THE RELATIONSHIPS BETWEEN SELECTED DEMOGRAPHIC FACTORS AND THE LEVEL OF JOB SATISFACTION OF EXTENSION AGENTS

Meagan Scott, 4-H Youth Agent
Mississippi State University Extension Service
Kirk A. Swortzel, Associate Professor
Walter N. Taylor, Professor
Mississippi State University

Abstract

The purpose of this study was to determine what demographic factors were related to the level of job satisfaction of Extension agents. The study followed a descriptive correlational design. A modified version of the Job Diagnostic Survey developed by Hackman and Oldham was sent to 195 Extension agents. Based on 143 usable responses, significant relationships existed between the job satisfaction constructs and the demographic factors of gender and race. When considering Extension agents’ current positions, a significant difference (p < .05) was found between area agents and 4-H agents regarding how each group rated satisfaction with co-worker relations.

Introduction

Hoppock (1935) defined job satisfaction as “any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say, ‘I am satisfied with my job’” (p. 47). Employees may be satisfied with some aspects of their jobs, while being dissatisfied with others. It is assumed that employees are able to balance the specific satisfactions against the specific dissatisfactions and arrive at a composite satisfaction with the job as a whole (Hoppock). According to Poling (1990), the best predictor of job satisfaction is when the employees’ personal values match those of the organization.

When considering job satisfaction, demographic variables should be considered to understand thoroughly the possible factors that lead to job satisfaction and dissatisfaction. Herzberg, Mausner, Peterson, and Capwell (1957) identified several characteristics of satisfied/dissatisfied workers. They indicated that morale is high when people first start their jobs. Morale decreases during the next few years and remains at a relatively low level until workers are in their late twenties or early thirties. At this time, job satisfaction levels begin to rise and continue to rise through the remainder of the workers’ careers. The same trend is found in regard to a worker’s length of service. Workers begin with high morale, which drops during the first year and remains low for a number of years. Then as length of service increases, job satisfaction levels tend to rise.

Concerning gender, there are no simple conclusions about the differences between males and females and their job satisfaction levels. Some studies reviewed by Herzberg et al. (1957) indicated that males were more satisfied with their jobs, while others indicated that females were more satisfied. Educational level is not clear either. Furthermore, these studies showed that workers with more education had a higher job satisfaction level, while other studies indicated that workers with more education had a lower job satisfaction level. Other studies showed no relationship between the two. Herzberg et al. (1957) suggested that a clear conclusion cannot be drawn concerning job satisfaction and its relationship to marital status, number of dependents, number of previous occupations, or ethnicity.
In a study of agricultural education teachers in Ohio, Cano and Miller (1992b) found that the teacher’s age, years in current position, total years teaching, and degree status were not significantly related to overall job satisfaction. In general, both males and females were equally satisfied with their jobs. These findings are similar to a later study of the same nature by Castillo, Conklin, and Cano (1999). Therefore, over an approximate ten-year period, agriculture teachers’ selected demographic characteristics were not significantly related to their overall level of job satisfaction. The findings from these two studies (Cano & Miller, 1992b; Castillo et al., 1999) implied that older or younger teachers were not necessarily more or less satisfied with their jobs. Additionally, the longer a teacher remained in the profession the less his or her overall job satisfaction level was affected (Castillo & Cano, 1999). When the same demographic variables were examined in yet another study that explored six different classifications of agriculture teachers (Cano & Miller, 1992a), it was found that overall job satisfaction was not significantly related to any of the demographic variables.

Although the Ohio researchers’ findings were consistent, their findings on age, total years teaching, and degree status are contrary to the findings of Berns (1989) and Grady (1985). Berns found that as the age of the teacher increased, so did his or her overall job satisfaction level. Grady found that as the number of years of teaching experience increased, overall job satisfaction increased as well. Berns discovered that a teacher’s educational level also affected his or her overall job satisfaction level. A teacher with a master’s degree was more satisfied with his or her teaching position than a teacher with only a bachelor’s degree. Because of these inconsistencies in the literature, perhaps findings on the relationship of demographic variables to overall job satisfaction should only be applied to the area in which the study was conducted.

Research has been conducted on whether Extension faculty’s level of job satisfaction was related to age, years of experience, educational level, and marital status (Andrews, 1990; Bowen, Radhakrishna, & Keyser, 1994; Fetsch & Kennington, 1997; Griffin, 1984; Nestor & Leary, 2000). Regarding age, intrinsic job satisfaction was higher for those in the age groups of 23 to 33 and 46 to 50 (Nestor & Leary). This is consistent with the findings of Griffin, who found in a study of Extension home economists that age was related to job satisfaction. The findings of Bowen et al. indicated that age was related to job satisfaction, because they found in a study of 4-H agents that those who were older had a higher level of job satisfaction. On the other hand, Andrews found no relationship between age and the job satisfaction levels of Extension agricultural agents.

Nestor and Leary (2000) did find that as one’s years of experience increased as an Extension faculty member, his or her intrinsic and overall job satisfaction increased as well. Bowen et al. (1994) also found this to be true for 4-H agents, while Fetsch and Kennington (1997) found it to be true for all Extension agents in their study. In contrast, Griffin (1984) and Andrews (1990) both found no relationship between job satisfaction and years of experience.

Concerning the educational level of Extension faculty, Andrews (1990) discovered a relationship between educational level and job satisfaction. However, Bowen et al. (1994) and Griffin (1984) found no such relationship.

Marital status was related to the job satisfaction levels of 4-H agents as indicated by Bowen et al. (1994) who found in a study that married 4-H agents were more satisfied with their jobs than those who were single. Fetsch and Kennington (1997) also found a relationship between marital status and job satisfaction levels. They found both divorced and married agents to be more satisfied with their jobs than agents who were never married, remarried, or widowed.

Several studies involving Extension agents regarding their job satisfaction levels and gender have been conducted (Bowen et al., 1994; Nestor & Leary, 2000; Riggs & Beus, 1993). However, the literature is divergent, illustrating that some studies indicate that females have higher levels of job satisfaction, while other studies indicate that males do (Bowen et al.; Riggs & Beus).
There are even some studies that indicate that there is no relationship between gender and job satisfaction levels (Nestor & Leary).

Whereas Nestor and Leary (2000) found no relationship between gender and job satisfaction, Riggs and Beus (1993) found that as the number of areas of responsibility increased for female agents, job satisfaction increased as well. The opposite was true for males. When their areas of responsibility increased, their job satisfaction levels decreased. However, males with more areas of responsibility were more satisfied with their colleagues than were female agents. It was also found that both male and female agents alike who had fewer areas of responsibility and fewer children living at home were more satisfied. Bowen et al. (1994) as well found a relationship between job satisfaction and gender. They discovered that female 4-H agents were more satisfied with their jobs than male agents.

**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 led to a number of personal and work outcomes that were 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.

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’ level of job satisfaction as it related to selected demographic factors following organizational restructuring in 2002. Therefore, an assessment of the relationship between selected demographic factors and Extension agents’ current level of job satisfaction was warranted.

**Purpose and Objectives**

The purpose of this study was to determine what demographic factors were related to the level of job satisfaction of Extension agents. The specific demographic factors addressed in this study were:

- Gender
- Race
- Age
- Marital status
- Education
- Previous position(s) with the Extension Service
- Current Extension Service position

**Methods and Procedures**

**Population**

The population for this descriptive correlational 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’ level of job satisfaction was 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, three 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.

Statements in two of the sections 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. Items in the third section 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). The last section consisted of questions that asked the participants pertinent demographic information.

Scale scores for the job satisfaction constructs were computed for each agent utilizing the scoring key provided by Hackman and Oldham (1980). 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. Reliability coefficients for the job satisfaction constructs ranged from .56 (satisfaction with co-worker relations) to .84 (growth satisfaction) (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, provided one indication of the discriminant validity of the items included in the Job Diagnostic Survey. For the job satisfaction constructs, the median off-diagonal 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 satisfaction constructs. Point-biserial correlation coefficients (\(r_{pb}\)) were calculated to determine the relationships between the job satisfaction constructs and gender, race, marital status, and whether or not the participant had held a previous position with the Extension Service prior to his or her current position. The rank-biserial correlation coefficient (\(r_b\)) was calculated to determine the relationships between the job satisfaction constructs and education. Significant relationships were determined with an a priori alpha level of .05. To describe the strength of the relationships calculated in the study, Davis’ conventions were utilized (Davis, 1971).

**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.

**Gender**

As reported in Table 1, low significant relationships were found between gender and three of the job satisfaction constructs, growth satisfaction (\(r_{pb} = .22\)), satisfaction with job security (\(r_{pb} = .19\)), and satisfaction with pay (\(r_{pb} = .23\)). After examining the scatter plots for the relationships between gender and these three constructs, it was found that females rated growth satisfaction, satisfaction with job security, and satisfaction with pay higher than males. All other relationships were low except for the one between gender and satisfaction with co-worker relations (\(r_{pb} = .08\)), which was negligible.

**Race**

Low significant relationships were found between race and two of the job satisfaction constructs, general satisfaction (\(r_{pb} = .22\))
and satisfaction with supervision ($r_{pb} = .24$) (Table 1). After examining the scatter plots for the relationships between race and these two constructs, it was found that Caucasians rated general satisfaction and satisfaction with supervision lower than other races. Negligible relationships were found between race and internal work motivation ($r_{pb} = .03$) and between race and satisfaction with pay ($r_{pb} = .09$).

**Age**

No significant relationships were found between age and the job satisfaction constructs. Satisfaction with job security ($r_b = -.12$) and satisfaction with pay ($r_b = .10$) were the only two job satisfaction constructs having low relationships with age. All other relationships were negligible.

**Marital Status**

No significant relationships were found between marital status and the job satisfaction constructs. Only two low relationships were found. These relationships were found between marital status and internal work motivation ($r_{pb} = .10$) and between marital status and satisfaction with pay ($r_{pb} = .11$). All other relationships were negligible.

**Education**

Again, no significant relationships were found between the demographic factor and the job satisfaction constructs. The only low relationship found was between education and satisfaction with pay ($r_s = .14$). All other relationships were negligible.

**Held a Previous Position with the Extension Service**

No significant relationships were found between whether or not a participant had held a previous position with the Extension Service and the job satisfaction constructs. All relationships were negligible, except for the low relationship with satisfaction with supervision ($r_{pb} = .10$).

---

**Table 1**

*The Relationships Between the Job Satisfaction Constructs and Gender and Race for All Agents (N = 143)*

<table>
<thead>
<tr>
<th>Job Satisfaction Construct</th>
<th>Gender</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Satisfaction Construct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Work Motivation</td>
<td>.15</td>
<td>.03</td>
</tr>
<tr>
<td>Growth Satisfaction</td>
<td>.22*</td>
<td>.16</td>
</tr>
<tr>
<td>General Satisfaction</td>
<td>.10</td>
<td>.22*</td>
</tr>
<tr>
<td>Context Satisfaction Construct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Security</td>
<td>.19*</td>
<td>.11</td>
</tr>
<tr>
<td>Pay</td>
<td>.23*</td>
<td>.09</td>
</tr>
<tr>
<td>Co-Worker Relations</td>
<td>.08</td>
<td>.10</td>
</tr>
<tr>
<td>Supervision</td>
<td>.16</td>
<td>.24*</td>
</tr>
</tbody>
</table>

*1 = female; 2 = male. b1 = other; 2 = Caucasian.*

*p < .05*
Current Extension Service Position

Job satisfaction means for all agents ranged from 3.70 to 6.60 (Table 2). 4-H agents rated the job satisfaction construct of satisfaction with co-worker relations the highest \( (M = 6.60) \), while county directors rated the job satisfaction construct of satisfaction with pay the lowest \( (M = 3.70) \). The means among the agent groups were alike for six of the seven job satisfaction constructs. A significant difference was found between area agents and 4-H agents \( (\text{Scheffé Mean Difference} = .3429, \ p = .032) \) regarding how each group rated satisfaction with co-worker relations. Area agents rated this construct significantly lower than 4-H agents.

Table 2

Means of the Job Satisfaction Constructs for All Agents \( (N = 143) \)

<table>
<thead>
<tr>
<th>Job Satisfaction Construct</th>
<th>Area Agents</th>
<th>County Directors</th>
<th>4-H Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Satisfaction Construct</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Work Motivation</td>
<td>5.51\text{a}</td>
<td>5.60\text{a}</td>
<td>5.57\text{a}</td>
</tr>
<tr>
<td>Growth Satisfaction</td>
<td>5.92\text{a}</td>
<td>6.03\text{a}</td>
<td>6.18\text{a}</td>
</tr>
<tr>
<td>General Satisfaction</td>
<td>5.20\text{a}</td>
<td>5.04\text{a}</td>
<td>5.17\text{a}</td>
</tr>
<tr>
<td><strong>Context Satisfaction Construct</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Security</td>
<td>5.30\text{a}</td>
<td>5.39\text{a}</td>
<td>5.71\text{a}</td>
</tr>
<tr>
<td>Pay</td>
<td>3.76\text{a}</td>
<td>3.70\text{a}</td>
<td>3.83\text{a}</td>
</tr>
<tr>
<td>Co-Worker Relations</td>
<td>6.25\text{a}</td>
<td>6.53\text{ab}</td>
<td>6.60\text{b}</td>
</tr>
<tr>
<td>Supervision</td>
<td>4.80\text{a}</td>
<td>5.21\text{a}</td>
<td>5.22\text{a}</td>
</tr>
</tbody>
</table>

*Note.* Means in the same row that do not share subscripts differ at \( p < .05 \) in the Scheffé mean difference comparison.

Conclusions

For Extension agents, low relationships were observed between gender and the job satisfaction constructs of growth satisfaction, satisfaction with job security, and satisfaction with pay. Females rated all three of these constructs higher than males, indicating a higher level of satisfaction with personal learning and growth opportunities at work, job security, and compensation. Previous studies have shown similar findings (Bowen et al., 1994; Riggs & Beus, 1993). However, even though the literature indicates a relationship between gender and job satisfaction, some studies are inconclusive regarding whether males or females are more satisfied (Herzberg et al., 1957). In contrast, other studies have shown that gender is not related to job satisfaction (Cano & Miller, 1992a; Cano & Miller, 1992b; Castillo & Cano, 1999; Castillo et al., 1999; Nestor & Leary, 2000).

Age was not related to any of the job satisfaction constructs for Extension agents. This conclusion is consistent with other studies (Andrews, 1990; Cano & Miller, 1992a; Cano & Miller, 1992b; Castillo & Cano, 1999; Castillo et al., 1999). However, several studies have shown a relationship between age and job satisfaction, indicating that older workers are more satisfied with their jobs than younger workers (Berns, 1989; Bowen et al., 1994; Griffin, 1984; Herzberg et al., 1957; Nestor & Leary, 2000).
For Extension agents, race had low relationships with the job satisfaction constructs of general satisfaction and satisfaction with supervision. Caucasians rated both of these constructs lower than other races, indicating a lower level of satisfaction with their jobs in general and with the supervision that they receive. However, some studies have shown that race and job satisfaction are not related (Herzberg et al., 1957).

Marital status was not related to any of the job satisfaction constructs for Extension agents. This conclusion is consistent with other studies (Herzberg et al., 1957). However, several studies have shown a relationship between marital status and job satisfaction, indicating that married or divorced agents are more satisfied with their jobs than remarried, never married, or widowed agents (Bowen et al., 1994; Fetsch & Kennington, 1997).

Education was not related to any of the job satisfaction constructs for Extension agents. Other researchers have drawn this same conclusion (Bowen et al., 1994; Cano & Miller, 1992a; Cano & Miller, 1992b; Castillo & Cano, 1999; Castillo et al., 1999; Griffin, 1984; Herzberg et al., 1957). However, the literature does indicate a relationship between education and job satisfaction, even though studies are inconclusive regarding whether or not workers increase or decrease their job satisfaction when they increase their educational level (Herzberg et al., 1957). Even so, some studies do indicate that increasing one’s educational level increases his or her level of job satisfaction (Andrews, 1990; Berns, 1989).

Comparing the means of the job satisfaction constructs for the three groups of Extension agents revealed that for the most part, there was no difference among the three groups regarding how satisfied each group was with the seven job satisfaction constructs. Two groups differed only on one of the seven job satisfaction constructs. A significant difference was found between area agents and 4-H agents regarding how satisfied each group was with their co-worker relations. Area agents rated this construct lower than 4-H agents, indicating a lower level of satisfaction with their relationships with their co-workers. However, having held a previous position with the Extension Service was not related to any of the job satisfaction constructs for Extension agents.

**Recommendations**

Results of this study should be presented to Extension administrators to make them aware of which demographic factors were related to the level of job satisfaction of Extension agents. Extension administrators should then design programs and trainings to help male Extension agents increase their level of satisfaction with personal learning and growth opportunities at work, job security, and compensation. They should also address the need for Caucasian Extension agents to increase their level of satisfaction with their jobs in general and with the supervision that they receive. Because area agents indicated a lower level of satisfaction with their relationships with their co-workers as compared to 4-H agents, Extension administrators should adjust area agents’ job duties so that they are able to build relationships with their co-workers.

This study should be replicated in three to five years to determine if the level of job satisfaction of Extension agents is related to the same demographic factors, to other demographic factors, or to none of the demographic factors. Finally, Extension Services in other states should replicate this study to make administrators aware of possible inservice needs among their employees.

**References**


Ohio Vocational Education Personnel Development Regional Center.


MEAGAN SCOTT is a 4-H Youth Agent in the Mississippi State University Extension Service, 401 West Lamar Street, Poplarville, MS 39470. E-mail: meagans@ext.msstate.edu.

KIRK A. SWORTZEL is an Associate Professor in the Department of Agricultural Information Science and Education at Mississippi State University, PO Box 9731, Mississippi State, MS 39762. E-mail: ksworthel@ais.msstate.edu.

WALTER N. TAYLOR is a Professor and Department Head in the Department of Agricultural Information Science and Education at Mississippi State University, PO Box 9731, Mississippi State, MS 39762. E-mail: wntaylor@ais.msstate.edu.