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TEACHER BURNOUT AND JOB SATISFACTION AMONG AGRICULTURAL EDUCATION TEACHERS

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Abstract

The demands on teachers both in and out of classrooms combined with increased budget cuts have led many to question the levels of job satisfaction and burnout among agricultural education teachers. The purpose of this study was to describe the occurrence of burnout and the level at which burnout exists among agricultural education teachers in Ohio. The study was also designed to consider the relationships between job satisfaction, occupational stress, personal strain, personal coping resources, and burnout among agricultural education teachers. A random sample (n = 388) of the population (N = 628) received a mailed questionnaire (37% response, n = 145). Teachers were described predominantly as married, white males with one to two children and less than 10 years of experience in their present positions. The majority of agricultural education teachers in the study possessed high levels of job satisfaction, low levels of occupational stress and personal strain, and high levels of personal coping resources. However, teachers in the study indicated a moderate level of frequency of burnout and a moderate to high level of intensity of burnout. No significant relationships were found between demographic characteristics and burnout, or between organizational factors and burnout.

Introduction and Theoretical/ Conceptual Framework

During the past 25 years, there has been significant exploration into the phenomena of job satisfaction, stress, and burnout. According to Barrick (1989, p. 35), "the linkage between stress, job satisfaction, and the work environment is critical to the study of burnout." In addition, Lambert et al. (2003, p. 3) asserted that "measuring teacher stress can play an instrumental role in understanding the processes that leads to teacher burnout."

The Person-Environment Fit Theory (French & Caplan, 1972) is widely accepted for studying the phenomenon of job satisfaction, stress, and burnout. In the Person-Environment Fit Theory, it is advocated that the degree to which individuals are compatible to, or *fit*, their environment is related to the degree to which they are stressed. According to Edwards, Caplan, and Harrison (1998), there are several distinctions relative to fit. The first distinction is between the individual and the environment, the second is between the objective representation and the subjective representation, the third is between demands and abilities (Edwards et al.). "Misfit between demands and abilities induces coping and defense mechanisms, which in turn influence objective and subjective environments" (Brewer & McMahan-Landers, 2003, p. 37). According to Brewer and McMahan-Landers (p. 126), "Stress can occur if there is a mismatch between the *reality* of the work environment (objective) and an individual's *perceptions* of the work environment (subjective)." Researchers (Farber, 1998; Lecompte & Dworkin, 1991; Troman & Woods, 2001) noted that teachers who experience stress over long periods of

time may experience what is known as *burnout*.

The term "burnout" was first used by Freudenberger (as cited in Weisberg & Sagie, 1999) to explain the phenomena of physical, emotional, and mental exhaustion. During the 1980s, stress and burnout became a serious issue affecting millions of workers (Farber, 1983).

> Burned-out professionals are more frequently absent or late for work than their non-burned out colleagues; they become noticeably less idealistic and more rigid; their performance at work deteriorates markedly, and they may fantasize or actually plan on leaving the profession. (Farber, p. 3).

Given the demands of the job, the teaching profession became a target audience for symptoms of burnout (Cherniss, 1980; Jarvis, 2002; Maslach, 1982; Weisberg & Sagie, 1999).

Effects of Stress and Burnout

Emotional exhaustion, one of the more extreme varieties of work related strain, manifests itself in employees as a general loss of feeling, concern, trust, interest, and spirit (Van Jaarsveld, 2004) often leading to chronic health problems and absence from the classroom (Lee, 1990). Matheny, Gfroerer, and Harris (2000) cited burnout symptoms as a loss of enthusiasm for work. Balkin, White, and Bodey (2003) reported that burnout led to a lower quality of teaching, absenteeism among staff, and early departure from the profession. Relative to departure from the profession, Jackson, Schwab, and Schuler (as cited in Balkin, et al.) found that burnout predicted subsequent thoughts about leaving the job and actual turnover.

Researchers have examined numerous stressors that lead to signs of stress and burnout: frustration, unrealized expectations, and stresses of the occupation (Malanowski & Wood, 1984); disruptive pupil behavior (Kyriacou & Sutcliffe, 1978); poor school discipline policy (Tokar & Feitler, 1986); time-resource allocation, (Abel & Sewell, 1999); classroom climate (Byrne, 1994); no influence over the daily school schedule nor a voice in decision-making (Maslach & Leiter, 1997); and, perception of lack of personal accomplishment (Croom, 2003). Conley, Pintrich, Vekiri, and Harrison (2004) found that teachers with symptoms of burnout felt that their work did not match their original reasons for becoming teachers.

Stress and Burnout Among Agriculture Teachers

According to Croom (2003, p. 1),

> Agriculture teachers draw upon physical, emotional and intellectual resources in order to be effective in the classroom (Cano, 1990). Teachers often find themselves working well beyond a 40-hour week as they supervise student projects, coach career development teams, evaluate student work and prepare lessons (Straquadine, 1990). The long hours at work, coupled with the stress of teaching could eventually lead to debilitating health problems (Vaughn, 1990).

However, in Croom's (2003) study, it was found that in spite of personal and environmental conditions that place teachers at risk of burnout, "agriculture teachers appear to be energetic and engaged professionals who were accomplishing something worthwhile for the benefit of students" (p. 11).

Thus, variables such as demographic characteristics, personal coping resources, personal strain, occupational stress, and job satisfaction may contribute to agricultural education teacher burnout (Figure 1).

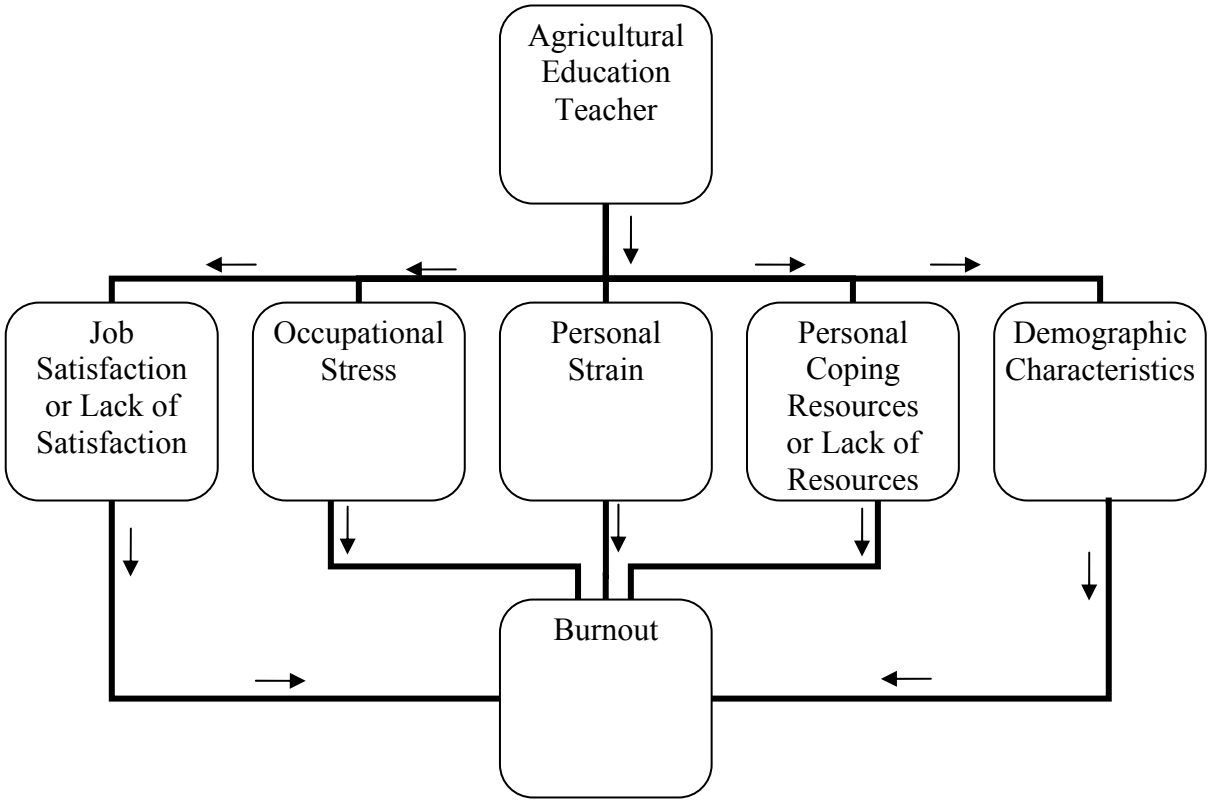

Figure 1. Conceptual model of agricultural education teacher burnout.

Purpose and Objectives

The purpose of this study was to describe the occurrence of burnout and the level at which burnout exists among agricultural education teachers in Ohio. The study was also designed to consider the relationships between the independent variables of job satisfaction, occupational stress, personal strain, personal coping resources, demographic characteristics and the dependent variable burnout. The objectives guiding the study were to:

1. Describe the level of job satisfaction, occupational stress, personal strain, personal coping resources, and burnout among agricultural education teachers; and,
2. Describe the extent to which burnout is associated with demographic characteristics, job satisfaction, occupational stress, personal strain, and personal coping resources among agricultural education teachers.

Methods

The population for this descriptive survey study consisted of agricultural education teachers in Ohio (N = 628). A random sample of teachers (n = 388) was selected to participate in the study (Cochran, 1977). The frame was provided by the state department of education.

Instrumentation

The original instruments used in this study were adapted from Clark's (1985) work with extension educators. Validity for the mailed questionnaire used in this study was established by a panel of experts in teacher education. Reliability was determined by pilot testing the instrument using agricultural education teachers (n = 14) who were not selected to participate in the study. The questionnaire for the study

was a compilation of several subjective rating subscales developed to measure constructs within burnout.

Job Satisfaction. The original Brayfield-Rothe "Job Satisfaction Index" instrument was shown to be both reliable and valid (Brayfield & Rothe, 1951). A modified version of the Brayfield-Rothe instrument was used in this study, and reliability for the overall scale, using Cronbach's alpha, was α =.75. The original Brayfield-Rothe was modified to remove out-of-vogue jargon, terms, or items.

Occupational Stress. Level of occupational stress was measured using the "Occupational Environment Scale" developed by Osipow and Spokane (1983), which combined subscales, each containing 5-point subjective rating scale questions ranging from "Most of the Time" to "Rarely or Never." The subscales were combined to create an overall measure of occupational stress. Reliability for the overall scale was α = .83.

*Personal Strain. L*evel of personal strain was measured using Osipow and Spokane's (1983) "Personal Strain Questionnaire." The instrument consisted of four subscales: vocational strain, psychological strain, interpersonal strain, and physical strain scored on a 5-point subjective rating scale with low scores indicating a low level of personal strain and high scores indicating a high level of personal strain. The subscales were combined to compute an overall level of personal strain. Reliability for the overall scale was α = .88.

Personal Coping Resources. Level of personal coping resources available to deal with stress were measured using Osipow and Spokane's (1983) "Personal Resources Questionnaire," which obtained measures of recreation, social support, and rational/cognitive coping. Each question was measured using a 5-point subjective rating scale with low scores indicating low levels of personal coping resources and high scores indicating usage of many coping mechanisms. The three subscales were combined to obtain an overall personal coping score. Reliability for the overall scale was α = .87.

Burnout. The Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996) was used to obtain measures of burnout. The scale consisted of three subscales: emotional exhaustion, depersonalization, and personal accomplishment. Each subscale was measured on two dimensions: frequency (how often the feeling occurred) and intensity (how strongly the feeling occurred). The frequency dimension was scored on a 7-point subjective rating scale with scores ranging from 0 (Never) to 6 (Every Day). The intensity dimension was scored on an 8-point subjective rating scale ranging from 0 (Never) to 7 (Major, very strong). Reliability for the overall scale for frequency for this study was α = .79.

The emotional exhaustion subscale contained nine items designed to measure the feeling of being emotionally overextended or exhausted by one's work. On this scale, higher scores indicated higher levels of burnout. The depersonalization scale contained five items designed to measure the individual's lack of feeling or impersonal response to students. A high score on this scale indicated high levels of burnout. The personal accomplishment scale contained eight items designed to measure the teacher's feelings of competence and successful achievements in one's work. The scale was reverse scored for both frequency and intensity; therefore, low scores indicated higher levels of burnout. Reliability for the overall scale for this study was α = .90.

Data Collection and Analysis

Data were collected using a mailed questionnaire. A personalized pre-survey postcard was mailed in late September of 2005. The questionnaire and cover letter were mailed during the second week of October with a postage-paid, self-addressed envelope. A 37% response rate (n = 145) was achieved. No follow-up of non-respondents was completed; thus, results should not be generalized beyond the participants of the study (Miller & Smith, 1983).

All data were analyzed using the Statistical Package for Social Sciences (SPSS v. 13.0). Descriptive statistics were calculated for demographic characteristics, each independent variable, and the dependent variable in the study. Pearson product moment correlations were computed to describe the strength and direction of the relationships between variables. An alpha level of .05 was set *a priori*.

Findings

Job Satisfaction

The scale used to measure job satisfaction of agricultural education teachers consisted of a 5-point subjective rating scale ranging from strongly disagree (5) to strongly agree (1). Thus, scores could have ranged from a low of 14 (strongly agree on all items) to 70 (strongly disagree on all items). The majority of teachers (99%) indicated that they either agreed or strongly agreed with items indicating satisfaction with the job. The overall mean for the sample was 25.59 (*SD* = 4.03).

Occupational Stress, Personal Strain, and Personal Coping Resources

For occupational stress, overall scores could have ranged from 18 (low stress) to 228 (high stress). The mean occupational stress score was 91.09 (*SD* = 12.94), indicating a lower-middle stress level. The overall level of personal strain for agricultural education teachers was lower-middle (59.3%) as well. The majority of teachers were in the lower two quartiles with a mean score of 91.03 (*SD* = 16.34), indicating a lower-middle level of personal strain. The majority of agricultural education teachers (64%) indicated an upper-middle level of personal coping resources with a mean score of 102.65 (*SD* = 15.44).

Burnout

Emotional Exhaustion. On the emotional exhaustion subscale (Table 1), the frequency dimension scores could have ranged from 0 to 54, and the intensity dimension scores could have ranged from 0 to 63. The level of emotional exhaustion (frequency) for the agricultural education teachers in the study population was 62 respondents (47.3%) in the moderate burnout range, whereas 46 respondents (35%) were in the low burnout range. Twenty-three respondents (17.6%) indicated they were experiencing high levels of emotional exhaustion frequently.

The level of emotional exhaustion (intensity) scores indicated that 53 (41%) of the teachers had experienced moderate burnout intensity, 41 (31.8%) had experienced low levels, and 35 (27%) had experienced high levels of emotional burnout (intensity). A mean score of 21.31 (*SD* = 9.05) was found for frequency and 31.71 (*SD* = 12.03) for intensity, both falling in the moderate range for emotional exhaustion of agricultural education teachers.

Depersonalization. The mean scores for depersonalization (frequency) in the sample were 8.54 (*SD* = 5.47) and 14.38 (*SD* = 8.67) for depersonalization (intensity), both in the moderate range. It was found that 49 (37.7%) of the teachers were in the moderate range for burnout, 46 (35.4%) were in the low range, and 35 (26.9%) were in the high range for depersonalization (frequency). In the depersonalization (intensity) dimension, the majority of teachers (51.6%) experienced high levels of burnout, 25.4% experienced low levels of burnout, and 23% experienced moderate levels of burnout (Table 1).

Personal Accomplishment. The personal accomplishment subscale included eight items that were interpreted in reverse of the other two scales. Therefore, for this subscale, low scores indicated high levels of burnout. The scores on the frequency scale could have ranged from 0 to 48 and on the intensity scale from 0 to 56. The majority of agricultural education teachers were in the high range for personal accomplishment for both frequency and intensity. Fifty seven (100%) indicated high levels of burnout for personal accomplishment (frequency). High levels of personal accomplishment burnout (intensity) were reported by 130 (98.5%), and 2 (1.5%) indicated moderate levels (Table 1).

Table 1
Emotional Exhaustion, Depersonalization, and Personal Accomplishment Burnout of Agricultural Education Teachers (n = 145) [a]

Emotional exhaustion					
	Frequency			Intensity	
Level of burnout	*n*	*%*	Level of burnout	*n*	*%*
Low (0-17)	46	35.1	Low (0-25)	41	31.8
Moderate (18-29)	62	47.3	Moderate (26-39)	53	41.1
High (30 or over)	23	17.6	High (40 or over)	35	27.1
M	21.31		*M*	31.71	
SD	9.05		*SD*	12.03	

Depersonalization					
	Frequency			Intensity	
Level of burnout	*n*	*%*	Level of burnout	*n*	*%*
Low (0-5)	46	35.4	Low (0-6)	32	25.4
Moderate (6-11)	49	37.7	Moderate (7-14)	29	23.0
High (12 or over)	35	26.9	High (15 or over)	65	51.6
M	8.54		*M*	14.38	
SD	5.47		*SD*	8.67	

Personal accomplishment					
	Frequency			Intensity	
Level of burnout	*n*	*%*	Level of burnout	*n*	*%*
Low (40 or over)	0	0	Low (44 or over)	0	0
Moderate (34-39)	0	0	Moderate (37-43)	2	1.5
High (0-33)	57	100	High (0-36)	130	98.5
M	10.37		*M*	17.04	
SD	5.57		*SD*	7.40	

[a] Some participants did not respond to all subscales.

Relationship Between Demographic Characteristics and Burnout

The magnitude of relationships in this study was described using Davis' (1971) conventions. Pearson product moment correlation coefficients for the relationship between burnout and age, gender, marital status, number of children, and years in present position are shown in Table 2. A negative correlation was found between all dimensions of burnout and age, indicating that the older the teacher the less they had tendencies toward burnout. emotional exhaustion (frequency) and age had a moderate negative correlation (r=-.338), no other relationships were correlated at .3 or above. No statistically significant correlations were found.

Table 2

Relationships Between Demographic Characteristics and Burnout Among Agricultural Education Teachers (n = 145)

Burnout subscales	Age	Gender	Marital status	Number of children	Years in current position
Emotional exhaustion					
Frequency	-.338	-.169	.073	-.157	-.252
Intensity	-.176	-.120	.050	-.136	-.135
Depersonalization					
Frequency	-.280	.045	.083	-.228	-.140
Intensity	-.052	.066	-.013	-.031	-.059
Personal accomplishment					
Frequency	-.061	-.117	.042	-.042	.077
Intensity	-.115	-.154	.108	-.086	-.078

Relationship Between Job Satisfaction, Occupational Stress, Personal Strain, Personal Coping Resources, and Burnout

A low positive relationship was found between job satisfaction and the emotional exhaustion subscale in both the frequency (r=.240) and intensity (r=.268) dimensions. A moderate positive relationship was found between occupational stress and emotional exhaustion frequency (r= .368) and a low positive relationship was found with intensity (r=.174). A low positive relationship existed between depersonalization and occupational stress for both frequency (r=.271) and intensity (r=.160). A moderate positive relationship was found between emotional exhaustion and overall personal strain in the frequency dimension (r=.432), and a low positive relationship was found in the intensity dimension (r=.293). The depersonalization subscale had a low positive relationship between frequency (r=.291) and intensity (r=.178) and personal strain.

Negative relationships existed between all three subscales of burnout and personal coping resources. A moderate negative relationship was established between personal coping and the emotional exhaustion subscale for the frequency dimension (r=-.391) and a low negative relationship was found for the intensity dimension (r=-.224).

Conclusions and Recommendations

The following conclusions are based on the interpretation of data presented in the study:

Describe Job Satisfaction, Occupational Stress, Personal Strain, Personal Coping Resources, and Burnout

Agricultural education teachers in this study were not experiencing occupational stress and, therefore, are not likely to develop burnout.

Agricultural education teachers in this study were satisfied with their jobs.

Describe Relationships Between Job Satisfaction, Occupational Stress, Personal Strain, Personal Coping Resources, and Burnout

Older agricultural education teachers in this study are less stressed than younger teachers.

Teachers with higher levels of emotional exhaustion are those who are more likely to experience burnout.

Discussion

Job Satisfaction. Job dissatisfaction has consistently been cited as a symptom of burnout (Cherniss, 1980; Clark, 1985; Igodan, 1984; Maslach, 1982). In this study, it was indicated that individuals in the sample were satisfied with their present positions. A low negative relationship between job satisfaction and burnout was found to exist, indicating there was a slight increase in the amount of burnout felt by individuals when they were dissatisfied with their jobs.

Occupational Stress. Other researchers have consistently indicated that occupational stress is a major factor in the incidence of burnout (Cherniss, 1980; Clark, 1985; Maslach, 1982). In this study, it was found that agricultural education teachers were experiencing low to middle levels of occupational stress and also that there was a moderate positive relationship between emotional exhaustion (frequency) and occupational stress and negligible to low positive relationships with all other subscales. Therefore, individuals with higher levels of occupational stress tended to experience higher levels of emotional burnout.

Personal Strain. Farber (1983) reported that burnout is not necessarily the result of stress, but the result of unmediated stress or strain (Clark, 1985). The teachers in this study indicated that they were experiencing low to middle levels of personal strain, indicating there was not a problem with personal strain at the current time. A moderate positive relationship was found to exist between personal strain and emotional exhaustion (frequency), with low positive relationships existing between personal strain and all of the other dimensions. Thus, individuals who experienced higher levels of personal strain were also at risk of experiencing higher levels of emotional burnout.

Personal Coping Resources. Researchers have consistently pointed out that one way to reduce or prevent levels of burnout is to increase an individual's personal coping resources (Clark, 1985). The results of this study indicated that the majority of individuals in the study were in the middle to upper category for coping resources. Clark reported that individuals categorized in the upper two quartiles of personal coping resources were using good to excellent personal coping strategies. Therefore, participants in this study were using adequate personal coping resources. The current study had a low to moderate negative relationship between personal coping resources and burnout, indicating individuals who had higher levels of personal coping resources tended to experience lower levels of burnout.

Summary of Burnout Among Agricultural Education Teachers

The majority of agricultural education teachers in this study were found to experience moderate levels of burnout. However, there were individuals experiencing high levels of burnout on the personal accomplishment subscale. Given that teachers must face a classroom full of students every day, negotiate potentially stressful interactions with parents,

administrators, counselors, and other teachers, contend with relatively low pay and shrinking school budgets, and ensure students meet increasingly strict standards of accountability, it may be little wonder that many experience a form of burnout at some point in their careers (Wood & McCarthy, 2002). The following recommendations are suggested by the researchers based on the findings of this study.

Agricultural education teachers should be made aware of the problems associated with burnout and how these problems may adversely affect their professional and personal lives. A presentation at the annual teacher's conference could enlighten the profession and would offer an opportunity to share warning signs and indicators of stress and burnout.

Steps should be taken to proactively educate teachers about personal coping resources and stress management techniques. Croom (2003) suggested that teacher education classes need to instruct students about the potential for burnout in the profession and should provide pre-service teachers with suggestions and strategies for coping with stress.

Job satisfaction, occupational stress, and personal strain levels of agricultural education teachers should be monitored to prevent burnout from occurring in the profession. At the individual level, self-efficacy and the ability to maintain perspective with regard to daily events have been described as "anxiety-buffers" (Conley, et al., 2004). Awareness of such personal coping resources could benefit the profession of secondary agricultural education teachers.

In addition, Tye and O'Brien (2002, p. 24) reported,

> ...the longer one has held a position, the less likely one is to see leaving it as a plausible option. This is why a...teacher who remains in the classroom past the initial years is less likely to leave the profession with every additional year.

Therefore, further studies should be conducted to determine deterrents to stress and burnout, especially among beginning agricultural education teachers.

This study should be replicated in other states to determine the extent to which burnout exists among agricultural education teachers nationally. In addition, Croom (2003) indicated the need to investigate burnout in teachers who have left the profession; these researchers support that recommendation.

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