

**Extension Agents' Perceptions of Fundamental Job Characteristics
and Their Level of Job Satisfaction**

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Abstract

The purpose of this study was to determine Extension agents' perceptions of fundamental job characteristics and their level of job satisfaction. The study followed a descriptive design. A modified version of the Job Diagnostic Survey developed by Hackman and Oldham (1980) was sent to 195 Extension agents. Based on 143 usable responses, agents perceived the job characteristics skill variety and task significance to be present most in their jobs, while they perceived feedback from agents the least. Agents were most satisfied with the job satisfaction constructs of growth satisfaction and satisfaction with co-worker relations, while they were least satisfied with the job satisfaction constructs of general satisfaction and satisfaction with pay.

Introduction

Job satisfaction can be defined as an individual's attitude about work roles and the relationship to worker motivation. Positive attitudes toward one's job are theoretically equivalent to job satisfaction and negative attitudes toward one's job are equivalent to job dissatisfaction (Vroom, 1964). Employees with higher job satisfaction levels believe that working in their organization will be satisfying in the long run, that they will care about the quality of their work, and that they will be more committed to the organization (Bavendam, 2000). However, as technology and increasing expectations, such as paperwork and travel, continue to place more requirements on jobs, more Americans are becoming dissatisfied with their jobs (The Conference Board, 2003).

The key to job satisfaction in the work place is to focus on changing those areas of work that employees want changed, and not the areas that journalists or behavioral scientists think that employees should want changed (Hackman & Oldham, 1980). Since employee retention and turnover are related to one's level of job satisfaction (Performance Unlimited, 1999), it is important to achieve good person-organization relationships by adapting jobs to people and adapting people to jobs (Hackman & Oldham, 1980). By doing this, employee job satisfaction levels and organization productivity increase, thus benefiting the employee and the employer (Fetsch, Flashman, & Jeffers, 1984).

Administrators need to understand the level of job satisfaction of their employees. Before organizational changes take place, the anticipated sensitive factors for employees need to be identified and analyzed. By identifying and analyzing these factors, administrators will have an understanding of what their employees want from their work. Understanding what their employees want from work can help administrators develop inservice trainings that will meet the needs of their employees, thus keeping job satisfaction at a maximum while simultaneously reducing job dissatisfaction. Realizing employees' attitudes and behavior during organizational change is imperative in helping administrators plan educational programs that will alleviate possible negative effects of reorganization on job performance (Barnett & Louderback, 1971; Jayaratne & Gamon, 1998).

Studying job satisfaction is important because organizational productivity is influenced by the quality of the relationship between people and the jobs they do. If there is a good fit between people and their jobs, such that work is a personally rewarding experience, then there may be little for management to do to foster high motivation and satisfaction. On the other hand, if there is not a good fit between employees and their jobs and employees are dissatisfied, then there may be little that management can do to produce high productivity and job satisfaction. Internal work motivation is tied closely with how well an employee performs on the job. Therefore, it is important to address the relationship between employees and their jobs before examining other aspects of the work place (Hackman & Oldham, 1980).

Several researchers (Barnett & Louderback, 1971; Bartholomew & Smith, 1990; Gamon & Cassina; 1989; Huerta & Smith, 1994; Hutchins, 1992; Johnson, 1966; King, 1990; Morse, 1987; Rockwell, Furgason, Jacobson, Schmidt, & Tooker, 1993; Taylor-Powell & Richardson, 1990) have studied the job satisfaction of Extension agents after their organization went through a restructuring process. Agents who were reassigned to area work, clustering counties into units, were satisfied with their jobs after the restructuring process. Their reassignment allowed them to develop expertise in a specialized area, allowing them to focus their work more and be more responsive to county concerns (Johnson, 1966; Taylor-Powell & Richardson, 1990). Barnett and Louderback (1971) found agents were most satisfied after restructuring with opportunities for personal growth and with the increased responsibilities that occurred as a result of their new roles. Agents also reported an increase in efficiency, work quality, and more group teaching as a result of multicounty work. Overall, agents had positive attitudes toward restructuring (Bartholomew & Smith, 1990; Gamon & Cassina; 1989; Huerta & Smith, 1994; Hutchins, 1992; King, 1990; Rockwell, Furgason, Jacobson, Schmidt, & Tooker, 1993).

Although restructuring has proven to improve the satisfaction of agents in several states, difficulties have also been discovered. Changes in work context have been primarily associated with job dissatisfaction in Kentucky (Barnett & Louderback, 1971). Lack of time to coordinate statewide issues, work with other issues coordinators, and work as a team were identified as concerns in Texas and Minnesota (Hutchins, 1992; Taylor-Powell & Richardson, 1990), while agents in Ohio mentioned that agent specialization was too time consuming and there was a lack of local support for the new structure (Huerta & Smith, 1994). Program implementation, increased time demands, and poor communication were also identified as areas of difficulty following restructuring in Minnesota and Nebraska (Morse, 1987; Rockwell et al., 1993).

Some studies have examined job satisfaction of Extension agents not involved in the restructuring process (Mallilo, 1990; Riggs & Beus, 1993). Riggs and Beus (1993) found that agents' overall satisfaction with their job, colleagues, and the Cooperative Extension System as an organization was moderately high. However, most agents were more satisfied with the latter two factors than with the job itself. Although Mallilo (1990) also found Extension agents to be moderately to highly satisfied with their jobs in general, he found that the majority of the agents were least satisfied with their pay.

Theoretical Framework

Hackman and Oldham's (1976) job characteristics theory describes the relationship between job characteristics and individual response to work. This theory is probably the most well-known and widely discussed effort to explain the relationship of job characteristics to job satisfaction. The job characteristics theory was originally tested with the intentions of diagnosing jobs to determine if and how they should be redesigned to improve employee motivation and productivity and then later to be used to evaluate the effects of job changes on employees. At the most basic level, five core job characteristics

lead to a number of personal and work outcomes that are beneficial to the individual (Hackman & Oldham, 1975; 1976).

A job characteristic is an attribute of a job that creates conditions for high work motivation, satisfaction, and performance (Hackman & Oldham, 1980). According to a job characteristics theory proposed by Turner and Lawrence (1965), employers should build into employees' jobs certain characteristics that create satisfying conditions. Hackman and Oldham (1980) revised this theory and proposed five core job characteristics that should be included in any job. These characteristics include skill variety, task identity, task significance, autonomy, and feedback. However, because people respond differently to the same job, employers must take into consideration both job characteristics and the work context of the job itself when redesigning work for their employees.

Exploration based on Hackman and Oldham's (1975) job characteristics theory can be found in the research conducted by Furgason (1992) on Extension agents in Nebraska. He used a modified version of the Job Diagnostic Survey to ascertain agents' perceptions of the five job characteristics following organizational restructuring. Furgason (1992) found that agents perceived skill variety to be present to a great extent in their jobs, while he found they perceived task identity and task significance to be present in their jobs to a lesser extent. Of all the job characteristics, he found that agents perceived feedback to be present the least.

Hackman and Oldham (1980) also defined the four personal and work outcomes of the job characteristics theory. These outcomes include internal work motivation, growth satisfaction, general satisfaction, and work effectiveness. Internal work motivation indicates an employee's satisfaction when performing well on the job because it is rewarding and satisfying to do so, thus serving as an incentive for continuing to do well. Growth satisfaction indicates employee satisfaction when employees have enriched opportunities for personal learning and growth at work. General satisfaction indicates employee satisfaction when employees indicate how satisfied they are with their jobs and how frequently they think of quitting their jobs. These three affective outcomes combine to form the personal satisfaction constructs. Finally, work effectiveness indicates an employee's satisfaction in both the quality and quantity of goods or services produced (Hackman & Oldham, 1974; 1980).

How satisfied individuals are with certain aspects of their work context may affect their willingness to respond positively to enriched work. Those who are relatively satisfied with job security, pay, co-worker relations, and supervision tend to respond more positively to jobs rating high on the job characteristics, thus having a higher level of context satisfaction. These four aspects of work context combine to form the context satisfaction constructs (Hackman & Oldham, 1980).

At the time of this study, Mississippi's Extension Service was two years removed from restructuring. Prior to reorganization, there was no evidence of Extension agents' job satisfaction. Although agents appeared to be satisfied after being reassigned to their

new positions, there was no evidence of studies examining Extension agents' perceptions of various job characteristics and their level of job satisfaction following organizational restructuring in 2002. Therefore, an assessment of agents' perceptions of the job characteristics and their current level of job satisfaction was warranted.

Purpose and Objectives

The purpose of this study was to determine Extension agents' perceptions of fundamental job characteristics and their level of job satisfaction. Specific research questions addressed in this study were:

1. What were the perceptions of Extension agents of the five fundamental job characteristics?
2. What was the level of job satisfaction of Extension agents?

Methods and Procedures

Population

The population for this descriptive study was all Extension agents employed by the Extension Service in Mississippi as of May 1, 2004 ($N = 195$). This included area agents, county directors, and 4-H agents. All 195 were included in the study.

Instrumentation

Extension agents' perceptions of the five job characteristics and their level of job satisfaction were obtained utilizing a modified version of the Job Diagnostic Survey developed by Hackman and Oldham (1980). The Job Diagnostic Survey consists of seven different sections, the first five of which were used in this study. An additional section containing 10 questions created by the researcher was added to the end of the questionnaire to collect selected demographic characteristics of the participants.

Section I contained items for agents to describe aspects of their jobs. In Section II, agents rated statements describing their jobs on a 7-point rating scale ranging from very inaccurate to very accurate. Items from Sections I and II yielded scores for each of the job characteristics. Statements in Sections III and V were rated on a 7-point rating scale ranging from strongly disagree to strongly agree. These two sections were used to measure two (internal work motivation and general satisfaction) of the seven aspects of job satisfaction, also called job satisfaction constructs. Section IV items were rated on a 7-point scale ranging from very dissatisfied to very satisfied. This section yielded scores for the remaining five job satisfaction constructs (growth satisfaction, satisfaction with job security, satisfaction with pay, satisfaction with co-worker relations, and satisfaction with supervision) (Hackman & Oldham, 1980). Section VI items consisted of questions that asked the participants pertinent demographic information.

Scale scores for the job characteristics and the job satisfaction constructs were computed for each agent utilizing the scoring key provided by Hackman and Oldham (1980). The job characteristic, feedback, was classified as either job feedback or feedback from agents. Upon calculating scores for the seven job satisfaction constructs, the first three, internal work motivation, growth satisfaction, and general satisfaction, were categorized as personal satisfaction. The last four, satisfaction with job security, pay, co-worker relations, and supervision, were categorized as context satisfaction (Hackman & Oldham, 1980).

Reliability and Validity

Hackman and Oldham (1974) established internal consistency reliabilities of each of the scales measured by the Job Diagnostic Survey. Oldham, Hackman, and Pearce (1976) later reported reliabilities for two job satisfaction scales not addressed in the initial study, satisfaction with job security and satisfaction with pay. The coefficient alpha for the job characteristics ranged from .59 (task identity) to .78 (feedback from agents). The reliability coefficients for the job characteristics were established as follows: .71 (skill variety); .59 (task identity); .66 (task significance); .66 (autonomy); .71 (job feedback); .78 (feedback from agents). Reliability coefficients for the job satisfaction constructs ranged from .56 (satisfaction with co-worker relations) to .84 (growth satisfaction). Reliability coefficients were established for the seven job satisfaction constructs: .76 (internal work motivation); .84 (growth satisfaction); .76 (general satisfaction); .62 (satisfaction with job security); .82 (satisfaction with pay); .56 (satisfaction with co-worker relations); .79 (satisfaction with supervision) (Hackman & Oldham, 1974; 1975).

The median of the correlations between the items composing a given scale and all the other items that are scored on different scales of the same general type, often called off-diagonal correlations, provide one indication of the discriminant validity of the items included in the Job Diagnostic Survey. The median off-diagonal correlations ranged from .12 (task identity) to .19 (skill variety, autonomy, and job feedback) for the job characteristics. For the job satisfaction constructs, the span of the correlations ranged from .23 (satisfaction with co-worker relations) to .28 (growth satisfaction) (Hackman & Oldham, 1974).

Data Collection

Data collection was accomplished through the use of an electronic survey through SurveyMonkey.com. Prior to data collection, the director of the Extension Service sent an email to all agents notifying them that they would be asked to participate in the study. The email further stated his support for the study and encouraged agents to participate. The initial email from the researcher asking agents to participate in the study was sent the next day. The message included a link to the survey as well as an individual code number. A week later, a second email was sent to those agents who had not responded. A third and final email was sent a week after the second email to the remaining agents who had not responded. The two follow-up email messages also included the link to the survey and the individual code numbers.

Of the 195 agents invited to participate in the study, 168 responded to the survey for an overall response rate of 86%. Due to incomplete data or to participants choosing not to participate, 143 surveys were usable, making the final usable response rate 73%.

Those not responding to the second follow-up email message were declared non-respondents. To handle non-response error, data from those who responded to the initial email message were compared with data from those who responded to either the first or second follow-up email messages. Responses that were collected following both follow-up email messages were used because less than 30 participants responded to the second follow-up email message. According to Linder, Murphy, and Briers (2001), comparing early respondents to late respondents is an acceptable method for addressing non-response error as a threat to external validity. After analyzing the data of early respondents and late respondents, no significant differences were noted.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS® Version 11.5 for Windows). Descriptive statistics, including means and standard deviations, were used to summarize the data. Frequencies and percentages were reported for the demographic data. Means and standard deviations were computed for the job characteristics and the job satisfaction constructs.

Results

Population Description

The largest percentage (41.2%) of the participants identified themselves as county directors, while 32.2% were classified as area agents. 4-H agents accounted for 26.6% of the participants.

Perceptions of the Job Characteristics

Using seven point scales, Extension agents provided mean scores for the job characteristics. Of all the job characteristics, Extension agents rated task significance the highest, whereas they rated feedback from agents the lowest. Means ranged from 4.12 to 6.41 (Table 1). Considering the three groups of agents, 4-H agents rated the job characteristic task significance the highest ($M = 6.41$, $SD = .76$), while area agents rated the job characteristic feedback from agents the lowest ($M = 4.12$, $SD = 1.50$).

Table 1. Means and Standard Deviations of the Job Characteristics for All Agents

Job Characteristic	All Agents (<i>N</i> = 143)	Area Agents (<i>n</i> = 46)	County Directors (<i>n</i> = 59)	4-H Agents (<i>n</i> = 38)
Skill Variety	6.12 (0.76)	5.97 (0.83)	6.29 (0.65)	6.03 (0.78)
Task Identity	5.10 (1.20)	5.36 (1.22)	4.94 (1.21)	5.05 (1.14)
Task Significance	6.31 (0.79)	6.18 (0.91)	6.34 (0.71)	6.41 (0.76)
Autonomy	5.84 (0.83)	5.80 (0.88)	5.77 (0.84)	6.00 (0.77)
Feedback				
Job Feedback	5.21 (0.93)	5.28 (0.97)	5.08 (0.95)	5.31 (0.83)
Feedback from Agents	4.32 (1.47)	4.12 (1.50)	4.35 (1.43)	4.51 (1.51)

Note. Means of the job characteristics were derived from a combination of items contained in Sections I and II of the Job Diagnostic Survey.

Level of Job Satisfaction

Using seven point scales, Extension agents provided mean scores for the personal job satisfaction constructs. Agents rated growth satisfaction the highest, while they rated general satisfaction the lowest. Means ranged from 5.04 to 6.18 (Table 2). Of the three groups of agents, 4-H agents rated the job satisfaction construct of growth satisfaction the highest

($M = 6.18$, $SD = .71$), while county directors rated the job satisfaction construct of general satisfaction the lowest ($M = 5.04$, $SD = 1.16$).

Extension agents provided mean scores for the context job satisfaction constructs using seven point scales. Agents rated satisfaction with co-worker relations the highest and rated satisfaction with pay the lowest. Means ranged from 3.70 to 6.60. Of the three groups of agents, 4-H agents rated the job satisfaction construct of satisfaction with co-

worker relations the highest ($M = 6.60$, $SD = .51$), while county directors rated the job satisfaction construct of satisfaction with pay the lowest ($M = 3.70$, $SD = 1.85$).

Table 2. *Means and Standard Deviations of the Job Satisfaction Constructs for All Agents*

Job Satisfaction Construct	All Agents ($N = 143$)	Area Agents ($n = 46$)	County Directors ($n = 59$)	4-H Agents ($n = 38$)
Personal Satisfaction Construct				
Internal Work Motivation	5.56 (0.61)	5.51 (0.65)	5.60 (0.61)	5.57 (0.59)
Growth Satisfaction	6.04 (0.81)	5.92 (0.93)	6.03 (0.76)	6.18 (0.71)
General Satisfaction	5.13 (1.11)	5.20 (1.19)	5.04 (1.16)	5.17 (0.94)
Context Satisfaction Construct				
Job Security	5.45 (1.33)	5.30 (1.35)	5.39 (1.36)	5.71 (1.27)
Pay	3.76 (1.86)	3.76 (1.84)	3.70 (1.85)	3.83 (1.94)
Co-Worker Relations	6.46 (0.60)	6.25 (0.73)	6.53 (0.51)	6.60 (0.51)
Supervision	5.08 (1.76)	4.80 (1.85)	5.21 (1.81)	5.22 (1.54)

Note. Means of two job satisfaction constructs (internal work motivation and general satisfaction) were derived from a combination of items contained in Sections III and V of the Job Diagnostic Survey. Means of the remaining five job satisfaction constructs (growth satisfaction, satisfaction with job security, satisfaction with pay, satisfaction with co-worker relations, and satisfaction with supervision) were derived from items contained in Section IV of the Job Diagnostic Survey.

Conclusions

Overall, Extension agents perceived skill variety to be present in their jobs, meaning that they felt that their jobs require an array of different activities to carry out the work, requiring them to use a number of different skills and talents. This conclusion is consistent with Ferguson's (1992) study, which indicated that Nebraska Extension agents perceived skill variety to be present in their jobs. County directors perceived skill variety to be present more in their jobs than did other agents in the present study.

Extension agents perceived task significance to be present in their jobs, meaning that their jobs have a substantial impact on the lives of other people, whether those people are in the immediate organization or the world at large. A previous study (Ferguson, 1992) found task significance to be present to a lesser extent in the jobs of Nebraska Extension agents. In the current study, 4-H agents believed task significance to be present more in their jobs than did other agents.

Extension agents perceived feedback from agents to be present in their jobs the least, meaning they perceived clear information about their performance from supervisors or from co-workers is not as prevalent in their jobs as other job characteristics. This conclusion is consistent with Ferguson's (1992) study, indicating that Nebraska Extension agents perceived feedback to be present in their jobs the least. In the present study, area agents perceived this characteristic the least.

County directors and 4-H agents perceived the job characteristic task identity to be present in their jobs to a lesser extent than the other job characteristics. They felt that their jobs may not require the completion of a "whole" and identifiable piece of work, that is, doing a job from beginning to end with a visible outcome. This conclusion is consistent with Ferguson's (1992) study, indicating that Nebraska Extension agents perceived task identity to be present in their jobs to a lesser extent than the other job characteristics. County directors perceived task identity to be present the least in their jobs in the present study.

Area agents perceived job feedback to be present in their jobs to a lesser extent than the other job characteristics. This means that the work activities required by their jobs may not provide them with direct and clear information about the effectiveness of their performance. This conclusion is consistent with Ferguson's (1992) study, indicating that Nebraska Extension agents perceived feedback to be present in their jobs the least.

Overall, Extension agents were satisfied with their jobs. Extension agents were most satisfied with the personal satisfaction construct of growth satisfaction, meaning they were most satisfied with the opportunities that they have for personal learning and growth at work. This conclusion is consistent with Barnett and Louderback (1971), indicating that agents associated opportunities for personal growth with job satisfaction. In the current study, 4-H agents were the most satisfied with this construct.

Extension agents were the least satisfied with the personal satisfaction construct of general satisfaction, meaning that they were least satisfied with their jobs in general. County directors were the least satisfied with this construct in the current study. The literature points to other researchers who arrived at the same conclusion, indicating that agents were the least satisfied with their jobs in general even though their satisfaction levels were still moderately high (Riggs & Beus, 1993).

Extension agents were satisfied the most with the context satisfaction construct of satisfaction with co-worker relations, meaning that they were the most satisfied with the relations that they have with their co-workers. This conclusion is consistent with other studies that indicate an association between positive co-worker relations and increased job satisfaction (Barnett & Louderback, 1971; Riggs & Beus, 1993). In the present study, 4-H agents were the most satisfied with this construct.

Agents were the least satisfied with the context satisfaction construct of satisfaction with pay, meaning agents were least satisfied with the amount of compensation that they receive for their jobs. The same conclusion was found in Mallilo's (1990) study of Rhode Island Extension agents. In the current study, county directors were the least satisfied with this construct.

Recommendations

Results of this study should be presented to Extension administrators to make them aware of the level of job satisfaction of the agents and to help them understand what agents want from their work. Extension administrators, state specialists, district directors, and others in supervisory positions should then provide more feedback for the agents that they oversee. Additionally, when there is a budget increase for the Extension Service, top priority should be to provide agents with increased salaries and benefits. In the meantime, Extension agents should provide more feedback for their co-workers regarding their job performance.

When researchers conduct similar studies, outside observers should use Hackman and Oldham's (1980) Job Rating Form to perform objective ratings of the job characteristics to be compared with the ratings by the Extension agents. Future researchers studying job satisfaction should also use Sections VI and VII of Hackman & Oldham's (1980) Job Diagnostic Survey to measure the individual growth need strength of each agent since an agent's individuality affects how he or she responds to his or her job.

This study should be replicated in three to five years to determine if the level of job satisfaction of the agents has remained the same, improved, or worsened. Studies should also be conducted to evaluate why agents leave the Extension Service and to determine why agents who are not satisfied with their jobs remain employed with the Extension Service. Finally, Extension Services in other states should replicate this study.

References

- Barnett, R., & Louderback, L. (1971). When organizations change. *Journal of Extension*, 9(2), 9-15.
- Bartholomew, H. M., & Smith, K. L. (1990). Stresses of multicounty agent positions. *Journal of Extension*, 28(4). Retrieved November 1, 2003, from <http://www.joe.org/joe/1990winter/a2.html>
- Bavendam, J. (2000). Managing job satisfaction [Electronic version]. *Bavendam Research Incorporated: Special Reports: Effective Management Through Measurement*, 6, 1-2.
- Fetsch, R. J., Flashman, R., & Jeffers, D. (1984). Up tight ain't right: Easing the pressure on county agents. *Journal of Extension*, 22(3). Retrieved March 24, 2004, from <http://www.joe.org/joe/1984may/a4.html>
- Furgason, J. W. (1992). *Changes in Extension educators' perceptions of job dimensions and job satisfaction following organizational restructuring*. Master's thesis, University of Nebraska, Lincoln.
- Gamon, J. A., & Cassina, E. H. (1989). *Levels of job satisfaction of Illinois Cooperative Extension personnel*. Unpublished manuscript, Iowa State University at Ames.
- Hackman, J. R., & Oldham, G. R. (1974). *The Job Diagnostic Survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects* (Tech. Rep. No. 4). New Haven, CT: Yale University, Department of Administrative Sciences.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60(2), 159-170.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250-279.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Huerta, J. M., & Smith, K. L. (1994). Attitudes of county Extension agents toward agent specialization in Ohio. *Journal of Agricultural Education*, 35(3), 6-10.
- Hutchins, G. K. (1992). Evaluating county clustering. *Journal of Extension*, 30(1). Retrieved November 1, 2003, from <http://www.joe.org/joe/1992spring/a5.html>

- Jayarathne, K. S. U., & Gamon, J. (1998). Effects of restructuring on the job performance of Extension educators: Implications for in-service training. *Journal of Agricultural Education, 39*(4), 45-52.
- Johnson, R. L. (1966). *Area Extension work: A pilot study* (Report). Manhattan, KS: Kansas State University, Extension Service.
- 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). *Summary of Research in Extension, 5*, 142.
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social scienceresearch [Electronic Version]. *Journal of Agricultural Education, 42*(4), 43-53.
- Mallilo, A. (1990). Extension staff satisfaction. *Journal of Extension, 28*(2). Retrieved March 24, 2004, from <http://www.joe.org/joe/1990summer/rb5.html>
- Morse, R. A. (1987). Minnesota Extension reorganization (Master's thesis, University of Minnesota, 1987). *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*(4), 395-403.
- Performance Unlimited. (1999). *Increasing employee satisfaction*. Retrieved December 8, 2003, from <http://www.performance-unlimited.com/satisfy.htm>
- Riggs, K., & Beus, K. M. (1993). Job satisfaction in Extension. *Journal of Extension, 31*(2). Retrieved October 6, 2003, from <http://www.joe.org/joe/1993summer/a5.html>
- Rockwell, S. K., Furgason, J., Jacobson, C., Schmidt, D., & Tooker, L. (1993). From single to multicounty programming units. *Journal of Extension, 31*(3). Retrieved September 9, 2003, from <http://www.joe.org/joe/1993fall/a4.html>
- Taylor-Powell, E., & Richardson, B. (1990). Issues programming changes Extension. *Journal of Extension, 28*(2). Retrieved November 1, 2003, from <http://www.joe.org/joe/1990summer/a4.html>
- The Conference Board. (2003). *U. S. job satisfaction hits record low*. Retrieved December 8, 2003, from http://www.conference-board.org/utilities/pressPrinterFriendly.cfm? press_ID=2227

Turner, A. N., & Lawrence, P. R. (1965). *Industrial jobs and the worker*. Boston: Harvard Graduate School of Business Administration. Vroom, V. H. (1964). *Work and motivation*. New York: John Wiley and Sons.