGREES - Bachelors or Advanced Degree
5. CRAGUN'S (attended "change agent" conference): Yes or No
6. DISTRICT - Northeast, Northwest, Southeast, Southwest

The first nine null hypotheses for the study relate to the agent's ranking of the nine roles, and are stated as follows:

Null Hypothesis No. 1

There are no differences between County Extension Agents' ranking of the role "The Change Agent should teach problem solving skills" based on the six personal characteristics.

Null Hypothesis No. 2

There are no differences between County Extension Agents' ranking of the role "The Change Agent should develop alternative delivery systems for educational programs" based on the six personal characteristics.

Null Hypothesis No. 3

There are no differences between County Extension Agents' ranking of the role "The Change Agent should take interest in state, regional and national issues" based on the six personal characteristics.

Null Hypothesis No. 4

There are no differences between County Extension Agents' ranking
of the role "The Change Agent should involve volunteers" based on the six personal characteristics.

Null Hypothesis No. 5

There are no differences between County Extension Agents' ranking of the role "The Change Agent should create a good program development process" based on the six personal characteristics.

Null Hypothesis No. 6

There are no differences between County Extension Agents' ranking of the role "The Change Agent should remain flexible to meet the needs of Clientele" based on the six personal characteristics.

Null Hypothesis No. 7

There are no differences between County Extension Agents' ranking of the role "The Change Agent should access the resources of the total University system" based on the six personal characteristics.

Null Hypothesis No. 8

There are no differences between County Extension Agents' ranking of the role "The Change Agent should have a self-development plan" based on the six personal characteristics.

Null Hypothesis No. 9

There are no differences between County Extension Agents' ranking of the role "The Change Agent should be an educational 'risk' taker" based on the six personal characteristics.

Due to the independent nature of the ranking items on this scale, an accurate reliability rating could not be attained. Face validity of the nine change agent roles was discussed on page 50. Post hoc comparisons of the significantly different means were done using the Scheffe' and Waller-Duncan methods (Appendix E).
**Work-Related Variables.** A telephone interview was conducted with Dr. Hamilton McCubbin, author of the 1984 stress study, to help determine the appropriate work related variables to be included in the dissertation study. As a result, the following dependent items were selected:

- **ORGANIZATIONAL COMMITMENT**
- **GOAL SETTING**
- **JOB-RELATED TENSION**
- **JOB INVOLVEMENT**
- **INTERNAL WORK MOTIVATION**
- **INTRINSIC MOTIVATION**

The null hypotheses and origin of each work-related scale for the study is presented as follows:

**ORGANIZATIONAL COMMITMENT**

The scale to be used for this analysis was developed by Porter and Smith (1970) as a measure of employee attitude regarding commitment to the organization. It contains 15 items, six of which are negatively phrased and reverse scored. There is a seven-point Likert response scale. The scores for each item are totaled and a mean score calculated. A high mean indicates high commitment to the organization.

Internal reliability for the commitment scale has ranged from 0.82 to 0.93 in various work settings, according to Cook (1981:84) in a review of work-related scales. The hypothesis is stated as follows:

**Null Hypothesis No. 10**

There are no differences between County Extension Agents' commitment to the Minnesota Agricultural Extension Service based on the six personal characteristics.
GOAL SETTING

Hypotheses No. 11 through 15 relate to goal setting aspects of the task-goal attributes scale which was developed by Richard M. Steers as part of his doctoral dissertation work in 1973 (Steers & Porter, 1979). It includes 16 items divided into five categories. A seven point response is used with terms ranging from strongly agree to strongly disagree, and four items are reverse scored. A mean value is calculated for each sub-scale. Internal reliability for each sub-scale ranged from 0.68 to 0.81, according to a review of work scales (Cook, 1981:211).

The goal setting hypotheses are stated as follows:

Null Hypothesis No. 11

There are no differences between County Extension Agents' perceptions regarding goal specificity based on the six personal characteristics.

Null Hypothesis No. 12

There are no differences between County Extension Agents' perceptions regarding goal difficulty based on the six personal characteristics.

Null Hypothesis No. 13

There are no differences between County Extension Agents' perceptions regarding participation in goal setting based on the six personal characteristics.

Null Hypothesis No. 14

There are no differences between County Extension Agents' perceptions regarding feedback on goal effort based on the six personal characteristics.
Null Hypothesis No. 15

There are no differences between County Extension Agents' perceptions regarding peer competition based on the six personal characteristics.

JOB-RELATED TENSION

The job-related tension scale is an adaptation by Kahn, Wolfe, Quinn and Snoek (1964) of previous research related to organizational stress. A 15-item scale is used with respondents indicating how frequently they are bothered by specific features of work. Their answers are scored from 1 to 5, and a mean is calculated for all the items. A high mean indicates a feeling of high tension at work. A review of work-related scales by Cook (1981:100) notes an internal reliability of 0.87 for this scale. The hypothesis is stated as:

Null Hypothesis No. 16

There are no differences between County Extension Agents' perceptions regarding job-related tension based on the six personal characteristics.

JOB INVOLVEMENT

The three item scale for job involvement was developed by Thomas Lodahl and Mathilde Kejner (1965) as part of their research on how persons identify with their work. Responses are scored from 1 to 7 and range from strongly disagree to strongly agree. A mean is taken across all items with a high mean indicating high job involvement. Internal reliability in one study was noted as 0.62 in a review of work-related scales by Cook (1981:121).

The hypothesis is stated as follows:
Null Hypothesis No. 17

There are no differences between County Extension Agents' perceptions regarding job involvement based on the six personal characteristics.

INTERNAL WORK MOTIVATION

The authors of this scale (Hackman & Oldham, 1975) describe internal work motivation as the degree to which employees are self-motivated to perform their jobs effectively. Six items are included with one reverse scored. Responses range from strongly disagree to strongly agree and are scored 1 to 7 with a high mean across all the items indicating high internal work motivation. Internal reliability was reported for a number of studies with a range of 0.69 to 0.75, according to a review of work scales by Cook (1981:122-123). The hypothesis is stated as follows:

Null Hypothesis No. 18

There are no differences between County Extension Agents' perceptions regarding internal work motivation based on the six personal characteristics.

INTRINSIC MOTIVATION

A four-item scale was developed by Lawler and Hall (1970) to measure employee motivation to perform based on rewards or feelings as a result of performing well. A seven-point response ranging from strongly disagree to strongly agree (1 to 7) is used and a mean is calculated. A high mean indicates high intrinsic motivation. Review of the literature did not reflect any statements about the internal reliability of this scale. The hypothesis is stated as follows:
Null Hypothesis No. 19

There are no differences between County Extension Agents' perceptions regarding intrinsic motivation based on the six personal characteristics.

Data Collection. The population for this study was all 253 County Extension Agents who were listed in the March 15, 1985 state directory of the Minnesota Agricultural Extension Service. They are college-educated men and women who are employed in the 91 county Extension offices, and have responsibilities in agriculture, home economics-family living, 4-H youth development, and community and natural resource development (CNRD).

For this study, the agents were grouped into three program areas because only a few agents had major CNRD assignments of 50 percent or more. The CNRD agents and a number of other County Extension Agents with 50-50 appointments in agriculture/4-H or home economics/4-H were assigned (based on their educational background) to the most relevant program area. In addition, agents were grouped by the four Extension districts, but not identified by county or program area at that level.

Based on the Portman (1975) sampling tables, it was determined that a response from 152 agents, stratified within the three program areas and representative of the proportion of agents in the four Extension districts was required to make an adequate study.

A 10-page questionnaire was designed (Appendix C) to collect the data through the mail. The components of the survey instrument included a page to gather demographic data regarding the six personal characteristics of the agents, a page on change agent definitions, and the six sections of scales described earlier in this chapter.
The questionnaire was pretested with 20 County Extension Agents in Minnesota, and modification of the instructions for the change agent ranking scale were made during the month of April, 1985.

Final version of the questionnaire was mailed from Baton Rouge, Louisiana, on May 1, 1985, with a cover letter from Dean and Director Patrick J. Borich of the Minnesota Agricultural Extension Service to encourage participation in the study (Appendix A). Responses were mailed back to Baton Rouge in a return stamped envelope. Identity of the respondents was kept confidential through assignment of code numbers to each individual. A follow up mailing was conducted on May 31 using a cover letter signed by the researcher (Appendix B). The respondents' check list was destroyed on July 1, 1985, so that no data in the computer could be traced back to the county level.

Data for all the work-related variables was studied using the general linear model from the Statistical Analysis System at LSU.

Limitations of the Study. There are three primary limitations to this doctoral dissertation study, as follows:

1. There are no scales that measure self-expectations of persons at work in and of themselves, and it was not the intent of this study to develop a new scale that measured these self-expectations.

2. The entire study is based on self-report scales as dependent variables, and used six personal characteristics of the respondents as the independent variables.

3. The study is not tied to organizational performance data which could be used to compare the response patterns of agents to their effectiveness as change agents as determined by the merit reward system of the Minnesota Agricultural Extension Service.
IV. ANALYSIS OF DATA

A total of 253 questionnaires were mailed to Minnesota County Extension Agents on May 1, 1985. Five questionnaires were returned with notes that the agent was no longer on staff or on special leave from the office and not available to participate in the study. Of the remaining 248 agents on active status during the six week survey period, a total of 230 usable questionnaires (92.75%) were returned and included in the statistical analysis.

The number of returns met the requirement for a minimum of 152 responses, according to the Portman (1975) sampling tables. Non-respondents tended to be divided equally across program areas and Extension districts. Respondents represented a good mix of male-female and administrative/non-administrative agents in Minnesota.

(Note is made that the respondents were grouped into three program areas: Agriculture, Home Economics-Family Living, 4-H Youth Development because of the small number of County Extension Agents with Community and Natural Resource Development (CNRD) assignments.)

Personal data for the 250 agents who participated in the study is displayed in Table No. 1 (page 60). This includes the six personal characteristics used as independent variables for the study: (1) Program Area, (2) Total Years Service, (3) County Extension Director or not, (4) Educational Degrees, (5) Attended CNRD Conference or not, and (6) Extension District; plus gender and age distributions which were considered to be overlapping characteristics with the other six items.
TABLE 1
DEMOGRAPHIC CHARACTERISTICS OF AGENTS IN STUDY
\((n = 230)\)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROGRAM AREA:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>84</td>
<td>36.52</td>
</tr>
<tr>
<td>Home Economics</td>
<td>77</td>
<td>33.48</td>
</tr>
<tr>
<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
</tr>
<tr>
<td>TOTAL YEARS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 5</td>
<td>71</td>
<td>30.87</td>
</tr>
<tr>
<td>6 - 10</td>
<td>64</td>
<td>27.83</td>
</tr>
<tr>
<td>11 - 20</td>
<td>53</td>
<td>23.04</td>
</tr>
<tr>
<td>21 - 39</td>
<td>42</td>
<td>18.26</td>
</tr>
<tr>
<td>COUNTY DIRECTOR:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>84</td>
<td>36.52</td>
</tr>
<tr>
<td>No</td>
<td>146</td>
<td>63.48</td>
</tr>
<tr>
<td>DEGREES:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>153</td>
<td>66.52</td>
</tr>
<tr>
<td>Masters</td>
<td>77</td>
<td>33.48</td>
</tr>
<tr>
<td>CNRD - CRAGUNS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>73</td>
<td>31.74</td>
</tr>
<tr>
<td>No</td>
<td>157</td>
<td>68.26</td>
</tr>
<tr>
<td>DISTRICT:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>56</td>
<td>24.35</td>
</tr>
<tr>
<td>Northwest</td>
<td>50</td>
<td>21.74</td>
</tr>
<tr>
<td>Southeast</td>
<td>69</td>
<td>30.00</td>
</tr>
<tr>
<td>Southwest</td>
<td>55</td>
<td>23.91</td>
</tr>
</tbody>
</table>

Additional Information
Gender: 116 females, 114 males = 230
Age of Respondents: Under 30 = 60  30 to 40 = 90
                  41 to 50 = 48  51 & Over = 32
Format. This chapter presents only the statistical findings of the study. Narrative interpretation of the findings is included in Chapter V. Sequence of the statistical presentation is as follows:

- **RATING OF CHANGE AGENT ROLES**
- **RANKING OF CHANGE AGENT ROLES**
- **ORGANIZATIONAL COMMITMENT**
- **GOAL SETTING**
- **JOB-RELATED TENSION**
- **JOB INVOLVEMENT**
- **INTERNAL WORK MOTIVATION**
- **INTRINSIC MOTIVATION**

Analysis was done using the Statistical Analysis System (SAS) and Statistical Package for the Social Sciences (SPSS) at Louisiana State.

**RATING OF CHANGE AGENT ROLES**

The nine change agent roles described in this study were drawn from an October 1980 document issued by Norman A. Brown, who served as Dean & Director of the Minnesota Agricultural Extension Service from 1980 to 1984. Face validity for the roles came from conversations and interviews with present and former district supervisors in the Minnesota system, and were further verified by contacts with two district supervisors outside the system in other states (Louisiana and Florida).

The rating scale for the roles was developed by the researcher using a four-point response that ranged (1) seldom or never important, to (4) very important (Appendix A). Means were calculated for each of the nine roles, and area presented in Table No. 2 (page 62). Analysis included a principal factor study with a varimax rotation to explore clusters of roles and a correlation matrix to verify item independence.
TABLE 2
CHANGE AGENT ROLES RATING BY ALL AGENTS

<table>
<thead>
<tr>
<th>Description of Role</th>
<th>(n = 230)</th>
<th>Mean*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role No. 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should teach problem solving skills</td>
<td></td>
<td>3.74</td>
</tr>
<tr>
<td>Role No. 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should develop alternative delivery systems for educational programs</td>
<td></td>
<td>3.53</td>
</tr>
<tr>
<td>Role No. 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should take interest in state, regional and national issues</td>
<td></td>
<td>3.23</td>
</tr>
<tr>
<td>Role No. 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should involve volunteers</td>
<td></td>
<td>3.49</td>
</tr>
<tr>
<td>Role No. 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should create a good program development process</td>
<td></td>
<td>3.67</td>
</tr>
<tr>
<td>Role No. 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should remain flexible to meet the needs of clientele</td>
<td></td>
<td>3.79</td>
</tr>
<tr>
<td>Role No. 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should access the resources of the total University system</td>
<td></td>
<td>3.29</td>
</tr>
<tr>
<td>Role No. 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should have a self-development plan</td>
<td></td>
<td>3.44</td>
</tr>
<tr>
<td>Role No. 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Change Agent should be an educational &quot;risk&quot; taker</td>
<td></td>
<td>3.30</td>
</tr>
</tbody>
</table>

*KEY: (Range = 1.00 to 4.00. Higher Mean = Higher Importance of Role)
Rating. The 230 Minnesota County Extension Agents who responded to the questionnaire rated the nine change agent roles in the study from 3.23 to 3.79 on the four point scale. The means indicate that respondents perceived each of the roles as fairly to very important in their work as educational change agents. Standard deviations for the nine roles ranged from 0.46 to 0.67 indicating that 68 percent of each distribution fell within relatively close proximity to the means.

Tests for skewness and kurtosis revealed that only the response to Role No. 6 (remain flexible to meet the needs of clientele) was slightly skewed and had a more peaked distribution, which corresponds to the highest mean of 3.79 and smallest standard deviation (0.46). This abnormality supports the MuCubbin study (1984) finding that the highest report of stress for Minnesota County Extension Agents was related to clientele needs and demands.

A comparison of the means reflects that Minnesota County Extension Agents rated Role No. 6, Role No. 1 (teach problem solving skills), and Role No. 5 (good program development process) in the top third for importance; while rating Role No. 9 (educational "risk" taker) Role No. 7 (access total University) and Role No. 3 (take interest in issues) in the bottom third.

Relative independence of each role was verified by examination of the correlation matrix provided during the principal factor analysis using the Statistical Package for Social Sciences (SPSS) at Louisiana State University. Table No. 3 displays the correlations between the nine change agent roles with a range of -.087 to .286. These results also indicate no halo effect by the respondents in the study.
### TABLE 3

**CORRELATION MATRIX REGARDING RELATIVE INDEPENDENCE OF CHANGE AGENT ROLES**

<table>
<thead>
<tr>
<th>Role 1</th>
<th>Role 2</th>
<th>Role 3</th>
<th>Role 4</th>
<th>Role 5</th>
<th>Role 6</th>
<th>Role 7</th>
<th>Role 8</th>
<th>Role 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role 1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role 2</td>
<td>-.021</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role 3</td>
<td>-.087</td>
<td>.189</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role 4</td>
<td>.129</td>
<td>.137</td>
<td>.092</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role 5</td>
<td>.177</td>
<td>.222</td>
<td>.192</td>
<td>.256</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role 6</td>
<td>.203</td>
<td>.075</td>
<td>.112</td>
<td>.136</td>
<td>.169</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role 7</td>
<td>.056</td>
<td>.286</td>
<td>.224</td>
<td>.235</td>
<td>.109</td>
<td>.197</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Role 8</td>
<td>.227</td>
<td>.133</td>
<td>.056</td>
<td>.100</td>
<td>.228</td>
<td>.142</td>
<td>.142</td>
<td>1.000</td>
</tr>
<tr>
<td>Role 9</td>
<td>.154</td>
<td>.278</td>
<td>.093</td>
<td>.138</td>
<td>.138</td>
<td>.078</td>
<td>.244</td>
<td>.279</td>
</tr>
</tbody>
</table>

*KEY:  Role 1 = teach problem solving skills  Role 2 = develop alternative delivery systems  Role 3 = take interest in issues  Role 4 = involve volunteers  Role 5 = good program development process  Role 6 = remain flexible to meet needs of clientele  Role 7 = access resources of total University system  Role 8 = have self-development plan  Role 9 = be educational "risk" taker*
Factor analysis of the rating scale was done using SPSS to help explore clusters of roles that might aid in understanding the self-expectations of Minnesota County Extension Agents as they carry out the nine roles. A varimax rotated orthogonal factor matrix provided three major clusters of roles using .50 as the standard to include in the clusters. These results are displayed in Table 4 (page 66), and are further discussed below:

Factor One includes three roles: No. 2 alternative delivery systems, No. 3 interest in issues, and No. 7 access total resources of the University. They represent organizational expectations that the County Extension Agent transcend perceptual boundaries of their work to provide clientele learning experiences that are not in the normal context of meetings or one-to-one consultations; expand their intellectual pursuits to become involved as an educator in important issues outside of the local community that impact on their area of responsibility; and seek to discover and adapt the resources of non-Extension units of the University to more fully meet clientele needs.

Factor Two includes four roles: No. 1 teach problem solving skills, No. 4 involve volunteers, No. 5 good program development, and No. 6 remain flexible to meet needs. These involve critical processes that County Extension Agents are expected to master to be viewed as competent professionals as they create relevant learning experiences.

Factor Three includes two roles: No. 8 self-development plan, and No. 9 educational "risk" taker. These express self-expectations that the County Extension Agent should maintain subject matter expertise, improve personal skills, and make a conscious effort to reach new audiences in carrying out their change agent function.
TABLE 4
VARIMAX ROTATED FACTOR MATRIX OF NINE CHANGE AGENT ROLES

<table>
<thead>
<tr>
<th>Role No.</th>
<th>Factor 1*</th>
<th>Factor 2*</th>
<th>Factor 3*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role No. 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach problem solving skills</td>
<td>-.42103</td>
<td>.50341</td>
<td>.45336</td>
</tr>
<tr>
<td>Role No. 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative delivery systems</td>
<td>.64550</td>
<td>-.01838</td>
<td>.36285</td>
</tr>
<tr>
<td>Role No. 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take interest in issues</td>
<td>.65643</td>
<td>.23827</td>
<td>-.17762</td>
</tr>
<tr>
<td>Role No. 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involve volunteers</td>
<td>.23772</td>
<td>.55463</td>
<td>.05684</td>
</tr>
<tr>
<td>Role No. 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Program Development</td>
<td>.21533</td>
<td>.57085</td>
<td>.18194</td>
</tr>
<tr>
<td>Role No. 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remain flexible to meet needs</td>
<td>.02381</td>
<td>.68885</td>
<td>.00738</td>
</tr>
<tr>
<td>Role No. 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access resources of University</td>
<td>.57251</td>
<td>.24569</td>
<td>.22476</td>
</tr>
<tr>
<td>Role No. 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Development Plan</td>
<td>-.02723</td>
<td>.20808</td>
<td>.68865</td>
</tr>
<tr>
<td>Role No. 9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational &quot;risk&quot; taker</td>
<td>.29234</td>
<td>-.05676</td>
<td>.75117</td>
</tr>
</tbody>
</table>

*KEY: A standard of .50 was set for a role to be included in a factor. Roles making up a cluster are underlined in the factor column.
RANKING OF CHANGE AGENT ROLES

The next ten tables (numbers 5-14) represent the responses by the 230 Minnesota County Extension Agents in this study to the request to rank each of the nine change agent roles using a nine-point scale with "1" as most important and "9" as least important. A forced ranking was required with no role being assigned the same number. Tests for skewness and kurtosis indicated that all nine distributions were normal. Standard deviations ranged from 2.07 for Role No. 2 (develop alternative delivery systems) to 2.43 for Role No. 3 (take interest in issues). No reliability test was required because of role independence.

A comparison of the means reflects that Minnesota County Extension Agents overall (Table No. 5, page 68) ranked Role No. 1 (teach problem solving skills) the most important at 3.09, and ranked Role No. 7 (access total University) the least important at 6.49.

In addition to Role No. 1, the agents ranked Role No. 6 (remain flexible to meet needs) at 3.52, and Role No. 5 (good program development process) at 3.56 in the top third for importance. The lower third included Role No. 3 (take interest in issues) at 6.33, and Role No. 8 (have a self-development plan) at 6.06, as having lesser importance.

It is of interest to note that Roles 1, 5 and 6 appeared in the top third of both the rating and ranking scales, as well as making up three of the four roles identified in Factor Two of the analysis. Both Role 3 and Role 7 were rated and ranked in the bottom third as far as importance, and make up two of the three roles included in Factor One.

Ranking. Further study of the means from the ranking scale was done using the Statistical Analysis System (SAS) at Louisiana State
<table>
<thead>
<tr>
<th>Description of Role</th>
<th>(n - 230)</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role No. 1: The Change Agent should teach problem-solving skills</td>
<td>3.09</td>
<td></td>
<td>2.29</td>
</tr>
<tr>
<td>Role No. 2: The Change Agent should develop alternative delivery systems for educational programs</td>
<td>5.01</td>
<td></td>
<td>2.07</td>
</tr>
<tr>
<td>Role No. 3: The Change Agent should take interest in state, regional and national issues</td>
<td>6.33</td>
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<td>2.43</td>
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<tr>
<td>Role No. 4: The Change Agent should involve volunteers</td>
<td>5.05</td>
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<td>Role No. 5: The Change Agent should create a good program development process</td>
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<td>2.24</td>
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<tr>
<td>Role No. 6: The Change Agent should remain flexible to meet the needs of clientele</td>
<td>3.52</td>
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<td>2.22</td>
</tr>
<tr>
<td>Role No. 7: The Change Agent should access the resources of the total University system</td>
<td>6.49</td>
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<td>2.25</td>
</tr>
<tr>
<td>Role No. 8: The Change Agent should have a self-development plan</td>
<td>6.06</td>
<td></td>
<td>2.34</td>
</tr>
<tr>
<td>Role No. 9: The Change Agent should be an educational risk taker</td>
<td>5.81</td>
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<td>2.37</td>
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</table>

*KEY: (Range = 1.00 to 9.00. Lower Mean = Higher Importance of Role)
University. Level of significance for analysis of variance was set at .05. Each of the nine roles was used as a dependent variable, and the following six personal characteristics of the County Extension Agents were used as the independent variables:

1. PROGRAM AREA - Agriculture, Home Economics, 4-H Youth
2. TOTAL YEARS with Minnesota Agricultural Extension Service
   0 to 5  6 to 11  11 to 20  21 and Over
3. COUNTY EXTENSION DIRECTOR (CED) - Yes or No
4. DEGREES - Bachelors or Advanced Degree
5. CRAGUN'S (attended change agent conference) - Yes or No
6. DISTRICT - Northeast, Northwest, Southeast, Southwest

Tests of the nine hypotheses related to the ranking scale in this study provided the following results:

Null Hypothesis No. 1

There are no differences between County Extension Agents' ranking of the role "The Change Agent should teach problem solving skills" based on the six personal characteristics.

Table 6 (page 70) indicates that the overall mean for Change Agent Role No. 1 was 3.09 on the ranking scale (range 1.00 to 9.00). Analysis of variance showed that only one independent variable PROGRAM AREA exceeded the .05 level of significance with an exact probability of 0.0496. A post hoc multiple comparison using the Waller-Duncan method revealed that the County Extension agents in the Home Economics-Family Living Program Area (2.52) ranked teach problem solving skills significantly higher than did County Extension Agents in either Agriculture (3.32) or 4-H Youth Development (3.43).
## TABLE 6

**RANKING OF THE CHANGE AGENT ROLE: TEACH PROBLEM SOLVING SKILLS BY SELECTED CHARACTERISTIC MINNESOTA COUNTY EXTENSION AGENTS**

<table>
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<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
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<td>230</td>
<td>100.00</td>
<td>3.09</td>
<td>3.05</td>
<td>0.0496</td>
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<tr>
<td><strong>PROGRAM AREA:</strong></td>
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<td></td>
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</tr>
<tr>
<td>Agriculture</td>
<td>84</td>
<td>36.52</td>
<td>3.32b</td>
<td>0.56</td>
<td>0.6454</td>
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<tr>
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<td>77</td>
<td>33.48</td>
<td>2.52a</td>
<td>df=2,218</td>
<td></td>
</tr>
<tr>
<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
<td>3.43b</td>
<td>df=2,218</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL YEARS:</strong></td>
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<td></td>
<td></td>
<td></td>
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</tr>
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<td>0 - 5</td>
<td>71</td>
<td>30.87</td>
<td>3.01</td>
<td>df=3,218</td>
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<tr>
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<td>64</td>
<td>27.83</td>
<td>2.98</td>
<td>df=3,218</td>
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<tr>
<td>11 - 20</td>
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<td>21 - 39</td>
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<tr>
<td><strong>DEGREES:</strong></td>
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<tr>
<td>Bachelors</td>
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<td>0.6053</td>
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<td>3.06</td>
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<td>Southwest</td>
<td>55</td>
<td>23.91</td>
<td>3.15</td>
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</tbody>
</table>

**KEY:** *(Lowest Level of Significance for this Study is .05)
+*(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)
(Different letters signify significantly different means)
Null Hypothesis No. 2

There are no differences between County Extension Agents' ranking of the role "The Change Agent should develop alternative delivery systems for educational programs" based on the six personal characteristics.

Table 7 (page 72) indicates the overall mean for Change Agent Role No. 2 was 5.01 on the ranking scale (range 1.00 to 9.00). Analysis of variance showed there were differences exceeding the .05 level of significance for two of the personal characteristics: DEGREE with an exact probability of 0.0284, and CRAGUN'S change agent conference with an exact probability of 0.0166. County Extension Agents with a bachelors degree (4.79) responded significantly higher than those with a masters degree (5.44) to the ranking of alternative delivery systems; while agents who did not participate in the change agent conference (4.80) ranked alternative delivery systems significantly higher than those who attended (5.47) the conference.

Null Hypothesis No. 3

There are no differences between County Extension Agents' ranking of the role "The Change Agent should take interest in state, regional and national issues" based on the six personal characteristics.

Table 8 (page 73) indicates that the overall mean for Change Agent Role No. 3 was 6.33 on the ranking scale (range 1.00 to 9.00). Analysis of variance showed that only one independent variable DISTRICT exceeded the .05 level of significance with an exact probability of 0.0369. A post hoc comparison using the Waller-Duncan method revealed that County Extension Agents in the Southwest District (5.58) ranked
TABLE 7

RANKING OF THE CHANGE AGENT ROLE: ALTERNATIVE DELIVERY SYSTEMS
BY SELECTED CHARACTERISTIC MINNESOTA COUNTY EXTENSION AGENTS

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<th>Mean*</th>
<th>F Value</th>
<th>P*</th>
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<td>5.23</td>
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<td>64</td>
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<td>4.77</td>
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<td>4.96</td>
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</table>

KEY: *(Lowest Level of Significance for this Study is .05)
+(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)
TABLE 8.
RANKING OF THE CHANGE AGENT ROLE: TAKE INTEREST IN ISSUES
BY SELECTED CHARACTERISTIC MINNESOTA COUNTY EXTENSION AGENTS

<table>
<thead>
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<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean</th>
<th>F Value</th>
<th>P*</th>
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<tr>
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<td>5.88</td>
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<td>6.52</td>
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<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
<td>6.67</td>
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<td>6.52</td>
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</tr>
<tr>
<td>11 - 20</td>
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<td>23.04</td>
<td>6.53</td>
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<td>5.93</td>
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<td>23.91</td>
<td>5.58_a</td>
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</table>

KEY: *(Lowest Level of Significance for this Study is .05)
+(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)
(Different letters signify significantly different means)
take an interest in issues significantly higher than in two of the other three districts, namely Northeast (6.61) and Northwest (6.76).

Null Hypothesis No. 4

There are no differences between County Extension Agents' ranking of the role "The Change Agent should involve volunteers" based on the six personal characteristics.

Table 9 (page 75) indicates that the overall mean for Change Agent Role No. 4 was 5.05 on the ranking scale (range 1.00 to 9.00). Analysis of variance showed that only one independent variable PROGRAM AREA exceeded the .05 level of significance with an exact probability of 0.0001. A post hoc comparison using the Scheffe' method revealed that County Extension Agents in 4-H Youth (3.83) ranked involve volunteers significantly higher than agents in Agriculture (5.87) and Home Economics-Family Living (5.26).

Null Hypothesis No. 5

There are no differences between County Extension Agents' ranking of the role "The Change Agent should create a good program development process" based on the six personal characteristics.

Table 10 (page 76) indicates that the overall mean for Change Agent Role No. 5 was 3.56 on the ranking scale (range 1.00 to 9.00). There were no statistically significant differences among County Extension Agents regarding this role.

Null Hypothesis No. 6

There are no differences between County Extension Agents' ranking of the role "The Change Agent should remain flexible to meet the needs of clientele" based on the six personal characteristics.

Table 11 (page 77) indicates that the overall mean for Change
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
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<td>5.05</td>
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<tr>
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<td>5.23</td>
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<tr>
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KEY: *(Lowest Level of Significance for this Study is .05)

+ (Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)
  (Different letters signify significantly different means)
TABLE 10
RANKING OF THE CHANGE AGENT ROLE: GOOD PROGRAM DEVELOPMENT
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

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KEY: *(Lowest Level of Significance for this Study is .05)
* (Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)
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KEY: * (Lowest Level of Significance for this Study is .05)
+(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)
Agent Role No. 6 was 3.52 on the ranking scale (range 1.00 to 9.00), and there were no statistically significant differences among agents.

**Null Hypothesis No. 7**

There are no differences between County Extension Agents' ranking of the role "The Change Agent should access the resources of the total University system" based on the six personal characteristics.

Table 12 (page 79) indicates that the overall mean for Change Agent Role No. 7 was 6.49 on the ranking scale (range 1.00 to 9.00). Analysis of variance showed that only one independent variable TOTAL YEARS exceeded the .05 level of significance with an exact probability of 0.0340. A post hoc comparison using the Waller-Duncan method revealed that County Extension Agents in the 6-10 years group (6.00) and 21-39 years group (6.12) ranked access the total University significantly higher than agents in the 11-20 years group (7.13).

**Null Hypothesis No. 8**

There are no differences between County Extension Agents' ranking of the role "The Change Agent should have a self-development plan" based on the six personal characteristics.

Table 13 (page 80) indicates that the overall mean for Change Agent Role No. 18 is 6.06. Analysis of variance showed four personal characteristics produced statistically significant differences among County Extension Agents for this role. These were as follows:

- **PROGRAM AREA** - Exact probability 0.0001. Agents in Agriculture (5.54) ranked self-development plan as significantly more important than both Home Economics-Family Living (6.51) and 4-H Youth (6.20).
- **COUNTY DIRECTOR** - Exact probability 0.0460. Non-directors (5.95) ranked self-development plan as significantly more important than
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**Key:** *(Lowest Level of Significance for this Study is .05)*

*(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)*

*(Different letters signify significantly different means)*
## TABLE 13
RANKING OF CHANGE AGENT ROLE: SELF DEVELOPMENT PLAN
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

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**KEY:** *(Lowest Level of Significance for this Study is .05)*

*(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)*
*(Different letters signify significantly different means)*
County Directors (6.25).

DEGREES - Exact probability 0.0019. County Extension Agents with a masters degree (5.52) ranked self development plan as significantly more important than those with a bachelors degree (6.33).

Cragun's - Exact probability 0.0089. County Extension Agents that did not attend (5.86) the change agent conference ranked self development plan as significantly more important than those that did attend the conference (6.49).

Null Hypothesis No. 9

There are no differences between County Extension Agents' ranking of the role "The Change Agent should be an educational 'risk' taker" based on the six personal characteristics.

Table 14 (page 82) indicates that the overall mean for Change Agent Role No. 9 was 5.81. Analysis of variance showed that only one independent variable PROGRAM AREA exceeded the .05 level of significance with an exact probability of 0.0157. A post hoc comparison using the Scheffe' method revealed that County Extension Agents in 4-H Youth Development (5.13) ranked be an educational 'risk' taker significantly more important than agents in Agriculture (5.92).

Organizational Commitment

Organizational commitment is defined as "the strength of an individual's identification with an involvement in a particular organization, and is said to be characterized by three factors: a strong belief in, and acceptance of, the organization's goals and values; a readiness to exert considerable effort on behalf of the organization; and a strong desire to remain a member (Cook, 1981:84)."
### TABLE 14

**RANKING OF CHANGE AGENT ROLE: EDUCATIONAL RISK TAKER**
**BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
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<td>230</td>
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<td>5.81</td>
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<td></td>
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<td><strong>PROGRAM AREA:</strong></td>
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</tr>
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<td>Agriculture</td>
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<td>36.52</td>
<td>5.92</td>
<td>4.23</td>
<td>0.0157</td>
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<td>6.31b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
<td>5.13a</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL YEARS:</strong></td>
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<td>1.72</td>
<td>0.1620</td>
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<tr>
<td>0 - 5</td>
<td>71</td>
<td>30.87</td>
<td>5.45</td>
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<tr>
<td>6 - 10</td>
<td>64</td>
<td>27.83</td>
<td>6.06</td>
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</tr>
<tr>
<td>11 - 20</td>
<td>53</td>
<td>23.04</td>
<td>5.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 39</td>
<td>42</td>
<td>18.26</td>
<td>6.26</td>
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<td>5.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>146</td>
<td>63.48</td>
<td>5.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DEGREES:</strong></td>
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<td></td>
<td></td>
<td>2.46</td>
<td>0.1180</td>
</tr>
<tr>
<td>Bachelors</td>
<td>153</td>
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<td>5.99</td>
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<tr>
<td>Masters</td>
<td>77</td>
<td>33.48</td>
<td>5.45</td>
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<td></td>
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<tr>
<td><strong>CNRD - CRAGUNS</strong></td>
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<td>0.04</td>
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<td>73</td>
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<tr>
<td>No</td>
<td>157</td>
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<tr>
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<td>21.74</td>
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<td>Southeast</td>
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<td>5.61</td>
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</tr>
<tr>
<td>Southwest</td>
<td>55</td>
<td>23.91</td>
<td>6.18</td>
<td></td>
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</tr>
</tbody>
</table>

**KEY:** *(Lowest Level of Significance for this Study is .05)*
+ *(Range = 1.00 to 9.00. Note: Lower Mean = Higher Ranked Importance)*
(Different letters signify significantly different means)
Null Hypothesis No. 10

There are no differences between County Extension Agents' commitment to the Minnesota Agricultural Extension Service based on the six personal characteristics.

Table 15 (page 84) indicates that the overall mean for organizational commitment by the 230 County Extension Agents who participated in the study was 5.17 on the scale (range 1.00 to 7.00 with the higher mean = higher commitment). Cronbach alpha test for internal reliability for this scale in the study was 0.86 compared to a range of 0.82-0.93 reported by Cook (1981:84). Skewness and kurtosis were normal.

Analysis of variance showed that there were statistical differences exceeding the .05 level of significance for two of the personal characteristics: PROGRAM AREA with an exact probability of 0.0001, and DISTRICT with an exact probability of 0.0073. A post hoc comparison using Scheffe' revealed that County Extension Agents in Home Economics (5.50) reported a significantly higher commitment to the Extension organization than did agents in Agriculture (5.10) and 4-H Youth (4.89); while the Southwest District agents (5.47) reported significantly more commitment to the organization than agents in either the Southeast (5.05) or the Northeast (4.96) districts.

GOAL SETTING

Richard M. Steers (1976:6) defines task-goal attributes as a dimension or characteristic of an employee's task goals, and groups them into five categories: (1) goal specificity, (2) goal difficulty, (3) participation in goal setting, (4) feedback on goal effort, and (5) peer competition.
### TABLE 15

A COMPARISON OF RESPONSES REGARDING: ORGANIZATIONAL COMMITMENT
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean</th>
<th>F Value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
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<td>Overall Response</td>
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<td>100.00</td>
<td>5.17</td>
<td>13.97</td>
<td>0.0001</td>
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<td></td>
</tr>
<tr>
<td>PROGRAM AREA:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>84</td>
<td>36.52</td>
<td>5.10b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td>77</td>
<td>33.48</td>
<td>5.50a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
<td>4.89b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL YEARS:</td>
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<td></td>
<td></td>
<td>1.48</td>
<td>0.2182</td>
</tr>
<tr>
<td>0 - 5</td>
<td>71</td>
<td>30.87</td>
<td>5.13</td>
<td>df=3,218</td>
<td></td>
</tr>
<tr>
<td>6 - 10</td>
<td>64</td>
<td>27.83</td>
<td>5.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 - 20</td>
<td>53</td>
<td>23.04</td>
<td>5.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 39</td>
<td>42</td>
<td>18.26</td>
<td>5.30</td>
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</tr>
<tr>
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<td></td>
<td></td>
<td>1.26</td>
<td>0.2619</td>
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<td>5.22</td>
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<tr>
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<td>146</td>
<td>63.48</td>
<td>5.14</td>
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<td>77</td>
<td>33.48</td>
<td>5.09</td>
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</tr>
<tr>
<td>CNRD - CRAGUNS</td>
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<td>1.28</td>
<td>0.2588</td>
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<td>73</td>
<td>31.74</td>
<td>5.27</td>
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</tr>
<tr>
<td>No</td>
<td>157</td>
<td>68.26</td>
<td>5.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTRICT:</td>
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<td></td>
<td></td>
<td>4.12</td>
<td>0.0073</td>
</tr>
<tr>
<td>Northeast</td>
<td>56</td>
<td>24.35</td>
<td>4.96b</td>
<td>df=3,218</td>
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</tr>
<tr>
<td>Northwest</td>
<td>50</td>
<td>21.74</td>
<td>5.26</td>
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</tr>
<tr>
<td>Southeast</td>
<td>69</td>
<td>30.00</td>
<td>5.05b</td>
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<tr>
<td>Southwest</td>
<td>55</td>
<td>23.91</td>
<td>5.47a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KEY:** *(Lowest Level of Significance for this Study is .05)*

+ *(Range = 1.00 to 7.00. Note: Higher Mean = Higher Commitment)*

(Different letters signify significantly different means)
A computer calculation of skewness and kurtosis indicated that the responses by Minnesota County Extension Agents all fell within the normal distribution for each of the five sub-units of the task-goal scale.

Cronbach alpha internal reliability for the agents' responses is compared below with the alpha coefficients from one of Steer's studies (Cook, 1981:211):

<table>
<thead>
<tr>
<th></th>
<th>Steers</th>
<th>Smalley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Specificity</td>
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<td>0.75</td>
</tr>
<tr>
<td>Goal Difficulty</td>
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<td>0.75</td>
</tr>
<tr>
<td>Participation in Goal Setting</td>
<td>0.72</td>
<td>0.69</td>
</tr>
<tr>
<td>Feedback on Goal Effort</td>
<td>0.81</td>
<td>0.83</td>
</tr>
<tr>
<td>Peer Competition</td>
<td>0.69</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Tables 16 through 20 reflect the statistical results for the five sub-units of the goal setting scale as related to null hypotheses 11 through 15 in this study, as follows:

**Null Hypothesis No. 11**

There are no differences between County Extension Agents' perceptions regarding goal specificity based on the six personal characteristics.

Table 16 (page 86) indicates the overall mean for the goal specificity sub-unit is 4.61 (range 1.00 to 7.00 with the higher mean = higher specificity). Analysis of variance showed that only one independent variable DISTRICT exceeded the .05 level of significance with an exact probability of 0.0073. A post hoc comparison using Scheffe' method revealed that the County Extension Agents in the Northwest (4.91) and the Southwest (4.88) districts reported significantly higher goal
TABLE 16
A COMPARISON OF RESPONSES REGARDING: GOAL SPECIFICITY
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean*</th>
<th>F Value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Response</td>
<td>230</td>
<td>100.00</td>
<td>4.61</td>
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<td></td>
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<tr>
<td>PROGRAM AREA:</td>
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<tr>
<td>Agriculture</td>
<td>84</td>
<td>36.52</td>
<td>4.67</td>
<td>0.71</td>
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<td>77</td>
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<td>4.74</td>
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<td></td>
</tr>
<tr>
<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
<td>4.40</td>
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</tr>
<tr>
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<td>0.0995 df=3,218</td>
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<td>71</td>
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<td>4.74</td>
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</tr>
<tr>
<td>6 - 10</td>
<td>64</td>
<td>27.83</td>
<td>4.39</td>
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<td>11 - 20</td>
<td>53</td>
<td>23.04</td>
<td>4.87</td>
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<tr>
<td>21 - 39</td>
<td>42</td>
<td>18.26</td>
<td>4.84</td>
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<td>146</td>
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<td>4.62</td>
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<tr>
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<td>77</td>
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<td>4.77</td>
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<td>4.61</td>
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<td></td>
</tr>
<tr>
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<td></td>
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<td>0.0073 df=3,218</td>
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<td>50</td>
<td>21.74</td>
<td>4.91a</td>
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</tr>
<tr>
<td>Southeast</td>
<td>69</td>
<td>30.00</td>
<td>4.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>55</td>
<td>23.91</td>
<td>4.88a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KEY: *(Lowest Level of Significance for this Study is .05)
+
(Range = 1.00 to 7.00. Note: Higher Mean = Higher Goal Specificity)
(Different letters signify significantly different means)
specificity than agents in the Northeast district (4.19).

**Null Hypothesis No. 12**

There are no differences between County Extension Agents' perceptions regarding goal difficulty based on the six personal characteristics.

Table 17 (page 88) indicates the overall mean for goal difficulty sub-unit was 4.73 (range 1.00 to 7.00 with the higher mean = higher difficulty). Analysis of variance showed that there were significant differences regarding two of the independent variables: PROGRAM AREA with an exact probability of 0.0228, and TOTAL YEARS with an exact probability of 0.0493.

A post hoc comparison using the Waller-Duncan method revealed that County Extension Agents in Agriculture (4.85) and 4-H Youth (4.87) reported significantly higher goal difficulty than agents in Home Economics (4.46); while agents with 0 to 5 years service (4.89) noted significantly more difficult goals than agents with 21 to 39 years of service (4.39).

**Null Hypothesis No. 13**

There are no differences between County Extension Agents' perceptions regarding participation in goal setting based on the six personal characteristics.

Table 18 (page 89) indicates the overall mean for the participation in goal setting sub-unit was 5.38 (range 1.00 to 7.00 with the higher mean = higher participation). Analysis of variance showed that only one independent variable DISTRICT exceeded the .05 level of significance with an exact probability of 0.0066. A post hoc comparison using the Scheffe' method revealed that County Extension Agents in the
## TABLE 17

A COMPARISON OF RESPONSES REGARDING: GOAL DIFFICULTY
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

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<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Response</td>
<td>230</td>
<td>100.00</td>
<td>4.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROGRAM AREA:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>84</td>
<td>36.52</td>
<td>4.85a</td>
<td>3.85</td>
<td>0.0228</td>
</tr>
<tr>
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<td>77</td>
<td>33.48</td>
<td>4.46b</td>
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</tr>
<tr>
<td>4-H Youth</td>
<td>69</td>
<td>30.00</td>
<td>4.87a</td>
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</tr>
<tr>
<td><strong>TOTAL YEARS:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>30.87</td>
<td>4.89a</td>
<td>2.64</td>
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<td>27.83</td>
<td>4.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 - 20</td>
<td>53</td>
<td>23.04</td>
<td>4.71</td>
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</tr>
<tr>
<td>21 - 39</td>
<td>42</td>
<td>18.26</td>
<td>4.39b</td>
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<tr>
<td><strong>COUNTY DIRECTOR:</strong></td>
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<td></td>
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</tr>
<tr>
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<td>84</td>
<td>36.52</td>
<td>4.68</td>
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<td>63.48</td>
<td>4.75</td>
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<td></td>
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<td><strong>DEGREES:</strong></td>
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<td></td>
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<tr>
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</table>

**KEY:** *(Lowest Level of Significance for this Study is .05)*
*(Range = 1.00 to 7.00. Note: Higher Mean = Higher Goal Difficulty)*
*(Different letters signify significantly different means)*
### Table 18

A Comparison of Responses Regarding: Participation in Goal Setting by Selected Characteristic, Minnesota County Extension Agents

<table>
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<th>(n)</th>
<th>Percent</th>
<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
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</table>

**Key:** *(Lowest Level of Significance for this Study is .05)*<br>+(Range = 1.00 to 7.00. Note: Higher Mean = Higher Participation)<br>(Different letters signify significantly different means)
Southwest district (5.61) reported a significantly higher participation in goal setting than agents in the Northeast district (5.03).

Null Hypothesis No. 14

There are no differences between County Extension Agents' perceptions regarding feedback on goal effort based on the six personal characteristics.

Table 19 (page 91) indicates the overall mean for the feedback on goal effort sub-unit was 3.86 (range 1.00 to 7.00 with higher mean = higher feedback). Analysis of variance showed that there were significant differences regarding two of the independent variables: PROGRAM AREA with an exact probability of 0.0222, and DISTRICT with an exact probability of 0.0019.

A post hoc comparison using the Scheffe' method revealed that County Extension Agents in Home Economics (4.29) reported significantly higher feedback on goal effort than agents in Agriculture (3.57); while agents in the Northwest district (4.38) reported significantly higher feedback on goal effort than those in the Northeast district (3.29).

Null Hypothesis No. 15

There are no differences between County Extension Agents' perceptions regarding peer competition based on the six personal characteristics.

Table 20 (page 92) indicates that the overall mean for the sub-unit on peer competition was 3.84 for the County Extension Agents (range 1.00 to 7.00 with higher mean = higher competition). There were no statistically significant differences among agents regarding peer competition as a task-goal attribute.
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<th>Mean+</th>
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</table>

KEY: *(Lowest Level of Significance for this Study is .05)*

+ *(Range = 1.00 to 7.00. Note: Higher Mean = Higher Feedback on Goal) (Different letters signify significantly different means)*


TABLE 20

A COMPARISON OF RESPONSES REGARDING: PEER COMPETITION
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

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<th>Characteristic</th>
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<th>Mean$^+$</th>
<th>F Value</th>
<th>p*</th>
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<td>3.83</td>
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KEY: * (Lowest Level of Significance for this Study is .05)
+ (Range = 1.00 to 7.00. Note: Higher Mean = Higher Peer Competition)
JOB-RELATED TENSION

The job-related tension scale focuses on role conflict and role ambiguity as a source of organizational stress for the employee. Computer calculations for skewness and kurtosis indicated a normal distribution of responses by County Extension Agents. Cronbach alpha internal reliability for this study was 0.82 compared to a range of 0.84 to 0.87 reported in the literature (Cook, 1981:100).

Null Hypothesis No. 16

There are no differences between County Extension Agents' perceptions regarding job-related tension based on the six personal characteristics.

Table 21 (page 94) indicates that the overall mean for the scale on job-related tension was 2.86 (range 1.00 to 5.00 with higher mean = higher tension). Analysis of variance showed that only one independent variable PROGRAM AREA exceeded the .05 level of significance with an exact probability of 0.0355. A post hoc comparison using the Scheffe' method revealed that County Extension Agents in 4-H youth (2.96) reported significantly more job-related tension than agents in Home Economics (2.74).

JOB INVOLVEMENT

Job involvement is the degree to which a person is identified psychologically with his work (Lodahl & Kejner, 1965:24). Calculations for skewness and kurtosis indicated normal distributions. Cronbach alpha internal reliability for this study was 0.76 compared to 0.62 reported in the literature (Cook, 1981:121), which also noted a correlation of 0.51 with overall job satisfaction.
### TABLE 21

A COMPARISON OF RESPONSES REGARDING: JOB-RELATED TENSION
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

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<th>Mean*</th>
<th>F Value</th>
<th>P*</th>
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<td>2.74</td>
<td>b</td>
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<td>2.96</td>
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KEY: *(Lowest Level of Significance for this Study is .05)
+(Range = 1.00 to 5.00. Note: Higher Mean = Higher Job-Related Tension)
(Different letters signify significantly different means)
Null Hypothesis No. 17

There are no differences between County Extension Agents' perceptions regarding job involvement based on the six personal characteristics.

Table 22 (page 96) indicates that the overall mean for the sub-scale on job involvement based on responses to questions No. 1, 2 and 3 (Appendix A, part six) was 4.87 (range 1.00 to 7.00 with higher mean = higher involvement). There were no statistically significant differences among the agents regarding job involvement.

INTERNAL WORK MOTIVATION

Internal work motivation is the degree to which an employee is self-motivated to perform effectively (Cook, 1981:121). Calculations for skewness and kurtosis indicated normal distributions. Cronbach alpha internal reliability for this study was 0.67 compared to 0.71 reported by Cook.

Null Hypothesis No. 18

There are no differences between County Extension Agents' perceptions regarding internal work motivation based on the six personal characteristics.

Table 23 (page 97) indicates that the overall mean for the sub-scale on internal work motivation based on responses to questions No. 4 through 9 (Appendix A, part six) was 5.88 (range 1.00 to 7.00 with higher mean = higher work motivation). There were no statistically significant differences among County Extension Agents regarding internal work motivation.
TABLE 22
A COMPARISON OF RESPONSES REGARDING: JOB INVOLVEMENT
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

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<th>F Value</th>
<th>P*</th>
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*(Lowest Level of Significance for this Study is .05)
+(Range = 1.00 to 7.00. Note: Higher Mean = Higher Job Involvement)
TABLE 23

A COMPARISON OF RESPONSES REGARDING: INTERNAL WORK MOTIVATION
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

<table>
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<tr>
<th>Characteristic</th>
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<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
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</thead>
<tbody>
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</table>

*(Lowest Level of Significance for this Study is .05)

+(Range = 1.00 to 7.00. Note: Higher Mean = Higher Work Motivation)
INTRINSIC MOTIVATION

Intrinsic motivation is defined in terms of the extent to which an employee is motivated to perform because of subjective rewards or feelings he or she expects as a result of performing well (Cook, 1981: 125). Calculations for skewness and kurtosis indicated normal distributions. Cronbach alpha internal reliability for this study was 0.89. No comparable alpha coefficients were quoted in the literature.

Null Hypothesis No. 19

There are no differences between County Extension Agents' perceptions regarding intrinsic motivation based on the six personal characteristics.

Table 24 (page 99) indicates that the overall mean for the subscale on intrinsic motivation based on responses to questions No. 5, and 10, 11, 12 (Appendix A, part six) was 6.46 (range 1.00 to 7.00 with higher mean = higher motivation). There were no statistically significant differences among County Extension Agents for this motivation.

Summary. The statistical analysis of the data provided by Minnesota County Extension Agents revealed that they rated the nine change agent roles as important overall, but there were some marked differences between agents when asked to force rank the roles. Factor analysis supported the contention that the roles were relatively independent of each other, and provided three clusters of roles to aid in understanding the self-expectations of the agents in the work place. Statistically significant differences were found for organizational commitment, goal setting, and job-related tension; but no differences for job involvement, internal work motivation, or intrinsic motivation.
TABLE 24

A COMPARISON OF RESPONSES REGARDING: INTRINSIC MOTIVATION
BY SELECTED CHARACTERISTIC, MINNESOTA COUNTY EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n)</th>
<th>Percent</th>
<th>Mean+</th>
<th>F Value</th>
<th>P*</th>
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*(Lowest Level of Significance for this Study is .05)
+(Range = 1.00 to 7.00. Note: Higher Mean = Higher Intrinsic Motivation)
V. SUMMARY AND CONCLUSIONS

Minnesota County Extension Agents are college-trained professionals who carry out informal education programs in the areas of agriculture, home economics-family living, 4-H youth development, and community and natural resource development. They include some 250 men and women who are employed by the Minnesota Agricultural Extension Service in 91 county offices across all 87 counties of the state.

Their organization was created as the third dimension of the land-grant university system to foster teaching-research-extension in the United States, and dates back to the passage of the federal Smith-Lever Act by Congress in 1914. County Extension Agents are expected to create relevant learning experiences that lead to educational change by men, women, and youth of Minnesota. Because of this mission, they are often referred to as change agents.

Purpose of Study. Many rural-urban societal changes have occurred during the past 70 years, and as a result there has been increasing pressure on the organization and its change agents in recent years to be more accountable and show educational impact to justify continued funding through federal-state-local tax dollars. Due to growing concern about the psychological and physical reactions of the agents to these demands, a study was commissioned in 1984 which resulted in a report on Minnesota County Extension Agents: Stress, Coping and Adaptation by Dr. Hamilton I. McCubbin and Dr. Joan M. Patterson of the Family Stress and Coping Project, College of Home Economics, University of Minnesota.
The major findings of the McCubbin study reflected that 75 percent of the Minnesota County Extension Agents sampled (n = 44) indicated that the stressor clientele needs/demands was the source of the highest feelings of personal strain, and that "expect too much of self" was reported as the second most frequent source of stress (70.5%). Administrators reviewing the study had a clear understanding of the pressure due to clientele needs and demands, but were less certain about the category related to self-expectations of the agents, and voiced interest in further study of this dimension.

Methodology. The researcher received approval form the Extension Management Council to follow up the McCubbin study with a dissertation study that would attempt to collect data and further define the components of the concept "expect too much of self." The doctoral committee assisted in focusing the study. The objectives for the study were stated as follows:

1. Determine the most important change agent roles that the Extension organization expects Minnesota County Extension Agents to carry out, and measure the relative importance among these agents.

2. Acquire appropriate, validated scales to measure several work-related variables that appear to have a bearing on self-expectations of the County Extension Agents as they carry out their roles.

3. Collect data to infer or generalize about the concept "expect too much of self."

Final version of the questionnaire was mailed on May 1, 1985, to all Minnesota County Extension Agents, and a second mailing was done the last day of May. A total of 230 usable responses were included in the study, which represented 92.75% of the agents on active duty.
Hypotheses. Nineteen hypotheses were stated to give direction to the dissertation study. Numbers 1 through 9 relate to the relative importance of the nine change agent roles included in this study, and the data collected forms the basis for answering the following research question:

1. Assuming that self-expectations for work by Minnesota County Extension Agents flow from the nine change agent roles identified in this study, to what extent do they rate these roles highly and to what extent do they place differing values on each of the roles?

Hypotheses numbers 10 through 19 relate to work variables that have the most bearing on the concept "expect too much of self" (as determined in discussion with Dr. McCubbin, author of the 1984 report). The data collected forms the basis for answering the second research question, which has six parts:

2. Assuming that self-expectations of the agents also flow from the work-related variables included in this study, to what extent do Minnesota County Extension Agents:

   a) Express a commitment to the Extension organization?
   b) Perceive effective goal setting for their positions?
   c) Report feelings of job-related tension?
   d) Indicate involvement with their jobs?
   e) Have high levels of internal work motivation?
   f) Give evidence of motivation through intrinsic rewards?

The third research question represents the need to infer or generalize from the data collected to the concept involved in this study and is stated as follows:

3. In reflecting upon the relative importance attributed to the
change agent roles and responses to the work-related scales, what new picture can we create regarding "expect too much of self" by Minnesota County Extension Agents in terms of supervision and future leadership?

MAJOR FINDINGS

Question No. 1

Rating and ranking the nine change agent roles.

Rating. The nine change agent roles in this study were selected because of their relative independence from each other, and the importance attributed to them by the Director of the Minnesota Agricultural Extension Service (Brown, 1980) and verified by contacts with district supervisors (District Program Leaders) in Minnesota, Louisiana and Florida.

Analysis of the data indicated that Minnesota County Extension Agents had accepted the importance of the nine roles in general by ratings that ranged from 3.23 to 3.79 on a scale of 1.00 to 4.00. However, factor analysis revealed three distinct groupings of these roles that lend themselves to the following interpretation:

Factor One - This cluster included Role No. 2 (alternative delivery), Role No. 3 (interest in issues) and Role No. 7 (access total resources of the University). Although all nine roles were rated as fairly important, this cluster emphasizes that as a group these roles are perceived as the least desirable as the county staff carry out their change agent work. In terms of self-expectations, this writer interprets this factor as indicating to supervisors that Roles 2-3-7 would contribute the least to motivation of the agent, who probably would give low priority to administrative requests for emphasis on
developing alternative delivery systems for educating clientele, taking a visible leadership role in looking at the alternatives and consequences of various public issues, or actually making use of University resources outside of those in the Institute of Agriculture, Forestry and Home Economics on the St. Paul campus. However, this interpretation is somewhat clouded by the fact that Minnesota County Extension Agents rated Role No. 2 (alternative delivery) as the third most important role (3.53). Further study might find that the agents give verbal accord to the importance of this role, but in reality do not make a sustained effort to actually use alternative delivery systems in their educational change work.

Factor Two - This factor includes four of the top five rated roles by the agents: Role No. 1 (teach problem solving skills), Role No. 4 (involve volunteers), Role No. 5 (good program development), and Role No. 6 (remain flexible to meet needs). In terms of self-expectations, this writer interprets Factor Two as indicating to supervisors that these roles contribute the most to motivation of the agent, who probably would give high priority to administrative requests for emphasis on these four roles. Both voluntary commitment to and acceptance of these roles could be expected.

Factor Three - Role No. 8 (self-development plan) and Role No. 9 (educational "risk" taker) are included in this factor. Each of these roles were rated as lower in importance by agents, but their primary meaning may be drawn from the concept of self-efficacy, which involves feelings of being able to master a task, and expectancy theory, which includes perceptions of efficacy, rewards and satisfaction from making the effort to perform the task. In terms of self-expectations, this
researcher interprets this factor as indicating to supervisors that Roles 8 and 9 have several meanings. For self-development, it is possible that agents feel that this is one area of their work where they have some control over time commitments. While staff training is accepted as mandatory, the other dimension of the Extension organization's human resource development (staff development) is voluntary in nature and based on expressed needs of the agents themselves. Further study of the lower rating for self-development, and the drop out rate for voluntary staff development courses, may find that agents are reducing time stress by controlling their final participation.

For "risk" taking, Factor Three's lower rating may be a reflection of both self-efficacy and the implementation of the merit system in the organization. Taking risk, which was defined in this study as "The process of trying new educational approaches and attempting to work with non-traditional clientele. . ." involves agents' perceptions of how well they can master this difficult task. It is also impacted on by experiences and perceptions of how the organization treats failure, and rewards successful efforts involving educational risk taking.

Further interpretation of Factor Three indicates to supervisors that the change agent roles related to self-development and "risk" taking can be highly motivating if good counseling techniques and a path-goal leadership approach is used to make these roles meaningful. In addition, it is important that both internal and external rewards be understood, that timely feedback be given the agent, and that monetary rewards tied to these roles be seen as being fairly distributed and related to the expected performance. Poor handling of Roles 8 and 9 by the supervisor could result in negative motivation to perform.
Ranking. In attempting to answer the second part of Question No. 1 (do agents place differing values on each of the roles), the findings from the statistical analysis of variance tend to indicate the following about the self-expectations of Minnesota County Extension Agents as they carry out the nine change agent roles:

ROLE 1: Problem Solving Skills - County Extension Agents in Home Economics-Family Living ranked this role significantly higher than those in Agriculture. This difference is probably explained best in terms of teaching orientation. Home Economists tend to create curriculums that focus on personal skill development related to family living. Agricultural agents tend to focus on technical subject matter which emphasize the appropriate methods of putting land, seed, fertilizer, livestock, machinery and farm facilities in the right mix to show a profit on investment.

ROLE 2: Alternative Delivery Systems - County Extension Agents with a bachelors degree, and those who did not attend the change agent conference ranked this role significantly higher than agents with a masters degree, and those who did attend the Community and Natural Resource Development event. Interpretation of these differences are made in terms of self-efficacy. The accomplishment of attaining the masters degree, and the additional insight gained by those attending the change agent conference may have moderated concerns about alternative delivery, and consequently these agents felt less compelled to rank this role as highly as those with lower feelings of self-efficacy in terms of alternative delivery.

ROLE 3: Interest in Issues - County Extension Agents within the Southwest Extension District ranked this role significantly higher
than agents in both the Northeast and Northwest districts. Primary
difference in this role may relate to a history of agricultural agent
participation in issue-related conferences in the Southwest District,
as well as the fact that Extension Home Economists in that area took
part in a training program in leadership/issue involvement in 1982
that resulted in an on-going program with support from an Area Exten­
sion Agent in Community and Natural Resource Development.

ROLE No. 4: Involve Volunteers - County Extension Agents in 4-H
Youth Development ranked this significantly higher than agents in both
Agriculture and Home Economics. This is best explained by a four-year
effort in the 4-H Program Area to train and re-train agents to become
effective managers of a volunteer system to free up the time of 4-H
agents to do more meaningful educational programs with youth.

ROLE No. 5: Good Program Development - There were no significant
differences among agents as it was ranked third most important by the
County Extension Agents participating in the study.

ROLE No. 6: Remain Flexible to Meet Clientele Needs - There were
no significant differences among agents as it was ranked second most
important by the County Extension Agents participating in the study.

ROLE No. 7: Access Resources of University - The only significant
difference involved Total Years of Service. Agents with 6 to 10 years
and 21 or more years found this role more important than agents in the
11 to 20 year category. Main interpretation here is the tendency for
the middle group to look inward for resources, while the other two
groups tend to view external resources more readily for use in carry­
ing out the change agent role.

ROLE No. 8: Self-Development Plan - Four characteristics were
significantly related to this role. Interpretation is provided as follows: (1) Agricultural agents indicated this role was more important than agents in both Home Economics and 4-H Youth. This difference is best attributed to a comprehensive on-going system of staff training that is required by all agents in the Agricultural Program Area, and less pronounced in the other two program areas. (2) Non-administrative agents in the counties ranked self-development as more important than County Extension Directors. This response is judged best in that self-development is a vehicle of upward mobility and promotion to a County Director position. (3) Agents with a master's degree ranked self-development higher than those with a bachelor's, which reflects a tendency for agents to value the advanced degree they put forth effort to attain. (4) Again, agents who did not attend the change agent conference tended to rank self-development higher - a response this researcher interprets as a tendency for non-participants to show a concern for more self-development.

ROLE No. 9: Educational "Risk" Taker - County Extension Agents in the 4-H Program Area ranked this role significantly higher than those in Agriculture. This is interpreted as an outgrowth of the new voluntarism emphasis in the 4-H Program Area, and a response to having to deal with a more creative position at the county level.

Question No. 2

Impact of the Work-Related Variables on Agent Self-Expectations

a) Organizational Commitment - Overall response of Minnesota County Extension Agents indicated a relatively high commitment to the organization (5.17 on a scale of 1.00 to 7.00). Analysis of the data
resulted in two statistically significant differences: (1) Home Economists reported higher commitment to the Extension organization than agents in both Agriculture and 4-H Youth, and (2) Agents in the Southwest District reported higher commitment to the organization than the agents in the Southeast and Northeast districts. The researcher interprets the first finding as reflecting a more unified approach to educational programming, and higher cohesion among Home Economists as a group. The difference between districts may be ascribed to the fact that two of the three district supervisors lived in the Southwest District for several years prior to this study, whereas most of the other District Program Leaders lived in the St. Paul campus vicinity. If the latter situation is true, a recent effort to office more of the DPLs out in their districts may be beneficial to the organization.

b) Goal Setting - In looking at the five task-attributes of goal setting, it was found (on a scale of 1.00 to 7.00) that the agents overall response was 4.61 for goal specificity, 4.73 for goal difficulty, 5.38 for participation in goal setting, 3.86 for feedback on goal effort, and 3.84 regarding peer competition. Interpretation of the overall responses reflects a perception by County Extension Agents that there was fairly high participation between them and their DPLs in setting goals, moderate levels of goal specificity and goal difficulty, and relatively low levels of feedback on goal effort. Management experts would raise concerns about the latter's impact on agent performance.

No differences were found among agents regarding peer competition as a goal setting factor, and this is interpreted as an optimum state for an organization that includes a large proportion of high
achievement-oriented persons. However, there were some statistically significant differences regarding the other four task-attributes as follows: (1) County Extension Agents in the Northwest and Southwest Districts indicated higher goal specificity than agents in the Northeast District. This probably reflects the collapse of the economic base in the northeast part of the state (iron mining), which resulted in an ambiguous situation for the agents; and also contributed to findings that (2) many County Extension Agents in the Northeast felt they had significantly less participation in setting their goals than agents in the Northwest District reported; and (3) the perception that the agents in the Northeast received significantly less feedback on goal effort than agents in the Northwest.

Other task-attribute findings included: (4) County Extension Agents in 4-H Youth Development perceived they had more difficult goals than agents in Home Economics; (5) agents with 0 to 5 years service indicated their goals were significantly more difficult than agents with 21 or more years; and (6) Home Economists reported significantly higher feedback on goal effort than agents in Agriculture. The last three findings may indicate that 4-H Agents are having some problems implementing the voluntarism system; that extra work needs to be done with younger agents in setting goals; and District Program Leaders in Agriculture may need to improve their feedback techniques.

c) Job-Related Tension - There is general concern in the Extension organization about County Extension Agents experiencing higher levels of stress and strain in recent years. This dissertation study only found moderate levels of reported job-related tension (2.86 on a scale of 1.00 to 5.00). However, in analyzing the data, it was noted
that 4-H Youth agents perceived their jobs as having significantly higher tension than agents in Home Economics. This finding also tends to relate to the implementation of the new voluntarism system in the 4-H Program Area, and the creative nature of the youth position.

Further analysis of the data revealed there were no differences among Minnesota County Extension Agents regarding: d) Job Involvement, e) Internal Work Motivation, and f) Intrinsic Motivation. These findings supported the McCubbin report that the agents identified closely with their jobs (4.87), had a fairly high degree of self-motivation to perform their work (5.88), and a very high feeling of intrinsic reward for accomplishment through their jobs (6.46) on the scale of 1.00 to 7.00 for this dissertation study.

Question No. 3

Generalizing to the Concept "Expect Too Much of Self".

Based on the findings in this dissertation, the following components of the concept "expect too much of self" seem to best describe the multi-dimensional nature of being a Minnesota County Extension Agent:

1. The most positive aspects of agent self-expectations come from carrying out the roles of teaching problem solving skills, good program development, working with volunteers, and remaining flexible to meet the needs of Extension clientele.

2. The most negative aspects of agent self-expectations come from attempting to deal with issue education and accessing the total University; while perceptions regarding alternative delivery systems tend to remain ambiguous.
3. Agent self-expectations regarding self-development and risk taking can be either positive or negative as a personal motivator depending upon past experiences in the Extension organization.

4. Agent strain and reports of "expect too much of self" can be anticipated when there is a combination of high levels of commitment to the organization, involvement with their jobs, internal work motivation, and feelings of intrinsic reward from task accomplishment.

5. Lack of feedback on goal effort may be contributing to the feelings of strain associated with agent self-expectations, despite specific and difficult goals, and good participation in goal setting, which should aid in the agents achieving their work expectations.

**Conclusion.** Reports by Minnesota County Extension Agents that they feel high levels of strain due to expecting too much of themselves should be viewed as a positive indicator of dedication to the work of an educational change agent. Rather than focus on the strain, Extension administrators need to give leadership that clarifies the mission and goals of the organization for the agent. Concerns and pressures regarding accountability can be reduced by improved communication and counseling techniques between supervisor and agent.

The importance of knowledge of results appears to be a key factor in reducing the amount of strain due to "expect too much of self." It is recommended that the Minnesota Agricultural Extension Service embark on additional research regarding feedback on goal effort. Focus of that research should be on identifying the components of adequate, timely feedback to the agents, determining the types of feedback behavior that is required by agent supervisors, and making use of this new knowledge to assist agents in forming realistic self-expectations.
BIBLIOGRAPHY

BOOKS


BOOKS


BOOKS


PUBLICATIONS OF THE GOVERNMENT,
LEARNED SOCIETIES, AND OTHER ORGANIZATIONS


PERIODICALS


PERIODICALS


PERIODICALS


PERIODICALS


UNPUBLISHED MATERIALS


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APPENDICES
APPENDIX A

Cover Letter By

Dean & Director Patrick J. Borich
April 26, 1985

TO: All Minnesota County Extension Agents
FROM: Patrick J. Borich, Dean and Director
RE: PARTICIPATION IN JARED SMALLEY DISSERTATION STUDY

This letter of support encourages your active participation in Jared Smalley's dissertation study of Minnesota County Extension Agents by completing and returning the attached questionnaire to him at his school address in Louisiana. Jared is currently on leave from his position as Area Extension Agent CNRD in our Northwest Extension District.

The topic of his study is the "Perceptions and Self-Expectations of the Change Agent Role in the Minnesota Agricultural Extension Service - 1985."

Jared's study is a significant follow up to our county study of stress, coping and adaptation done last year by Dr. Hamilton McCubbin and Dr. Joan Patterson. His focus is on nine specific aspects of your role in planned educational change, and involves factors relating to personal and organizational goals, work load, job tension, and your feelings about Extension work.

Please note that your response is coded so that you will not be identified individually. Data collected will be combined at the district and multi-county levels so the report will not reflect separate county responses.

Jared asks that the questionnaire be returned on/or before the date indicated on the first page of his survey. A stamped envelope is enclosed for your use.
APPENDIX B

Follow Up Letter By

Jared M. Smalley
May 30, 1985
3101 Highland Road
Apartment No. 105
Baton Rouge, LA 70802

Dear Co-Worker,

Making assumptions is risky business when your 1,400 miles away from the person you are writing to about a dissertation study.

As of noon today, the questionnaire sent you the first week of May has not been returned to my school address in Louisiana. This fact leaves me with several possible assumptions: (1) you never received the original copy, (2) you mailed a completed questionnaire back and it went astray somewhere along the way, (3) you were so busy (as usual) when it came that there just was not any time to respond, or (4) you hate surveys and they go directly into the waste basket.

Feedback. If Assumption (4) is true in this case, and you still do not want to participate, I respect that individual right as an Extension staff member. However, please let me know that is the case by sending your uncompleted questionnaire back by return mail in the attached envelope.

If Assumptions (1) or (2) apply to your response then I would appreciate your taking the time to fill out the duplicate questionnaire attached, and putting it back in the mail no later than Monday, June 10.

If Assumption (3) is the main reason why your response has not been received, then I hope that this second mailing catches you at a moment when you can take 12 to 20 minutes (the time pre-testers reported it took to complete) to respond at this time. If your schedule or some other personal situation makes it impossible to respond, please let me know this by just returning the uncompleted questionnaire on/or before June 10.

Your participation in this study is important because only you can represent and reflect your thoughts and feelings about the "change agent" role, the organization, goal setting, and personal involvement in work.

In addition, your response when added to the expressions of the other 203 County Extension Agents who have already responded helps develop a better picture or pattern of perceptions and expectations by program area, age group, time in service, gender or other factors involved in this study.

NOTE that your response is coded to maintain confidentiality. Data will be aggregated in terms of your district (first number) and a nine-county grouping (second number) with no individual county identification used.

Sincerely,

Jared M. Smalley
Area Extension Agent, CNRD
Northwest Extension District
APPENDIX C

Dissertation Questionnaire
This questionnaire is part of a dissertation study being done by Jared M. Smalley, Area Extension Agent, CNRD, regarding the:

"PERCEPTIONS AND SELF-EXPECTATIONS OF THE CHANGE AGENT ROLE IN THE MINNESOTA AGRICULTURAL EXTENSION SERVICE - 1985"

Identification of individual County Extension Agents will only be known to the researcher through the personal I.D. number established for each person. **All data collected will be aggregated by Extension District to maintain confidentiality, and the respondent's check list used by the researcher will be destroyed on July 1, 1985.**

Please return the questionnaire on/or before: ________________
In attached postage paid envelope to:
J.M. Smalley, 3101 Highland Road, Apt. 105, Baton Rouge, Louisiana 70802

****THANK YOU FOR YOUR COOPERATION AND ASSISTANCE WITH THIS REQUEST****

COUNTY EXTENSION AGENT IDENTIFICATION NUMBER: / / / / / /
Please provide the following information about yourself:
1. Indicate your program area (X)
   _ Agriculture    _ Home Economics/Family Living    _ 4-H Youth
   _ IF SPLIT APPOINTMENT describe in percent below: _
   Ag_____% HE/FL_____% 4-H_____% CNRD_____% OTHER_____%

2. Years in current position (present county):______

3. Total Years in Extension:________

4. Are you a County Extension Director?  YES  NO

5. Age on your past birthday:________

6. _____Male  or  _____Female

7. Indicate All Educational Degrees Attained:
   _____ Bachelors. . . . . List Major:__________________________
   _____ Advanced Degree. . . List Major:__________________________

8. Did you participate as a representative of your county in the March 26-28, 1984 state CNRD Conference at Cragun's Center?  YES  NO

9. Circle the Extension District your office is located in:
   Northeast  -  Northwest  -  Southeast  -  Southwest

(TURN TO DEFINITIONS)
DEFINITIONS FOR USE WITH PART ONE AND PART TWO OF QUESTIONNAIRE

1. **Teach Problem Solving Skills**
   
   The process of providing Extension clientele with skills that help them solve their own problems.

2. **Alternative Delivery Systems**
   
   The process of developing approaches for assisting Extension clientele in addition to meetings and one-to-one consultations.

3. **Interest in Issues**
   
   The process of keeping aware of issues at the state, regional (i.e. neighboring states) and national levels that also have impact on Extension clientele at the county level.

4. **Involve Volunteers**
   
   The process of recruiting, selecting, training and giving volunteers a significant role in the delivery of Extension educational programs.

5. **Good Program Development**
   
   The process of identifying educational needs with Extension clientele, setting priorities, implementing and evaluating learning experiences, and reporting results.

6. **Remain Flexible to Meet Needs**
   
   The process of remaining in touch with and reacting to the immediate and changing needs of Extension clientele.

7. **Access Resources of Total University**
   
   The process of going beyond the Extension-related units of the University of Minnesota (including its branches) to acquire information and expertise to meet the needs of Extension clientele at the county level.

8. **Self Development Plan**
   
   The process of maintaining and improving subject matter and personal skills to continue your effectiveness as a County Extension Agent.

9. **Educational "Risk" Taker**
   
   The process of trying new educational approaches and attempting to work with non-traditional clientele where there is "risk" in terms of the educational outcomes not being successful.

(TURN TO PART ONE)
PART ONE: The Change Agent

The role of the "Change Agent" in planned educational change is part of every County Extension Agent position in Minnesota.

Based on your observation and experience rate each statement below using the following scoring system:

4. VERY Important
3. FAIRLY Important
2. OCCASIONALLY Important
1. SELDOM or NEVER Important

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>YOUR RATING</th>
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<tbody>
<tr>
<td>1. The Change Agent should teach problem solving skills.</td>
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<td>2. The Change Agent should develop alternative delivery systems for educational programs.</td>
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<td>3. The Change Agent should take interest in state, regional and national issues.</td>
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<td>4. The Change Agent should involve volunteers.</td>
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<td>5. The Change Agent should create a good program development process.</td>
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<td>6. The Change Agent should remain flexible to meet the needs of clientele.</td>
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<td>7. The Change Agent should access the resources of the total University system.</td>
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<td>8. The Change Agent should have a self development plan.</td>
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<td>9. The Change Agent should be an educational &quot;risk&quot; taker.</td>
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(TURN TO PART TWO)
PART TWO: The Change Agent

This scale asks you to look at the same items from Part One in terms of relative importance.

You are requested to force rank the items giving "1" to the most important and "9" to the least important from your viewpoint.

No two items should receive the same number. SEE EXAMPLE AT RIGHT.

Use the numbers: 1-2-3-4-5-6-7-8-9

STATEMENT

The Change Agent should teach problem solving skills.

The Change Agent should develop alternative delivery systems for educational programs.

The Change Agent should take interest in state, regional and national issues.

The Change Agent should involve volunteers.

The Change Agent should create a good program development process.

The Change Agent should remain flexible to meet the needs of clientele.

The Change Agent should access the resources of the total University system.

The Change Agent should have a self development plan.

The Change Agent should be an educational "risk" taker.

(TURN TO PART THREE)

EXAMPLE OF RANKING ITEMS

Problem Solving Skills......4
Alternative Delivery........9
Interest in Issues........1
Involve Volunteers.........3
Program Development........6
Flexible to Meet Needs......5
Access Resources U of M...8
Self Development Plan......2
Educational "Risk" Taker...7
PART THREE: My Organization

Please study scale at right and respond to statements below.  
*Mark each question 1 to 7 with an "X"

EXAMPLE: 1 2 3 □ 5 6 7

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<td>1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful</td>
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<td>2. I talk up this organization to my friends as a great organization to work for</td>
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<td>3. I feel very little loyalty to this organization</td>
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<td>4. I would accept almost any type of job assignment in order to keep working for this organization</td>
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<td>5. I find that my values and the organization's values are very similar</td>
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<td>6. I am proud to tell others that I am part of this organization</td>
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<td>7. I could just as well be working for a different organization as long as the type of work were similar</td>
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<td>8. This organization really inspires the very best in me in the way of job performance</td>
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<td>9. It would take very little change in my present circumstances to cause me to leave this organization</td>
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<td>10. I am extremely glad that I chose this organization to work for, over others I was considering at the time I joined</td>
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### PART THREE: (Continued)

**My Organisation**

"Mark each question 1 to 7 with an "X""

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11. There's not too much to be gained by sticking with this organisation indefinitely

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12. Often, I find it difficult to agree with this organisation's policies on important matters relating to its employees

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13. I really care about the fate of this organisation

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14. For me this is the best of all possible organisations for which to work

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15. Deciding to work for this organisation was a definite mistake on my part

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(TURN TO PART FOUR)
PART FOUR: Setting Work Goals

Please respond to the following statements regarding goals and objectives: Mark each question 1 to 7 with an "X"

1. I am allowed a high degree of influence in the determination of my work objectives

2. I should not have too much difficulty in reaching my work objectives; they appear to be fairly easy

3. I receive a considerable amount of feedback concerning my quantity of output on the job

4. Most of my co-workers and peers try to outperform each other on their assigned work goals

5. My work objectives are very clear and specific; I know exactly what my job is

6. My work objectives require a great deal of effort from me to complete

7. I really have little voice in the formulation of my work objectives

8. I am provided with a great deal of guidance on the quality of my work

9. The setting of my work goals is pretty much under my own control

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<th>Number</th>
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<tbody>
<tr>
<td>12</td>
<td>My District Program Leader seldom lets me know how well I am doing on my work toward my work objectives</td>
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<td>13</td>
<td>There is a very competitive atmosphere among my peers and myself with regard to attaining our respective work goals; we all want to do better in attaining our goals than anyone else</td>
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<td>14</td>
<td>I understand fully which of my work objectives are more important than others; I have a clear sense of priorities on these goals</td>
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<td>15</td>
<td>My work objectives are quite difficult to attain</td>
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<td>16</td>
<td>My District Program Leader usually asks for my opinions and thoughts when determining my work objectives</td>
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**PART FIVE: My Feelings About Work**

**How frequently are you bothered at work by?**

Mark a column 1 to 5 with an (X) for each question:

| feeling that you have too little authority to carry out the responsibilities assigned to you | 1 2 3 4 5 |
| feeling unclear on just what the scope and responsibilities of your job are | 1 2 3 4 5 |
| not knowing what opportunities for advancement or promotion exist for you | 1 2 3 4 5 |
| feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary workday | 1 2 3 4 5 |
| thinking that you'll not be able to satisfy the conflicting demands of various people over you | 1 2 3 4 5 |
| feeling that you're not fully qualified to handle your job | 1 2 3 4 5 |
| not knowing what your immediate supervisor (DPL) thinks of you, how he or she evaluates your performance | 1 2 3 4 5 |
| the fact that you can't get information needed to carry out your job | 1 2 3 4 5 |
| having to decide things that affect the lives of individuals, people that you know | 1 2 3 4 5 |
| feeling that you may not be liked and accepted by the people you work with | 1 2 3 4 5 |
| feeling unable to influence your immediate supervisor's (DPL) decisions and actions that affect you | 1 2 3 4 5 |
| not knowing just what the people you work with expect of you | 1 2 3 4 5 |
| thinking that the amount of work you have to do may interfere with how well it gets done | 1 2 3 4 5 |
| feeling that you have to do things on the job that are against your better judgment | 1 2 3 4 5 |
| feeling that your job tends to interfere with your family life | 1 2 3 4 5 |

(TURN TO PART SIX')
PART SIX: Feelings About Self and Others

Please conclude this questionnaire by responding to the following statements regarding self and others. SEE SCALE CHANGE.

"Mark each question 1 to 7 with an "X"

<table>
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<th>EXAMPLE:</th>
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1. I am very much personally involved in my work
2. I live, eat and breathe my job
3. The most important things which happen to me involve my job
4. My opinion of myself goes up when I do this job well
5. I feel a great sense of personal satisfaction when I do this job well
6. I feel bad and unhappy when I discover that I have performed poorly on this job
7. My own feelings generally are not affected much one way or the other by how well I do this job
8. Most people on this job feel a great sense of personal satisfaction when they do the job well
9. Most people on this job feel bad or unhappy when they find they have performed the work poorly
10. When I do my work well, it gives me a feeling of accomplishment
11. When I perform my job well, it contributes to my personal growth and development
12. Doing my job well increases my feeling of self esteem

(END OF QUESTIONNAIRE)

THANK YOU

THANK YOU
APPENDIX D
Factor Analysis
FACTOR ANALYSIS

The Statistical Package for the Social Sciences (pp. 468-489) was used to help analyze clusters of the change agent roles in this study.

The term factor analysis covers a large variety of procedures, and involves three primary steps: (1) the preparation of a correlation matrix, (2) the extraction of the initial factors - the exploration of possible data reduction, and (3) the rotation to a terminal solution - the search for simple and interpretable factors.

The first step in factor analysis involves the calculation of measures of association for a set of relevant variables, which have crucial implications for the factor results and their possible interpretation.

The second step in factor analysis is to explore data reduction possibilities. In doing so, the new variables may be defined as exact transformations of the original data or inferences may be made about the structure of variables and the source of their variation.

In the third step, a number of rotational methods are applied to arrive at the best terminal solution that satisfies the theoretical and practical needs of the research problem. (This is possible regardless of whether factors are defined or inferred, as the exact configuration of the factor structure is not unique, and one factor solution can be transformed into another without violating the basic assumptions or the mathematical properties of a given solution.)

For this dissertation study, the Varimax orthogonal rotation was found to be the best rotational method for use in helping interpret the concept "expect too much of self."
APPENDIX E

Post Hoc Comparisons
POST HOC COMPARISONS

Glass and Hopkins (1984:368-401) describe multiple comparisons in the following manner:

The omnibus F-test in an analysis of variance (ANOVA) is a test of the hypothesis that the population means of all J groups are equal. There are two possible statistical conclusions that follow, i.e., the hypothesis is either tenable or it is rejected. The rejection of the null hypothesis tells nothing about which means differ significantly from which other means. In most studies, when $H_0$ is rejected, then a search for which differences in means are significant is in order, and the procedures used in the search are termed multiple comparison techniques. These are either planned prior to the research or done post hoc after the analysis reveals some differences.

The two post hoc techniques used in helping explain the statistically significant differences in this research study included the Scheffe' and the Waller-Duncan methods.

Scheffe' - This technique is a conservative post hoc method. It defines the family of contrasts as the family of all possible simple and complex contrasts, and employs a family-based type-I error rate.

Waller-Duncan - This technique is more liberal than Scheffe' but still provides a high level of protection against type-I errors (i.e., claiming differences that are not real when the F is small).

Both techniques were applied using the Statistical Analysis System (SAS) at Louisiana State University, and the results are reported in Chapter IV of this dissertation study.
VITA

Jared Melville Smalley is the son of Harvey D. Smalley Jr., and Marian Melville Smalley. He was born December 26, 1936, at St. Paul, Minnesota. His early childhood was spent at Perham, Minnesota, where he attended elementary and junior high school; and his high school days were spent at Glenwood, Minnesota.

A fourth generation newspaper editor, he earned a bachelor of arts degree in Journalism from the University of Minnesota in 1959, and held various reporting assignments on weekly and daily newspapers in Perham, Redwood Falls, Benson and Fergus Falls communities of Minnesota.

On April 16, 1968, he joined the Minnesota Agricultural Extension Service, as an Area Extension Agent assigned to a special community development project called Concerted Services in Training & Education that focused on a variety of approaches for rural development (and required 13 one week training sessions in Washington D.C. to learn strategies). During the phase out period of the project (1976–78), he was involved closely with the development of alternative delivery systems for adult education and networked with a number of vocational technical schools in northwestern Minnesota.

Beginning October 1, 1978, he assumed a series of three acting assignments as an assistant district director and as a district director to supervise Minnesota County Extension Agents in northwestern Minnesota. This was followed by a one-year assignment (1981–82) as an Area Extension Agent with the Home Economics-Family Living program area doing communication and image building efforts; thirteen months
as acting state program leader for Community Resource Development; and a one-year assignment as assistant to the Dean & Director of Extension with responsibility for coordinating activities in the Community and Natural Resource Development (CNRD) program area. He is currently the Area Extension Agent for CNRD at the Crookston campus of the University of Minnesota, and has responsibility for work with County Extension Agents in 22 counties of northwestern Minnesota on educational programs related to public issue education and leadership development.

Prior to his doctoral study in the Department of Extension and International Education at Louisiana State University, he completed a master of science in education degree in the social studies area from Moorhead State University at Moorhead, Minnesota (1976).

His family includes his wife, Donna, to whom he has been married since August 16, 1958; and their three children: Margaret Stacey, a masters student in educational counseling at Moorhead State University (Minn.); Gregory Michael, a recent graduate in psychology from the University of Minnesota; and Gayle Marie, a fifth year senior at North Dakota State University (Fargo) in nutrition.

At age 49, his career goals include working another 21 years as an Extension educator in community development or in administrative assignments related to the development of relevant educational programs for Extension clientele in rural and urban settings.

THE END
Candidate: Jared M. Smalley

Major Field: Extension Education

Title of Dissertation: Perceptions of Nine Change Agent Roles and Related Work Variables by County Extension Agents in the Minnesota Agricultural Extension Service — 1985

Approved:

[Signatures of Major Professor and Chairman, Dean of the Graduate School, and EXAMINING COMMITTEE members]

Date of Examination: October 29, 1985