

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Department of Agricultural Leadership,
Education and Communication: Dissertations,
Theses, and Student Scholarship

Agricultural Leadership, Education, and
Communication, Department of

Winter 12-1992

Changes in Extension Educators' Perceptions of Job Dimensions and Job satisfaction Following Organizational Restructuring

John W. Furgason

University of Nebraska-Lincoln

Follow this and additional works at: <https://digitalcommons.unl.edu/aglediss>



Part of the [Other Public Affairs, Public Policy and Public Administration Commons](#)

Furgason, John W., "Changes in Extension Educators' Perceptions of Job Dimensions and Job satisfaction Following Organizational Restructuring" (1992). *Department of Agricultural Leadership, Education and Communication: Dissertations, Theses, and Student Scholarship*. 81.
<https://digitalcommons.unl.edu/aglediss/81>

This Thesis is brought to you for free and open access by the Agricultural Leadership, Education, and Communication, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Department of Agricultural Leadership, Education and Communication: Dissertations, Theses, and Student Scholarship by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Changes in Extension Educators' Perceptions
of Job Dimensions and Job Satisfaction
Following Organizational Restructuring
by

John W. Furgason

A THESIS

Presented to the Faculty of
The Graduate College in the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Master of Arts

Major: Adult and Continuing Education
Under the Supervision of Professor John M. Dirkx

Lincoln, Nebraska

December, 1992

Changes in Extension Educators' Perceptions
of Job Dimensions and Job Satisfaction
Following Organizational Restructuring

John W. Furgason, M.A.
University of Nebraska, 1992

Adviser: John M. Dirkx

The literature provides ample evidence that state Extension programs across the country are introducing new or modified program development approaches and reorganized work units as they attempt to remain responsive to the public's educational needs. Implementation of such innovations, in many instances, represents change in Extension agent roles and responsibilities which could be characterized as a redesign of Extension work.

Research on the effects of job redesign has consistently found evidence that workers' perceptions of certain core dimensions or characteristics of their jobs influence their satisfaction with that job. Given the changing organizational climate within Extension and the findings of job redesign research, the present inquiry explored whether the introduction of organizational innovations changed Extension agent job perceptions and job satisfaction.

Data from prior research with Nebraska Extension agents established a baseline of perceptions about the level of skill variety, task identity, task significance, autonomy, feedback, personal satisfaction, and context satisfaction present in the job of agent. These observations, obtained before program development and work unit changes were

implemented, were contrasted with agents' current perceptions of the same factors following introduction of organizational changes.

The study findings suggested that agents (n=103) saw the job dimensions as unchanged and experienced no change in personal satisfaction. Further, new agents (n=33) who had joined the organization after implementation of the innovations did not appear to perceive the job dimensions and personal satisfaction differently from their experienced colleagues. Satisfaction with compensation and supervision improved, while satisfaction with co-worker relations declined, among those agents experiencing the work modifications. In addition, these agents were more satisfied with job security, compensation, and supervision than were their newer colleagues.

It was concluded that, over the five-year period, implementation of issues-based programming and clustered work units had not altered Extension agent perceptions of core job dimensions or levels of job satisfaction, but may have affected some aspects of satisfaction with the work context.

CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF TABLES	iii
Chapter 1 -- Introduction	1
Problem Statement	1
Purpose of the Study	6
Definition of Terms	7
Limitations	8
Chapter 2 -- Review of Literature	9
Relevant Literature	9
Related Literature	19
Chapter 3 -- Methods	24
Description of Subjects	24
Research Design and Procedures	24
Instrument	26
Data Analysis	30
Chapter 4 -- Results	31
Description of Participants	32
Changes in Job Dimensions and Job Satisfaction	32
Differences in Staff Perceptions	35
Other Findings	37
Chapter 5 -- Summary and Discussion	41
References Cited	49
APPENDIXES	
A. Analyses of Prior Group vs. Repeat Group	52
B. Transmittal Letter Included with Survey Instrument	53
C. Survey Instrument	54

ACKNOWLEDGEMENTS

Completion of this thesis is a particularly significant event in my life, both from an educational standpoint and at a personal level. I extend my thanks to Dr. John Dirkx for serving as my adviser in this endeavor, and for the support, encouragement, and guidance he provided me in pursuing this goal.

To Dr. Kay Rockwell and Dr. Beth Birnstihl, my appreciation for your assistance and advice in the development and execution of this project and for your reading and critiquing the thesis report. I also thank Dr. Jim Burrow for serving as a reader on my thesis committee.

I thank Aura Lee, my wife, for helping me maintain a sense of perspective throughout the process.

LIST OF TABLES

1.	Reliabilities of the JDS scales	28
2.	Scales computed from the 60-item instrument . . .	29
3.	Mean Scores on Job Dimensions: 1987 & 1992 all subjects	33
4.	Mean Scores on Job Dimensions: Repeat group - 1987 vs. 1992	34
5.	Mean Scores on Job Satisfaction: Repeat group - 1987 vs. 1992	35
6.	Mean Scores on Job Dimensions: Repeat group vs. New group	37
7.	Mean Scores on Job Satisfaction: Repeat group vs. New group	37
8.	Mean Scores on Context Satisfaction: Repeat group 1987 vs. 1992	39
9.	Mean Scores on Context Satisfaction: Repeat group vs. New group	40
10.	1987 Mean Scores on Job Dimensions Repeat group vs. prior group	52
11.	1987 Mean Scores on Job Satisfaction Repeat group vs. prior group	52

CHAPTER 1

INTRODUCTION

Problem Statement

The University of Nebraska Cooperative Extension Division's long-standing mission has been to implement educational programs focused on agriculture, natural resources and home economics concerns and practices. Above all else, these programs are intended to be responsive to the practical needs of people and communities throughout the state. Nebraska Extension recently reshaped its program planning processes and its organizational structure to continue fulfilling its mission in the face of changing educational, social, and economic conditions. Nebraska's actions to address such changes are consistent with the challenges facing the Cooperative Extension System (CES) on a national scale. A recent report setting forth the CES strategic vision for the 1990's noted that: "...the System must be positioned to meet the shifting needs and priorities of the people it serves. As their needs and priorities change, Extension program priorities, organizational structures, and external relationships must also change" (Cooperative Extension System Strategic Planning Council, 1991, p. v).

Across the CES, a number of state Extension Divisions other than Nebraska's have also implemented new or modified

programming approaches. The Extension Service of the United States Department of Agriculture (ES-USDA) encouraged development of this trend when it established national priority program initiatives (Cooperative Extension System, 1988). Within this operational structure, federal funding available to state Extension programs through ES-USDA is targeted to address issues critical to the continued economic, social, and environmental well-being of the population at large. State Extension programs, including Nebraska Extension, have begun focusing their resources on identifying and responding to priority initiatives through a programming strategy that focuses on matters of wide public concern arising out of complex human problems. These concerns, or issues, typically transcend the boundaries of individual disciplines and subject matter areas. Thus, educational programming is being developed from an issues-based perspective and therefore requires more emphasis on teamwork and interdisciplinary approaches to service planning and delivery.

The introduction of issues-based programming with its accompanying focus on team-oriented strategies increases the need for specialized staff expertise. Similarly, the greater knowledge levels people tend to have within their areas of interest create a need for staff to provide more in-depth information and education. However, given the diversity of expertise required by the issues and budget

limitations at the local and state level, it is apparent that individual counties cannot support "full" coverage by specialized agents. Within this context, insuring an effective and efficient distribution of staff expertise to address an array of critical issues across an entire state presents a significant challenge to Extension administrators. Responses to this challenge are varied, but several state Extension programs have elected to modify their organizational structures to promote greater staff specialization and facilitate implementation of issues-based programming. From earlier work by Barnett and Louderback (1971) and Johnson (1966) it is evident that multi-county organization and agent specialization have surfaced as concerns in the past.

Nebraska Extension is among those programs that have shifted from the traditional single-county model of organization and administration to a multi-county or cluster model. The Nebraska model, referred to as the Extension Program Unit (EPU), was introduced on a pilot basis in 1987. By 1989, all 87 single-county program units had been replaced by 21 EPUs. In summarizing the development of the EPU model and its purposes, Rockwell, et. al. (1992) noted that the EPU was intended to support greater depth in programming and to "(a) increase Extension agent's roles as educators within their specialized area, and (b) create a situation in which agents could be more proactive in

responding to critical issues" (p. 147). Changes affecting staff upon implementation of the EPU structure included appointment of a coordinator for the EPU, assignment and division of program responsibilities according to agent's areas of special interest, and the addition of Extension assistant positions to assume responsibilities for 4-H programs.

Recent studies and reports from a number of other states across the CES indicate that the impact of issues-based programming and reorganization into multi-county program units on field staff is an area of significant interest. In addition to work in Nebraska (Rockwell, et. al. 1992), researchers in Texas, Minnesota, and Ohio have examined the effects such innovations are having on Extension programs and personnel (Taylor-Powell and Richardson 1990, Krueger and Ahles 1989, Bartholomew and Smith 1990). Collectively, these studies document and describe the implementation of (a) issues-based programming, (b) reorganization into multi-county program units, or (c) simultaneous introduction of both changes. Findings from these studies indicate that agents' jobs have changed, particularly with respect to the types and frequencies of specific work tasks.

A question that remains unanswered in the literature is whether these innovations have altered Agents' perceptions of the fundamental characteristics of their jobs or their

levels of job satisfaction. Understanding the potential impact organizational changes could have on staff perceptions of Extension work and worker satisfaction has practical significance for administrators in designing and implementing such changes. Research into this subject could also have theoretical implications for organizational development and behavior.

Birnstihl (1989) investigated the relationship of job characteristics and job satisfaction among Extension agents in Nebraska. Based on the Job Characteristics theory developed by Hackman and Oldham (1975), this study hypothesized that employees' perceptions of certain key dimensions of their jobs influence satisfaction with work which, in turn, is related to overall job performance. Specifically, the study found for Nebraska Extension agents that (a) the job dimensions of autonomy, skill variety, and feedback contributed to job satisfaction, and b) job satisfaction was correlated with performance (Birnstihl & Rockwell, 1989). Further research was recommended to determine if the job dimensions, as perceived by Extension agents, are altered as the structure of the organization changes.

Since the Birnstihl and Rockwell study immediately preceded the introduction of significant programming and organizational changes in Nebraska Extension, its findings provide a baseline reference point for further research.

Thus, the present study is being undertaken to evaluate how the introduction of issues programming and multi-county program units have affected Extension agents' views of their working environment.

Given the nature of funding trends within ES-USDA, and the persistent budget constraints experienced by the University of Nebraska and the State of Nebraska it is reasonable to expect that issues-based programming and multi-county structure are permanent changes in Nebraska Extension operations. Extension agents' comfortableness with such changes, as evidenced by their levels of job satisfaction, will contribute substantially to the potential success or failure of these strategies. Accordingly, findings from this study have potential implications for staff development, in-service training, and personnel recruitment/retention.

Purpose of the Study

This study seeks to determine whether changes in Nebraska Extension's organizational structure and programming approach, instituted in 1988, have altered Extension agents' perceptions of their jobs or their job satisfaction. Specific research questions posed in this study include the following:

1. Has the relative importance of the job dimensions changed from 1987 to 1992?

2. Have Extension agent perceptions of five job dimensions (autonomy, skill variety, feedback, task identity, and task significance) changed from 1987 to 1992?
3. Have job satisfaction levels changed from 1987 to 1992?
4. Are there differences in perceptions of job dimensions between staff hired before 1987 and those hired since 1987?
5. Are there differences in job satisfaction between staff hired before 1987 and those hired since 1987?

Definition of Terms

Hackman and Oldham (1980, pp. 78-80) defined the job dimensions as follows --

Skill variety: The degree to which a job requires a variety of different activities in carrying out the work, involving the use of a number of different skills and talents of the person.

Task identity: The degree to which a job requires completion of a "whole" and identifiable piece of work, that is doing a job from beginning to end with a visible outcome.

Task significance: The degree to which a job has a substantial impact on the lives of other people, whether those people are in the immediate organization or the world at large.

Autonomy: The degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.

Feedback: The degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his or her performance.

Context satisfaction, within this study, is being defined by the researcher as follows --

Context satisfaction: A composite indicator of employee satisfaction with job security, compensation, co-worker relations, and supervision.

Limitations

The study was subject to the following limitations:

1. Data collected in the study consisted of self-reported perceptions of the Extension agents which are susceptible to respondent bias.
2. Due to the case study nature of the inquiry, findings may not be generalizeable to the experiences of Extension programs in states other than Nebraska.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this chapter is to review relevant and related research and literature which addresses the primary variables of interest in the current study. These variables include specific aspects of job change within Extension work such as issues-based programming, multi-county or clustered work units, agent specialization, and job satisfaction. Beyond direct applications to Extension work, the review will briefly examine literature pertaining to the Job Characteristics theory, especially as it relates to the subject of job satisfaction.

Relevant Literature

The Cooperative Extension System (CES) is a non-formal educational system organized as a partnership of the United States Department of Agriculture, seventy-four Land Grant Universities, and thousands of county-level units. The purpose or mission of this national partnership is "to help people improve their lives through an educational process that uses scientific knowledge focused on issues and needs" (Cooperative Extension System Strategic Planning Council, 1990). Due to the dynamic role it plays in providing practical education, the Cooperative Extension System (CES) periodically reviews and renews its program structures and priorities. In 1987 CES established a "New Direction,"

...to become a more relevant, dynamic, and flexible organization, able to make a greater impact on problems and opportunities brought about by changes in the global economy, the environment, demographics, family structures, values, and resources. (Cooperative Extension Strategic Planning Council, 1991).

These changes cut across traditional CES programming areas and discipline-based research interests.

Consequently, an issues-based approach to programming was initiated by the CES as a means of responding to those complex problems which are matters of critical public concern. The decentralized nature of the CES allows each state to develop its own approach to this programming innovation. Thus, published and unpublished studies and reports concerning the implementation of issues-based programming by state Extension programs address differing organizational perspectives and strategies. In some states issue programming is being pursued in a context of organizational restructuring involving the clustering of counties into new operating units.

Researchers in Texas undertook an interim evaluation of issues-based programming to identify successes, obstacles, and improvements needed and to document the types of changes occurring (Taylor-Powell & Richardson, 1990). Staff surveyed included agents, specialists, coordinators, and district directors. Changes in job roles, organization of

resources, audiences reached, delivery methods used, and Extension program council structure were expected to be evident in this assessment of staff perceptions. Findings indicated that 70% of the agents reported changes in their jobs. More time and effort were being spent coordinating with others (internal/external), but agents also felt their work to be more focused and more responsive to county concerns. Changes in program councils were reported by 80% of the agents, while 81% indicated they were working with new or different audiences. Nearly two-thirds of the staff surveyed were having problems carrying out programs based on issues. A list of in-service education needs identified, in rank order, included: (1) turning complex issues into programs, (2) innovative program methods, (3) building teams, and (4) evaluating issues impact.

Conklin and Gritzmacher (1990) investigated perceptions of Ohio Extension faculty by obtaining measures of faculty attitudes toward issues-based programming, ratings of its importance, knowledge of this approach, and ability to implement. Results showed that staff felt issues-based programming was moderately important to their professional role while their attitudes toward this programming approach were fairly neutral. Staff reported their knowledge of, and ability to implement, issues-based programming only slightly above average. Training needs identified as high priority

were resource identification, audience identification, and evaluation.

Another study of Ohio Extension, conducted by Bartholomew and Smith (1990), provided a descriptive report regarding the introduction of clustered program units begun in 1987. Agents reported increased efficiency and more group teaching as a result of multi-county work. For most agents hours worked had increased and, as a consequence, many felt less in control of their lives. King (1990) also looked at staff attitudes toward clustering in Ohio and suggested that agents were receptive to the concept, willing to learn more about it, and believed the concept had merit. Agent specialization success was strongly correlated with clustering success.

Perceptions or reactions to clustered staffing patterns in Minnesota, also introduced in 1987, were evaluated by Hutchins (1990). In this case study, Hutchins notes that clustering was intended to improve the system's capacity to conduct issues-based programming. Agent specialization and explicit expectations that cluster units would form program and issue teams to help focus their efforts were key elements of the new cluster system. Specialization was found to be a satisfying aspect of clustering. Agents liked being viewed more as a teacher and expert resource. Increases in personal and professional support from co-workers were reported and staff felt that program quality

had improved as well. However, implementation of the interdisciplinary issue teams posed some difficulty for agents as they had to deal with the combined challenges of working as a team and addressing a new type of program need. An earlier case study by Morse (1987), conducted at the beginning of Minnesota's shift to clustering, found that while staff appeared to have a basic and consistent understanding of the new system, a number of administrative implementation problems could be seen as potential threats to successful team efforts.

Another assessment of the Minnesota experience with clustering, issues-based programming, and agent specialization tracked the implementation process over time. Krueger and Ahles (1989) surveyed agents and other participants in the process at three six-month intervals beginning in February 1988 and drew upon results from two surveys conducted in 1987 to detect changes in perceptions. Data showed a consistent increase in the perceived quality of programs and quality of staff over a two and half year period. Respondent ratings of familiarity with and favorable attitudes toward clustering were relatively high over the 1988-1989 time frame. Specialization continued to be seen as important and favorableness toward issues-based programming was highly rated at each survey interval. Agents were largely in agreement that the innovations were worth the investment of time and money; clustering was

viewed as worthwhile by 70% of the agents, while around 90% believed specialization and issues-based programming were beneficial as well.

Implementation of clustering and issues-based programming in Nebraska Extension appears to have much in common with the experiences being reported by other states. Rockwell, Furgason, Jacobson, Schmidt, and Tooker (1992) summarized results of a two-year pilot test to establish clustered program units by noting that this innovation presented agents with new roles and new time demands. Increased specialization and direct teaching were evident and more time was devoted to planning programs than to program preparation. Results of a survey conducted by Rockwell, Furgason, and Schmidt (1992) suggest that agent perceptions, reactions, and attitudes towards clustering and issues-based programming closely parallel those of agents in other states. Specific findings showed that 90% of the agents saw issues-based programming as an effective way to develop new programs, 72% believed teamwork would be promoted, and 70% felt such programming provided the opportunity to specialize. With regard to clustering, 85% agreed that the sharing of implementation responsibilities improves programming, 82% felt delegating some program administration to other staff made better use of agent time, and 79% saw clustering making better use of agent knowledge and skills.

The concept of organizing Extension staff into multi-county or clustered work units predates the current focus on issues-based programming by several decades. At that time the term area work was commonly used to describe this type of staffing arrangement. Johnson (1966) argued that area work arose out of a need to reconcile two conflicting forces, which were: (1) pressures for greater expertise among Extension staff resulting from an increasingly better educated clientele and growing demands to serve hard to reach segments of society (e. g. low income, school dropouts, teen parents), and (2) the inherent limitations which the traditional county-based staffing pattern placed on specialization. In his study of California Extension workers, Johnson found that agents reassigned to area work were satisfied with the job and felt it did permit them to develop expertise in a specialized interest area. County Extension directors believed that a cooperative and supportive attitude among staff involved was essential to successful implementation of area work.

Barnett and Louderback (1971) investigated the effects of organizational changes on aspects of job satisfaction among Kentucky Extension staff. Agents in this study were shifted from generalist to area specialist job duties and had program responsibilities expanded from single to multi-county areas. Factors found to be significantly associated with job satisfaction stemming from the new specialized role

were opportunities for personal growth, the work itself, and greater responsibility. The latter two satisfaction factors were also significantly associated with the change in geographical coverage. Additional satisfaction factors linked with multi-county work were increased interpersonal relations with others/colleagues and seeing direct results of their work. Dissatisfactions related to both job change components were working conditions and supervision received. These findings suggest that changes in the agents' roles which increased the scope of their jobs were sources of job satisfaction while dissatisfaction primarily focused on context variables.

Agent satisfaction with multi-county assignments was also investigated by Warner, Young, and Cunningham (1975) through a comparative study of staffing patterns across seven state Extension programs. These researchers contrasted agent perceptions of program effectiveness, complexity, and job satisfaction in three different staff arrangements: (1) county staff with area responsibilities, (2) county and area staff, and (3) county staff only. All patterns were seen as moderately effective with no significant differences between types. Complexity was regarded as low in each system but agents in the two area models reported significantly less complexity. Agents in the county with area responsibilities pattern rated complexity at the lowest level. Job satisfaction was high

across all groups yet staff in the area models were significantly more satisfied than those from the county only systems. As with complexity, satisfaction was greatest among staff in the states utilizing the county with area responsibilities staffing arrangement. The authors suggested that greater satisfaction in the area patterns was attributable to greater specialization and a feeling of greater participation in decision making.

In a study of Illinois Extension agents, Gamon and Cassina (1989) explored determinants of job satisfaction utilizing the Herzberg two-factor theory of work motivation. Six factors affecting job satisfaction were identified: (1) job importance, (2) supervision, (3) work overload, (4) salary, (5) facilities, and (6) progress in marketing the Extension image. Gamon and Cassina noted that findings were consistent with the Herzberg theory in that job importance was reported as a source of satisfaction while the remaining five factors were sources of dissatisfaction. Overall, staff were moderately satisfied but levels differed significantly between single and multi-county agents on the job importance factor.

Apart from organizational change and structure issues, other research on agent job satisfaction has explored the effects of age, experience, and values (Griffin, 1984; Poling, 1990; Andrews, 1990;). In addition, two recent studies have examined the relationship of specific job

dimensions or characteristics to Extension agent performance (Birnstihl, 1987) and job satisfaction (Birnstihl & Rockwell, 1989).

Birnstihl's purpose in the 1987 research was to test a model developed by Hackman and Oldham (1975), now recognized as the Job Characteristics theory, with a population not addressed in the initial research validating the theory. Results of the study generally supported the a priori structure of five key job dimensions as theorized by Hackman and Oldham: (1) skill variety, (2) task identity, (3) task significance, (4) autonomy, and (5) feedback. The theory was further supported with regard to the structure of intervening variables that moderate the relationship between the job dimensions and outcomes which include both personal and work outcomes. It is these personal outcomes that are generally defined as aspects of job satisfaction.

In a second study, Birnstihl and Rockwell (1989) addressed the question of the job dimensions as they relate to job satisfaction. Factor analysis results presented a single factor, identified as personal satisfaction, which combined three separate factors proposed by the model (general satisfaction, growth satisfaction, and internal work motivation). As predicted by the model, context satisfaction was composed of four factors, (a) job security, (b) compensation, (c) working relationships, and (d) supervision.

On the basis of correlational analyses the authors concluded that for Extension agents the job dimensions influence satisfaction with the job which is, in turn, related to job performance (Birnstihl & Rockwell, 1989). In essence, the study suggests that job satisfaction does derive from certain job dimensions. Thus, satisfaction may be affected as changes in jobs alter the degree to which critical dimensions are/are not perceived as present.

Related Literature

The Job Characteristics theory advocated by Hackman and Oldham is, perhaps, the most well known and widely discussed attempt to explain the relationship of job dimensions to job satisfaction. A substantial amount of research on this theory has been reported in the literature. Hackman and Oldham (1976) conducted an initial test of the theory using 658 subjects who worked in 62 different jobs across seven organizations. Utilizing the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1975), the study findings were consistent with expectations from the theoretical model. Specifically, the results supported the link between job dimensions and job satisfactions. Further, a summary score across job dimensions (the motivating potential score or MPS), related more strongly to satisfaction than any of its component dimensions.

A related study by Oldham, Hackman, and Pearce (1976) found similar results but demonstrated that satisfaction

with work context may play a moderating role in the theory relating job dimensions to job satisfaction. These authors observed that employees who are satisfied with job context variables and who have strong growth needs tend to respond more positively to enriched jobs than those having low context satisfaction and/or low growth needs.

In reviewing empirical evidence concerning the relationships posed by the Job Characteristics theory, Kelly (1992) found employee perceptions of job content (the job dimensions) were associated with job satisfaction in 21 of 31 studies reviewed. Where employees perceived an improvement in job content they were likely to experience an increase in job satisfaction. For Kelly, the overall results ran parallel to those found in reviews of worker participation in decision making. In addition, the review found evidence indicating that group job redesign improved satisfaction more than individual job redesign. However, a criticism Kelly offered was that few studies have involved an actual change in job content. He felt it could be argued that highly skilled jobs may be perceived differently by employees experiencing actual changes in job design compared with employees recruited after a job has been changed. It should be noted that many of these studies focused on personal satisfaction attributes and addressed context satisfaction in a limited manner if at all.

A study conducted by Hackman, Pearce, and Wolfe (1978), used a sample which had experienced job changes, though the changes were the results of technological innovations rather than planned job enrichment efforts. Findings showed that general satisfaction, internal work motivation, and growth satisfaction increased for jobs that were improved (increased on the job dimensions) and decreased for jobs that had been diminished. Context satisfactions did not change as a function of the job changes, but since the context variables had not been altered by the work redesign this was the expected result.

Orpen (1979) also studied the effects of job enrichment in a field experiment and concluded that job satisfaction is more strongly related to the job dimensions present in a job than it is to employee involvement in the work or motivation to perform well. Orpen also found that the MPS related more strongly to each of the personal and work outcomes than did any of the core dimensions on their own.

The essential properties of the MPS, noted above, are fairly synonymous with the term job scope as used in the literature. In a review of studies exploring the job content-job satisfaction relationship from the perspective of job scope, Stone (1986) noted a high degree of convergence between field-based and laboratory-based research. The overall consistency of the findings led Stone to conclude that job scope is a strong predictor of

individuals' affective responses to the work they perform and their jobs in general.

Champoux (1980) investigated the nature of the connection between job scope and affective outcomes (personal satisfaction) and found evidence suggesting a curvilinear relationship. That is, as job scope rises (gets broader) there is a corresponding rise in satisfaction, up to a point, beyond which further increases in job scope produce decrements in satisfaction.

Summary

The literature concerning the relationship between job content and job satisfaction has consistently reported evidence suggesting that employee perceptions of their job's dimensions affects their level of job satisfaction. This association appears valid whether considered in terms of specific job dimensions, a global measure of motivating potential, or as overall job scope. Thus, changes in jobs that increase or decrease the relative degree to which the core dimensions are perceived to be present tend to alter perceptions of job satisfaction.

From the review of literature regarding Extension work it is reasonable to conclude that the job of Extension agent is a dynamic one with respect to the key job dimensions. The introduction of innovations in programming and/or organizational structure is widespread across the Extension system. Yet it is also clear that most of the current

studies have been descriptive accounts of ongoing implementation of change. Little attention has been paid to the question of whether the changes being introduced have substantially altered Extension agents' perceptions of their jobs or their level of job satisfaction. The current study proposes to explore this line of inquiry.

CHAPTER 3

METHODS

Description of Subjects

The population for this study consisted of all University of Nebraska Cooperative Extension agents working on at least a half-time basis in Extension Program Units as of December 31, 1991. A current list of agents provided by the Cooperative Extension personnel officer identified 145 potential participants. A majority of these agents were males (53%). Length of service with Nebraska Extension ranged from 1 year to 36 years with the average being 12.9 years. Agent position assignments largely included responsibility for Agriculture or Home Economics programs. A small number of agent assignments involved other programs (Youth and 4-H, Horticulture). Worksite settings varied from the sparsely populated counties of north central Nebraska to the large metropolitan areas of Lincoln and Omaha. Agents were assigned to Extension Program Units (EPU) which ranged in size from 2 to 11 counties. Eleven of the 21 EPU settings were comprised of three or four counties.

Research Design and Procedures

The study utilized a survey research design and was conducted as a follow-up to prior research conducted by Birnstihl (1987, 1989). The raw data and analyses from the

prior studies were provided to the researcher by Birnstihl. For the present study, a letter requesting agent participation, a questionnaire, and a postage-paid return envelope were mailed to each eligible Extension agent September 9, 1992. A code number was placed on the return envelope to protect confidentiality and enable follow-up with non-responders. Agents who had participated in the 1987 Birnstihl research were assigned the same code numbers as used in that study to permit comparisons between their 1987 and 1992 responses. Telephone follow-up contact with non-responders was conducted during the period September 23 through October 2, 1992.

Data from the 1987 study were analyzed to draw comparisons between those agents who participated in both studies (Repeat group, n=103) and agents lost through attrition since the earlier study (Prior group, n=44). This was done to address concerns that staff who left the organization might have differed from those who remained in terms of their perceptions of job dimensions or job satisfaction and thus be a source of error in the present study. Independent T-test analyses of response scale scores revealed no differences between the two groups for any of the job dimension or satisfaction scale scores (Appendix A). The groups were similar with respect to gender distribution but agents in the Prior group had a greater length of service (\bar{M} = 16.68 years) with Nebraska Extension than the

Repeat group agents ($M = 10.82$ years). However, given that 52% of the Prior group had retired from the organization with over 20 years service, the differences in length of service were largely accounted for as a function of normal retirement. It was concluded that the Prior group's absence from the present study would not have influenced the results.

Instrument

Extension agent perceptions of job dimensions and job satisfaction were obtained utilizing a modified version of the Job Diagnostic Survey (JDS) developed by Hackman and Oldham (1980). The instrument used for this study (Appendix C) consisted of five sections of the JDS questionnaire which included 60 items addressing general job characteristics or aspects of job satisfaction. One additional item requested the subject's length of service with the organization. Two sections of the JDS, measuring the strength of an individual's growth needs (within their jobs), were omitted from the questionnaire because this construct was not within the scope of the study. All JDS items employed a 7-point rating scale.

The sections of the instrument consisted of the following:

1. Sections I and II -- measurements of the five job dimensions -- skill variety, task identity, task significance, autonomy, and feedback (21 items).

2. Sections III to V -- measurements of sources of job satisfaction (39 items).

The first section of the instrument asked the agents to describe seven aspects of their jobs using a continuum ranging from very little to very much, with descriptive anchors included at the extremes and midpoint of the range. In the second section items were rated by respondents as very inaccurate to very accurate statements about their jobs. Item scores from these sections yielded scale scores for each of the five job dimensions.

Statements in sections three and five were rated on a strongly disagree to strongly agree scale, while the section four item response choices ranged from very dissatisfied to very satisfied. Item scores drawn from these sections yielded scale scores for seven aspects of job satisfaction which included: (1) general satisfaction, (2) internal work motivation, (3) growth satisfaction, (4) satisfaction with job security, (5) satisfaction with compensation, (6) satisfaction with co-worker relations, and (7) satisfaction with supervision.

Internal consistency reliabilities of the JDS scales as reported by Hackman and Oldham (1975) are displayed in Table 1. Reliabilities for two satisfaction scales not addressed in the initial study were subsequently reported by Oldham, Hackman, and Pearce (1976).

Table 1

<u>Reliabilities of the JDS scales</u>	
<u>Scales</u>	<u>Internal consistency reliability</u>
Job Dimension	
Skill variety	.71
Task identity	.59
Task significance	.66
Autonomy	.71
Feedback from the job	.71
Feedback from others	.78
Job Satisfaction	
General satisfaction	.76
Internal work motivation	.76
Growth satisfaction	.84
Co-worker relations	.56
Supervision	.79
Job security	.62 ^a
Compensation	.82 ^a

^a(Oldham, Hackman, & Pearce, 1976)

Coefficient alpha for the job dimensions ranged from .59 (task identity) to .78 (feedback from others). Reliability coefficients for the satisfaction scales ranged from .56 (satisfaction with co-worker relations) to .84 (growth satisfaction). Estimates of scale reliabilities obtained in other studies have been of comparable magnitude (Champoux, 1980). According to Hackman and Oldham (1975), the JDS scale items show adequate discriminant validity and given constructs were tapped in a manner that maximized the substantive richness of the measures. Evidence indicates that ratings of the job dimensions converge moderately well across employees, supervisors, and outside observers. Fried and Ferris (1986) found that the initial five-factor structure of the job dimensions varied across subsamples, but perfectly matched the ideal factor solution for highly

educated respondents (some graduate work or graduate degree).

Scale scores were computed for the job dimensions and job satisfaction components utilizing the scoring keys provided by Hackman and Oldham (1980) in conjunction with the factor analysis results obtained in the 1987 Birnstihl study. An overview of the scales as computed for this study is presented in Table 2.

Table 2

Scales computed from the 60-item instrument.

Job dimension scales	Satisfaction scales
Skill variety	Personal satisfaction
Task identity	General satisfaction
Task significance	Internal work motivation
Autonomy	Growth satisfaction
Feedback	Context satisfaction
From others	Job security
From the job	Compensation
	Co-worker relations
	Supervision

In order to replicate Birnstihl's factor structure, scale scores for the feedback job dimension were modified to include both components of feedback (feedback from others and feedback from the job). In addition, the seven discrete satisfaction scales were transformed into two broader scales: a) personal satisfaction--formed from the general satisfaction, internal work motivation, and growth satisfaction scale scores; and, b) context satisfaction--created from scale scores for satisfaction with job security, compensation, co-worker relations, and supervision.

Data Analysis

Descriptive statistics, including means and standard deviations, and frequency distributions were computed for each of the job dimension and satisfaction scales. Dependent T-test analyses were used to determine whether perceptions had changed among those agents surveyed in 1987 and in 1992. Independent T-test statistics were employed to analyze differences between the current perceptions of agents surveyed in both studies with those of newer agents who joined Extension since 1987.

CHAPTER 4

RESULTS

Presentation of the study results begins with a brief overview of statistical procedures followed by a description of the participants. Findings addressing the research questions are reported in three sections, namely: (a) changes in job dimensions and job satisfaction (questions 1-3, pp. 6-7), (b) differences in staff perceptions (questions 4-5, p. 7), and, (c) other findings related to the initial questions.

Overview of Statistical Procedures

Research questions concerning the subject of changes in agents' perceptions were addressed through the use of dependent T-test data analysis techniques. The use of such methods was considered necessary in view of the relationship existing between the responses provided by those agents surveyed first in 1987 and again in the current study. The dependent T-test was selected as an appropriate statistical test for these data given the scope of the research questions. This portion of the analysis was conducted with a sample size of $n=103$ due to incomplete 1987 data for one subject.

Research questions concerning differences in current perceptions between the pre-1987 agents (Repeat group) and the post-1987 agents (New group) were explored through the use of independent T-test analyses. For this portion of the

investigation all 137 subjects were included in the data analysis steps. Thus, the Repeat group size was $n=104$ and the New group size was $n=33$.

Description of Participants

Questionnaires were returned by 137 of the 145 eligible University of Nebraska Cooperative Extension agents, yielding a return rate of 95.1%. Fifty-four percent of the respondents were male and 46% were female. Length of service with Nebraska Extension varied from one year to 36 years with an average of 13.0 years. The majority of participants (57%) had more than ten years' experience as agents. Seventy-six percent of the sample were identified as the pre-1987 Repeat group, and thus, the post-1987 New group comprised 24% of the total respondents.

Changes in Job Dimensions and Job Satisfaction

The study sought to determine whether the relative order of job dimension importance (presence in a high degree) had changed (research question 1). Visual comparisons of the mean scores for all subjects surveyed in 1987 ($n=154$) and in 1992 ($n=137$) reveals that the relative order of importance of the job dimensions remained unchanged (Table 3). In both study groups skill variety was the job dimension perceived as present in the greatest degree. The mean for skill variety in the 1992 group was 6.28 on a 7-point scale. The dimensions of autonomy and task significance were rated slightly lower in each time period

while task identity and feedback were the attributes seen as having the least presence in the job of Extension agent. Although these latter two dimensions were rated lower relative to the other three, the mean scores for each job dimension are above the midpoint of the rating scale.

The relative order of the job dimensions reported by the Repeat group was also unchanged over time (Table 4). In both studies the Repeat group's ordering of the job dimensions matched that of the overall study samples noted above.

These findings provide no support for suggesting that the order of importance of the job dimensions changed over the specified time period.

Table 3

Mean Scores on Job Dimensions:
1987 & 1992 all subjects^a

Job Dimension	Rank	Year	n	Mean	S.D.
Skill variety	1	1987	154	6.19	0.67
		1992	135	6.28	0.55
Autonomy	2	1987	154	6.02	0.75
		1992	136	6.05	0.70
Task significance	3	1987	154	5.89	0.89
		1992	136	5.90	0.80
Task identity	4	1987	154	4.98	1.20
		1992	136	5.05	1.27
Feedback	5	1987	154	4.67	1.00
		1992	137	4.65	1.03

^aMeans calculated on a 7-point Likert scale with 1 being the low score and 7 being the high score.

A second research question posed in this study asked whether perceptions of the five job dimensions had changed

since 1987. The observed means and standard deviations presented in Table 4 show that agents tended to share the perception that their jobs were high in skill variety, task significance, and autonomy. Conversely, the task identity and feedback dimensions were seen as moderately present and with greater variation among agent perceptions. No significant differences between 1987 and 1992 agent perceptions were found for any of the five job dimensions.

Given these findings, the supportable answer to the research question is that perceptions of the five job dimensions did not change between 1987 and 1992.

Table 4

Mean Scores on Job Dimensions:
Repeat group - 1987 vs 1992

Job Dimension	Year	n	Mean	S.D.	t	df
Skill variety	1987	102	6.23	0.59	0.35	101
	1992	102	6.25	0.56		
Autonomy	1987	102	6.06	0.67	0.56	101
	1992	102	6.10	0.66		
Task significance	1987	102	5.97	0.77	-0.70	101
	1992	102	5.91	0.82		
Task identity	1987	102	4.99	1.25	0.88	101
	1992	102	5.11	1.27		
Feedback	1987	103	4.67	1.03	0.17	102
	1992	103	4.69	1.05		

* Indicates T values significant at $p < .05$

The study also sought to determine whether perceptions of job satisfaction among the agents in the Repeat group had changed over time. Scores were computed for two measures of job satisfaction, (a) context satisfaction and (b) personal satisfaction, for each subject in the Repeat group. Results

of dependent T-test analyses for these variables are presented in Table 5. Although context satisfaction was rated moderate to high in both time periods, ratings also showed a relatively high degree of variability. Nevertheless, agents reported a significantly greater level of context satisfaction in 1992 ($M = 5.56$) than they had in 1987 ($M = 5.24$), $t(100) = 3.70$, $p < .05$. Comparisons of personal satisfaction, rated high in 1987 and 1992 with moderate variation among the ratings, revealed no significant differences.

With respect to the question of change in satisfaction levels between 1987 and 1992, the findings provide support for acknowledging a change in context satisfaction but offer no support regarding changes in personal satisfaction.

Table 5

Mean Scores on Job Satisfaction:
Repeat group 1987 vs. 1992

Satisfaction Scale	Year,	n	Mean	S.D.	t	df
Context	1987	101	5.24	1.07	3.70*	100
	1992	101	5.56	0.92		
Personal	1987	101	6.09	0.69	-0.26	100
	1992	101	6.07	0.70		

* Indicates T values significant at $p < .05$

Differences in Staff Perceptions

Investigation of the job dimensions and job satisfaction was pursued further to ascertain whether perceptions differed between the Repeat group and New group agents.

Both groups perceived skill variety, task significance, and autonomy as highly present and displayed low to moderate variation in their responses. Opinions of task identity and feedback were more varied within each group and were regarded as moderately present in the job of agent (Table 6). Examination of the T-test results reveals that no significant differences between groups were detected for any of the job dimensions.

Job satisfaction scores of the Repeat group were also contrasted with those of the New group to determine whether perceptions differed. Results of the T-test comparisons between the groups are presented in Table 7. The Repeat group reported significantly greater context satisfaction ($M = 5.57$) than did the New group ($M = 5.08$), $t(133) = 2.66$, $p < .05$. No differences between the groups were found for personal satisfaction.

These findings support the view that agents working in Extension before 1987 and those joining the organization after 1987 have similar perceptions of the five job dimensions, have similar levels of personal satisfaction, but differ in their levels of context satisfaction.

Table 6

Mean Scores on Job Dimensions:
Repeat group vs. New group

Job Dimension	Group	n	Mean	S.D.	t	df
Skill variety	Repeat	103	6.25	0.56	-0.91	133
	New	32	6.35	0.53		
Autonomy	Repeat	103	6.10	0.66	1.44	134
	New	33	5.90	0.81		
Task significance	Repeat	103	5.90	0.82	0.07	134
	New	33	5.89	0.77		
Task identity	Repeat	103	5.11	1.27	1.06	134
	New	33	4.85	1.27		
Feedback	Repeat	104	4.69	1.05	0.82	135
	New	33	4.52	0.97		

* Indicates T values significant at $p < .05$

Table 7

Mean Scores on Job Satisfaction:
Repeat group vs. New group

Satisfaction Scale	Group	n	Mean	S.D.	t	df
Context	Repeat	102	5.57	0.92	2.66*	133
	New	33	5.08	0.91		
Personal	Repeat	102	6.07	0.70	0.33	133
	New	33	6.02	0.93		

* Indicates T values significant at $p < .05$

Other Findings

Post hoc exploratory analyses of the findings regarding context satisfaction were conducted to examine the nature of the observed differences in greater detail. The measure of context satisfaction in this study represented a combination of four subscales: satisfaction with (a) job security, (b) compensation, (c) co-worker relations, and (d) supervision. T-test comparisons were run to test for changes over time in satisfaction levels within the Repeat group and for

differences in satisfaction between the Repeat group and the New group of agents.

Results of the analyses concerning changes in Repeat group satisfaction (Table 8) reveal that significant differences were found for three of the four subscales. Repeat group agents were significantly more satisfied with compensation and supervision in 1992 than they had been in 1987. While satisfaction with compensation rose from a moderate to a high level, agent responses show wide variation at both time periods. Similarly, an increase in the moderate level of satisfaction with supervision is accompanied by a high degree of variation in staff perceptions. Although satisfaction with co-worker relations significantly declined from 1987 to 1992, staff remain highly satisfied with this aspect of the work context. Agents reported moderate satisfaction with job security but, as was evident for other context subscales, opinions were fairly diverse. No significant difference in satisfaction with job security was found over the time period in question.

Table 8

Mean Scores on Context Satisfaction:
Repeat group 1987 vs. 1992

Satisfaction Scale	Year	n	Mean	S.D.	t	df
Job security	1987	103	4.74	1.61	1.05	102
	1992	103	4.90	1.57		
Compensation	1987	103	4.66	1.79	5.86*	102
	1992	103	5.58	1.42		
Co-worker relations	1987	101	6.41	0.57	-2.15*	100
	1992	101	6.26	0.72		
Supervision	1987	103	5.17	1.40	2.11*	102
	1992	103	5.46	1.32		

* Indicates T values significant at $p < .05$

T-test results are presented in Table 9 for tests of differences on the context satisfaction subscales between the Repeat group and the New group. Findings indicate that Repeat group agents were significantly more satisfied with job security, compensation, and supervision than their colleagues in the New group. However, satisfaction levels for these context elements were in the moderate range and in each instance it was apparent that agent perceptions varied rather widely. No significant difference was found regarding satisfaction with co-worker relations which was rated uniformly high in both groups.

Table 9

Mean Scores on Context Satisfaction:
Repeat group vs. New group

Satisfaction Scale	Group	n	Mean	S.D.	t	df
Job security	Repeat	104	4.90	1.56	2.58*	135
	New	33	4.06	1.82		
Compensation	Repeat	104	5.58	1.42	2.41*	135
	New	33	4.89	1.47		
Co-worker relations	Repeat	102	6.27	0.72	-1.35	83
	New	33	6.41	0.47		
Supervision	Repeat	104	5.47	1.32	1.99*	135
	New	33	4.95	1.29		

* Indicates T values significant at $p < .05$

CHAPTER 5

SUMMARY AND DISCUSSION

Summary

The literature provides ample evidence that state Extension programs across the country are introducing new or modified program development approaches and reorganized work units as they attempt to remain responsive to the public's educational needs. Implementation of such innovations, in many instances, represents change in Extension agent roles and responsibilities which to some extent can be characterized as a redesign of Extension work.

Research on the effects of job redesign has consistently found evidence that workers' perceptions of certain core dimensions or characteristics of their jobs influence their satisfaction with that job. Given the changing organizational climate within Extension and the findings of job redesign research, the present inquiry explored whether the introduction of organizational innovations changed Extension agent job perceptions and job satisfaction.

Data from prior research with Nebraska Extension agents established a baseline of perceptions about the level of skill variety, task identity, task significance, autonomy, feedback, personal satisfaction and context satisfaction present in the job of agent. These observations, obtained

CHAPTER 5

SUMMARY AND DISCUSSION

Summary

The literature provides ample evidence that state Extension programs across the country are introducing new or modified program development approaches and reorganized work units as they attempt to remain responsive to the public's educational needs. Implementation of such innovations, in many instances, represents change in Extension agent roles and responsibilities which to some extent can be characterized as a redesign of Extension work.

Research on the effects of job redesign has consistently found evidence that workers' perceptions of certain core dimensions or characteristics of their jobs influence their satisfaction with that job. Given the changing organizational climate within Extension and the findings of job redesign research, the present inquiry explored whether the introduction of organizational innovations changed Extension agent job perceptions and job satisfaction.

Data from prior research with Nebraska Extension agents established a baseline of perceptions about the level of skill variety, task identity, task significance, autonomy, feedback, personal satisfaction and context satisfaction present in the job of agent. These observations, obtained

before program development and work unit changes were implemented, were contrasted with agent's current perceptions of the same factors following the introduction of the organizational changes.

The study findings suggested that agents saw the job dimensions as unchanged and experienced no change in their personal satisfaction. Further, new agents who had joined the organization after implementation of the innovations did not appear to perceive the job dimensions and personal satisfaction differently than their experienced colleagues. Satisfaction with the work context (in terms of compensation, co-worker relations, and supervision) did appear to have changed over time for agents experiencing the work modifications. In addition, context satisfaction for these agents appeared to differ from that of the newer agents with regard to job security, compensation, and supervision.

Discussion

The study findings provide evidence that the introduction of issues-based programming and multi-county work units has not altered agents' perceptions of their jobs or their levels of job satisfaction. These findings were unexpected given the specific changes in agent duties, responsibilities, and expectations reported in Nebraska by Rockwell et al. (1992) and in several other states pursuing similar organizational strategies (Taylor-Powell &

Richardson 1990; Bartholomew & Smith, 1990; and Hutchins, 1990).

The apparent discrepancy in findings suggests that introduction of issues-base programming and clustered work units may have altered the form rather than the substance of agents' work. That is, the shift in programming and clustered work units has resulted in changes in the types or difficulty of tasks performed, methods for completing tasks, volume of work, and time required (the form of work), without affecting staff perceptions of the fundamental nature or scope of the job (the substance of the work) as represented in the job dimensions.

The absence of differences between staff who experienced the work modifications and those who did not lends credence to this argument. For the new staff, the form of work would have been directly associated with the demands of issues-based programming and clustered work units, yet their perceptions of the job dimensions matched those of the agents whose forms of work had changed. This interpretation also seems consistent with the observations made by Hackman, Pearce, and Wolfe (1978) with regard to expected outcomes of job design interventions. These authors noted that, in a setting where work modifications were introduced as overall organizational strategies without regard for their potential to systematically influence particular job dimensions or context factors, staff held no

expectations that characteristics of their jobs or work context would be altered. In the present study the circumstances under which innovations were introduced bear some similarity to those reported in the Hackman, Pearce, and Wolfe study. Thus it could be argued that changes in perceptions of the job dimensions would not be expected.

The findings of no difference in personal satisfaction between the past and current perceptions of agents implementing the innovations and between this group and the new agents are consistent with the Job Characteristics theory and the body of research which has demonstrated its validity. According to the theory, the level of personal satisfaction experienced in a job is derived from the relative strength of the core job dimensions. Therefore, absent changes or differences in job dimension perceptions, personal satisfaction would be expected to be unaltered as it was in this study.

As noted above, the implementation of issues-based programming and clustered work units was not accompanied by direct interventions to improve any facet of context satisfaction. Nevertheless, context satisfaction increased for agents participating in the organizational changes and differences in satisfaction were found between these agents and the new group of agents. To offer an explanation for these outcomes it is necessary to consider the post hoc

analyses which looked at the separate components of the context satisfaction scale.

The four sources of context satisfaction included job security, compensation, co-worker relations, and supervision. Satisfaction with job security was unchanged while satisfaction with compensation rose substantially for agents working during the transition period. However, over the 1987 to 1992 span, compensation was increased substantially in two of the years and incrementally in the other years. It is reasonable to suggest that the greater satisfaction noted in 1992 could be accounted for by the actual improvements in staff compensation over the 5-year period. The lower level of satisfaction with compensation reported by the new agents further supports this interpretation in that these agents would tend to receive less compensation, as well as smaller pay increases. In addition to real differences between newer and older staff compensation levels, the newer agents' lower satisfaction with compensation may also be related to generally higher expectations, higher standards of salary adequacy, and/or greater financial needs as these agents enter the organization during a time of broad economic strain.

Although the innovations introduced did not specifically seek to improve satisfaction with co-worker relations or supervision, it is likely that these aspects of the work context were affected by the shift in programming

and clustered work units. The nature of these work modifications changed supervisory assignments for some staff and in so doing could account for increases in satisfaction with supervision within the Repeat group. On the other hand, the observed increase might also be explained by routine turnover in supervisory personnel and position transfers. Further research would help clarify these alternative interpretations.

Satisfaction with co-worker relations showed a decline following implementation of the structural and programming changes. These work modifications did alter staff interaction patterns, particularly as they pertained to a greater emphasis on teamwork. The necessity of staff working more closely together may have altered long-standing relationships, by introducing a need for more interdependent work, along with more reliance on one another for work outcomes. Thus, relationships with co-workers could carry more of a sense of disappointment than in the past when agents worked together as independent colleagues. It is useful to note that satisfaction ratings for co-worker relations obtained before the innovations occurred were nearly identical to the ratings provided by the new agents. The comparison suggests that the modest decline in this aspect of context satisfaction is an effect of the innovations which could reverse itself or continue to decline as relationships with co-workers are adapted to the

demands of the teamwork environment. It appears that research focused on satisfaction with co-worker relations in teamwork settings would be an appropriate undertaking.

Implications

The strength of the job dimensions and personal satisfaction remained unchanged following the introduction of issues-based programming and clustered work units. Accordingly, work design and/or staff development strategies may need to be considered to increase the perceived level of feedback from the job itself and perhaps more importantly from peers, team leaders, coordinators, and administrators.

While similar steps could also be directed toward strengthening the sense of task identity, caution should be exercised. The moderate level reported for this dimension implies that agents currently see their work as a noticeable contribution to a larger effort. Given the interdisciplinary teamwork required to carry out issues-based programming effectively, increasing this dimension must be careful to focus on defining the larger effort as a team product rather than an individual one.

Perceptions of skill variety, autonomy, and task significance are already quite high so the concern with these dimensions is to avoid actions which could appear to lessen their scope. Of the three, autonomy is the one dimension that bears watching as issues-based programming is further developed.

With regard to context factors, it appears that efforts toward improvements in satisfaction with supervision may be appropriate, especially among the newer agents.

Replication of this research by other Extension programs pursuing similar organizational change strategies would add to the understanding of job scope-job satisfaction relationships as they apply to the Extension educator's unique type of work. In particular, additional utilization of the Job Diagnostic Survey instrument would be useful in validating Extension agents' high ratings of job dimensions and job satisfaction observed thus far only in Nebraska. Further studies which included objective ratings of the job dimensions by outside observers would also be beneficial in confirming the validity of the actual scope of Extension agent work. Finally, additional studies may be warranted to explore the influences that changes in the form of work may have on worker attitudes.

In view of the dynamic changes facing Extension today, feedback on the effects of programming innovations on the work force will continue to be a vital administrative concern. It is hoped that this study's preliminary evidence regarding Extension staff perspectives of their work will contribute to administrative practice within the Extension System.

References Cited

- Andrews, G. L. (1990). An assessment of the interactions of selected personal characteristics and perceptions of selected aspects of job satisfaction by Wisconsin Cooperative Extension agricultural agents (Masters thesis, University of Wisconsin-River Falls, 1990). From Summary of Research in Extension, 5, 151.
- Barnett, R., & Louderback, L. (1971). When organizations change. Journal of Extension, 10 (Summer), 9-15.
- Bartholomew, H. M., & Smith, K. L. (1990). Stresses of multicounty agent positions: A new staffing pattern for Extension. Journal of Extension, 28 (Winter), 10-12.
- Birnstihl, E. A. (1987). The influence of growth needs and psychological states on the relationship of job dimensions and job performance of service related educators. (Doctoral dissertation, University of Nebraska-Lincoln, 1987). Dissertation Abstracts International, 49, 696A.
- Birnstihl, E. A., & Rockwell, S. K. (1989). The influence of job dimensions on satisfaction and performance of Extension educators. Unpublished manuscript, University of Nebraska-Lincoln, Lincoln, NE.
- Champoux, J. E. (1980). A three sample test of some extensions to the job characteristics model of work motivation. Academy of Management Journal, 23, 466-478.
- Conklin, N. L., & Gritzmacher, J. E. (1990). Issues programming training needs of personnel in the Ohio Cooperative Extension Service. Unpublished manuscript, The Ohio State University, Cooperative Extension Service, Columbus, OH.
- Cooperative Extension System. (1988). Issues programming in Extension (Report). St. Paul, MN: University of Minnesota, Cooperative Extension, & United States Department of Agriculture, Extension Service.
- Cooperative Extension System Strategic Planning Council. (1991, March). Patterns of change. (Report). Washington, D.C.: United States Department of Agriculture, Extension Service.
- Fried, Y., & Ferris, G. R. (1986). The dimensionality of job characteristics: Some neglected issues. Journal of Applied Psychology, 71, 419-426.

- Gamon, J. A., & Cassina, E. H. (1989). Levels of job satisfaction of Illinois Cooperative Extension personnel. Unpublished manuscript, Iowa State University, Dept. of Agricultural Education and Studies, Ames, IA.
- Griffin, S. F. (1984). Methods of coping with work force role conflict in relation to job satisfaction of Cooperative Extension home economists (Master's thesis, Rutgers University, 1984). From Summary of Research in Extension, 2, 195.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 60, 159-170.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: A test of a theory. Organizational Behavioral Human Performance, 16, 250-279.
- Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Addison Wesley: Reading, MA.
- Hackman, J. R., Pearce, J. L. & Wolfe, J.C. (1978). Effects of changes in job characteristics on work attitudes and behaviors: A naturally occurring quasi-experiment. Organizational Behavior and Human Performance, 21, 289-304.
- Hutchins, G. K. (1992). Evaluating county clustering. Journal of Extension, 30 (Spring), 17-19.
- Johnson, R. L. (1966). Area Extension work: A pilot study (Report). Manhattan, KS: Kansas State University, Extension Service.
- Kelly, J. (1992). Does job re-design theory explain job re-design outcomes. Human Relations, 45, 753-774.
- King, D. R. (1990). Attitudes of extension faculty and staff regarding the clustered staffing pattern in Ohio. (Master's thesis, The Ohio State University, 1990). From Summary of Research in Extension, 5, 142.
- Krueger R., & Ahles, T. (1989, March). Are changes worth the effort: Opinions of county commissioners, Extension Committee members and agents about changes in the Minnesota Extension Service (Report). St. Paul, MN: University of Minnesota, Cooperative Extension.

- Morse, R. A. (1987). Minnesota Extension reorganization (Masters thesis, University of Minnesota, 1987). From Summary of Research in Extension, 3, 4.
- Oldham, G. R., Hackman, J. R., & Pearce, J. L. (1976). Conditions under which employees respond positively to enriched work. Journal of Applied Psychology, 61, 395-403.
- Orpen, C. (1979). The effects of job enrichment on employee satisfaction, motivation, involvement, and performance: A field experiment. Human Relations, 32, 189-217.
- Poling, R. L. (1990). Factors associated with job satisfaction of faculty members at a land-grant university (Doctoral dissertation, The Ohio State University, 1990). From Summary of Research in Extension, 5, 143.
- Rockwell, S. K., Furgason, J., & Schmidt, D. (1992, July). Issue-based programming in Extension programming units: Nebraska's faculty/staff/opinions (Report). Lincoln, NE: University of Nebraska-Lincoln, Cooperative Extension.
- Rockwell, S. K., Furgason, J., Jacobson, C., Schmidt, D. & Tooker, L. (1992). Restructuring Cooperative Extension from single into multiple county units to facilitate delivering educational programs. In C. Borchers (Ed.), Proceedings of the Eleventh Annual Midwest Research-to-Practice Conference, (pp. 146-152). Manhattan, KS: Kansas State University.
- Stone, E. F. (1986). Job scope-job satisfaction and job scope-job performance relationships. In E. A. Locke (Ed.), Generalizing from laboratory to field settings (pp. 189-206), Lexington, MA: D.C. Heath & Company.
- Taylor-Powell, E., & Richardson, B. (1990). Issues programming changes Extension. Journal of Extension, 28 (Summer), 16-18.
- Warner, P., Young, R., & Cunningham, C. (1975). Is area staffing better. Journal of Extension, 13 (May/June), 21-27.

APPENDIX A

Table 10

1987 Mean Scores on Job Dimensions:
Repeat group vs. Prior group

Job Dimension	Group	N	Mean	S.D.	t	df
Skill variety	Repeat	103	6.24	0.59	0.85	65
	Prior	44	6.13	0.77		
Task identity	Repeat	103	4.97	1.27	0.07	145
	Prior	44	4.95	1.07		
Task significance	Repeat	103	5.97	0.77	1.38	61
	Prior	44	5.72	1.12		
Autonomy	Repeat	103	6.05	0.67	0.41	67
	Prior	44	5.99	0.86		
Feedback	Repeat	103	4.67	1.02	-0.08	145
	Prior	44	4.69	0.96		

* Indicates T values significant at $p < .05$

Table 11

1987 Mean Scores on Job Satisfaction:
Repeat group vs. Prior group

Satisfaction Scale	Group	N	Mean	S.D.	t	df
Context	Repeat	103	5.24	1.06	-1.39	145
	Prior	44	5.51	1.07		
Personal	Repeat	103	6.08	0.69	-0.50	145
	Prior	44	6.14	0.71		

* Indicates T values significant at $p < .05$

Appendix B
Transmittal Letter Included with Survey Instrument

Jack Furgason
1300 Peach
Lincoln, NE 68502

September 9, 1992

Dear

Last Fall I joined the Nebraska Cooperative Extension staff as an evaluation assistant working with Kay Rockwell. To date I have had the opportunity to work with a few of you on various program evaluation projects. I know that this is a busy season and that you have been asked to complete a number of surveys recently. However, I am asking for your help at this time because I am completing my Master's degree this semester.

The thesis research I am conducting is intended to contribute to the field of knowledge pertaining to Extension work and your participation and input in the study is vital to this research effort. This study is a follow-up of the study initiated by Beth Birstihl in her 1987 doctoral dissertation. Beth investigated Agents' perceptions of various aspects of their jobs and 98% of the Agents participated in her study.

On the following pages, you will find several different kinds of questions about your job. Specific instructions are given at the beginning of each section. The questions are designed to obtain your perceptions of your job. It will take approximately 20 minutes to complete the entire questionnaire.

Your individual answers will be kept completely confidential. An identification number is located on the return envelope. This number will only be used for two purposes -- to facilitate the processes of data collection and statistical data analyses. Your name will never be associated with the data and only group analysis of the data will be conducted. Please answer each item as honestly and frankly as possible.

General instructions:

1. Please read the introduction to each section carefully.
2. Please answer each item.
3. Be as honest and objective as possible with your responses.
4. Circle the most appropriate number for each response.

Your response by September 21, 1992, will enable my research to more accurately and more thoroughly reflect Agent perceptions. Please return the completed questionnaire in the enclosed envelope by September 21st. Thank you for your cooperation and assistance.

Sincerely,

Jack Furgason

cc: District Directors

Appendix C

Modified
Job Characteristics Questionnaire

Section I.

This part of the questionnaire asks you to describe your job. Please do not use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later.

1. To what extent does your job require you to work closely with other people (either clientele or people in related jobs in your own organization)?

1	2	3	4	5	6	7
<i>Very little; dealing with other people is not at all necessary in doing the job.</i>		<i>Moderately, some dealing with others is necessary.</i>			<i>Very much; dealing with other people is an absolutely essential and crucial part of doing the job.</i>	

2. To what extent does your job permit you to decide on your own how to go about doing the work?

1	2	3	4	5	6	7
<i>Very little; the job gives me almost no personal "say" about how and when the work is done.</i>		<i>Moderately; many things are standardized and not under my control, but I can make some decisions about the work.</i>			<i>Very much; the job gives me almost complete responsibility for deciding how and when the work is done.</i>	

3. To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or, is it only a small part of the overall piece of work which is finished by other people?

1	2	3	4	5	6	7
<i>My job is only a tiny part of the overall piece of work; the results of my activities cannot be seen in the final product or service.</i>		<i>My job is a moderate-sized "chunk" of the overall piece of work; my own contribution can be seen in the final outcome.</i>			<i>My job involves doing the whole piece of work, from start to finish; the results of my activities are easily seen in the final product or service.</i>	

4. To what extent does the job require you to do many different things at work, using a variety of your skills and talents?

1	2	3	4	5	6	7
<i>Very little; the job requires me to do the same routine things over and over again.</i>		<i>Moderate variety.</i>			<i>Very much; the job requires me to do many different things, using a number of different skills and talents.</i>	

5. Are the results of your work likely to significantly affect the lives or well-being of other people?

1	2	3	4	5	6	7
<i>Not very significant, the outcomes of my work are not likely to have important effect on other people.</i>			<i>Moderately significant.</i>		<i>Highly significant; the outcomes of my work can affect other people in very important ways.</i>	

6. To what extent do Extension Administrators or co-workers let you know how well you are doing on your job?

1	2	3	4	5	6	7
<i>Very little; people almost never let me know how well I am doing.</i>			<i>Moderately; sometimes people may give me "feedback": other times they may not.</i>		<i>Very much; managers or co-workers provide me with almost constant "feedback" about how well I am doing.</i>	

7. To what extent does the job itself provide clues about how well you are doing--aside from any "feedback" co-workers or supervisors may provide?

1	2	3	4	5	6	7
<i>Very little; the job itself is set up so I could work forever without finding out how well I am doing.</i>			<i>Moderately; sometimes doing the job provides "feedback" to me; sometimes it does not.</i>		<i>Very much; the job is set up so that I get almost constant "feedback" as I work about how well I am doing.</i>	

8. How many total years have you been employed as an Extension agent, either in Nebraska or other states?

_____ years

Section II.

Listed below are a number of statements which could be used to describe any job. Please indicate how accurately or inaccurately the statement describes your job.

	Inaccurate			Neither	Accurate		
	Very	Somewhat	Slightly		Slightly	Somewhat	Very
1. The job requires me to use a number of complex or high-level skills.	1	2	3	4	5	6	7
2. The job requires a lot of cooperative work with other people.	1	2	3	4	5	6	7
3. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.	1	2	3	4	5	6	7
4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.	1	2	3	4	5	6	7
5. The job is quite simple and repetitive.	1	2	3	4	5	6	7
6. The job can be done adequately by a person working alone--without talking or checking with other people.	1	2	3	4	5	6	7
7. The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.	1	2	3	4	5	6	7
8. This job is one where a lot of other people can be effected by how well the work gets done.	1	2	3	4	5	6	7
9. The job denies me any chance to use my personal initiative or judgment in carrying out the work.	1	2	3	4	5	6	7
10. Supervisors often let me know how well they think I am performing the job.	1	2	3	4	5	6	7
11. The job provides me the chance to completely finish the pieces of work I begin.	1	2	3	4	5	6	7
12. The job itself provides very few clues about whether or not I am performing well.	1	2	3	4	5	6	7
13. The job gives me considerable opportunity for independence and freedom in how I do the work.	1	2	3	4	5	6	7
14. The job itself is not very significant or important in the broader scheme of things.	1	2	3	4	5	6	7

Section III.

Each of the statements below is something that a person might say about his/her job. Please indicate your own personal feelings about your job by marking how much you agree with each of the statements.

	Disagree				Agree		
	Strongly	Somewhat	Slightly	Neither	Slightly	Somewhat	Strongly
1. It's hard, on this job, for me to care very much about whether or not the work gets done right.	1	2	3	4	5	6	7
2. My opinion of myself goes up when I do this job well.	1	2	3	4	5	6	7
3. Generally speaking, I am very satisfied with this job.	1	2	3	4	5	6	7
4. Most of the things I have to do on this job seem useless or trivial.	1	2	3	4	5	6	7
5. I usually know whether or not my work is satisfactory on this job.	1	2	3	4	5	6	7
6. I feel a great sense of personal satisfaction when I do this job well.	1	2	3	4	5	6	7
7. The work I do on this job is very meaningful to me.	1	2	3	4	5	6	7
8. I feel a very high degree of personal responsibility for the work I do on this job.	1	2	3	4	5	6	7
9. I frequently think of quitting this job.	1	2	3	4	5	6	7
10. I feel bad and unhappy when I discover that I have performed poorly on this job.	1	2	3	4	5	6	7
11. I often have trouble figuring out whether I'm doing well or poorly on this job.	1	2	3	4	5	6	7
12. I feel I should personally take the credit or blame for the results of my work on this job.	1	2	3	4	5	6	7
13. I am generally satisfied with the kind of work I do in this job.	1	2	3	4	5	6	7
14. My own feelings generally are not affected much one way or the other by how well I do on this job.	1	2	3	4	5	6	7
15. Whether or not this job gets done right is clearly my responsibility.	1	2	3	4	5	6	7

Section IV.

Now please indicate how satisfied you are with each aspect of your job listed below.

	Dissatisfied			Neither	Satisfied		
	Very	Somewhat	Slightly		Slightly	Somewhat	Very
1. The amount of job security I have.	1	2	3	4	5	6	7
2. The amount of pay and fringe benefits I receive.	1	2	3	4	5	6	7
3. The amount of personal growth and development I get in doing my job.	1	2	3	4	5	6	7
4. The people I talk to and work with on my job.	1	2	3	4	5	6	7
5. The degree of respect and fair treatment I receive from my boss.	1	2	3	4	5	6	7
6. The feeling of worthwhile accomplishment I get from doing my job.	1	2	3	4	5	6	7
7. The chance to get to know other people while on the job.	1	2	3	4	5	6	7
8. The amount of support and guidance I receive from my supervisor.	1	2	3	4	5	6	7
9. The degree to which I am fairly paid for what I contribute to this organization.	1	2	3	4	5	6	7
10. The amount of independent thought and action I can exercise in my job.	1	2	3	4	5	6	7
11. How secure things look for me in the future in this organization.	1	2	3	4	5	6	7
12. The chance to help other people while at work.	1	2	3	4	5	6	7
13. The amount of challenge in my job.	1	2	3	4	5	6	7
14. The overall quality of the supervision I receive in my work.	1	2	3	4	5	6	7

Section V.

Now, please think of the OTHER PEOPLE in your organization who hold the same job you do. Please think about how accurately each of the statements describes the feelings of those people about the job. It is quite all right if your answers here are different from when you described your own reactions to the job. Often different people feel quite differently about the same job.

Most people on this job...	Disagree			Agree			
	Strongly	Somewhat	Slightly	Neither	Slightly	Somewhat	Strongly
1. ...feel a great sense of personal satisfaction when they do the job well.	1	2	3	4	5	6	7
2. ...are very satisfied with the job.	1	2	3	4	5	6	7
3. ...feel that the work is useless or trivial.	1	2	3	4	5	6	7
4. ...feel a great deal of personal responsibility for the work they do.	1	2	3	4	5	6	7
5. ...have a pretty good idea of how well they are performing their work.	1	2	3	4	5	6	7
6. ...find the work very meaningful.	1	2	3	4	5	6	7
7. ...feel that whether or not the job gets done right is clearly their own responsibility.	1	2	3	4	5	6	7
8. ...often think of quitting.	1	2	3	4	5	6	7
9. ...feel bad or unhappy when they find they have performed the work poorly.	1	2	3	4	5	6	7
10. ...have trouble figuring out whether they are doing a good or bad job.	1	2	3	4	5	6	7