

LEVELS OF BURNOUT AND JOB SATISFACTION IN LARGE-SCALE AGRIBUSINESS

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Abstract

This research examined organizational sources and levels of Burnout and Job Satisfaction of a large scale agribusiness (n=300) by administering the Maslach Burnout Inventory – General Survey, the Hoppock Job Satisfaction Blank, the Areas of Work Life Survey, and demographic questions. This study provided normative sample data for the agribusiness sector, found a good degree of fit between the agribusiness sample data and existing industry norms, and determined the relationships between burnout and job satisfaction for the agribusiness sector followed known patterns of other industries. Recommendations are made for future normative research to be conducted on a larger and more diverse sample size, in order to better draw conclusions for the industry as a whole.

Introduction

Burnout is considered a special form of occupational stress. Occupational stress is, “any affect-laden experience that is caused by an imbalance between job demands and the response capability of the worker” (Schaufeli & Enzmann, 1998, p. 8). Burnout is more specifically conceptualized as a psychological syndrome in response to prolonged chronic emotional and interpersonal stressors on the job (Maslach, Schaufeli, & Leiter, 2001). Between 1980 and 1985, the same time as the development of burnout research, workers’ compensation claims related to organizational stress tripled, and in some states such as California, organizational stress claims comprised a quarter of all workers’ compensation claims (Bordwin, 1996). The court systems in many states have upheld that non-traumatic mental injury (organizational stress or burnout) is compensable under the workers’ compensation statute.

A wide range of physical, cognitive, affective, behavioral, and motivational symptoms have been associated with burnout. These symptoms include anxiety, depression, sleep disturbance, headaches, gastrointestinal illness, high blood pressure, muscle tension, chronic fatigue, absenteeism, intention to quit jobs, decreased organizational commitment and lowered job satisfaction (Cordes & Daugherty, 1993; Kahill, 1988; Schaufeli & Enzmann, 1998; Schaufeli, Marek, & Maslach, 1993). Despite the establishment of the relationship of burnout to the above symptoms, the true organizational costs of burnout are not known. The cost of organizational stress to organizations in the United States has been estimated at \$200 billion dollars per year due to absenteeism, losses due to reduced productivity, replacement and retraining costs of new employees, damage to production or equipment, and litigation (International Labor Office, 1993). It is estimated that approximately 30% of the workforce in developed countries suffer

from work related stress, and in the U.S. alone, 550 million working days are lost each year due to organizational stress (Hole, Sparks, & Cooper, 2001).

History of Burnout – Towards a Definition

The initial scientific articles on burnout were written by Herbert Freudenberger (1974, 1975), and Christina Maslach (1976). These articles served to identify, describe, and name an existing social problem based on observations. These observations were neither systematic nor standardized (Maslach & Schaufeli, 1993; Schaufeli & Enzmann, 1998). During this period, the concept of burnout varied widely. As many as 132 symptoms have been associated with burnout, expanding the concept to the extent that these symptoms became extremely generic and therefore lost specific meaning (1998). Later articles provided standardized assessments like the Maslach Burnout Inventory (Maslach & Jackson, 1981a; 1981b; 1986; Maslach, Jackson, & Leiter, 1996) and Burnout Measure (Pines & Aronson, 1988; Pines, Aronson, & Kafry, 1981). With the creation of standardized instruments, burnout can now be studied empirically. The confusion of conceptual definitions has been reduced and clarified by the general acceptance of the Maslach Burnout Inventory as the main instrument to assess the burnout syndrome. The Maslach Burnout Inventory (MBI) is now the most universally used instrument to measure burnout (Schaufeli & Enzmann, 1998). Because of the widespread use of the MBI as the principle measurement tool for burnout, the definition of burnout has become equivalent to the manner in which it is measured by the MBI (1998).

The MBI

There are three versions of the MBI: 1) The original MBI-Human Services Survey (or MBI-HSS), which was designed for professionals in the human services and health care occupations, 2) The MBI-Educators Survey (or MBI-ES), an adaptation of the original MBI-HSS designed for

people in educational settings, and 3) *The MBI-General Survey*, or *MBI-GS*, designed to work with workers not covered by the first two surveys. The MBI-GS operationalized burnout in slightly broader terms than the other two surveys with respect to the job, and not just to the personal relationships that may be a part of that job. In both the MBI-HSS, and the MBI-ES, burnout is operationalized as three dimensions. These components are emotional exhaustion, depersonalization, and reduced personal accomplishment, reflecting the focus of the worker's interaction with other people. The MBI-GS assesses the same three dimensions as the MBI-ES and MBI-HSS using slightly revised items, so that it maintains a consistent factor structure across a variety of occupations (Maslach et al., 1996). Because of the more diverse occupational settings, the labels for the three dimensions of the MBI-GS are slightly broader and more generic: *Exhaustion, Cynicism, and Reduced Professional Efficacy* (1996).

MBI-GS Dimensions

Emotional Exhaustion

Exhaustion is the dimension most indicative of the burnout syndrome, and of the three dimensions of burnout, exhaustion has been the most studied (Maslach et al., 2001). Shirom (1989) argued that exhaustion was the only component of burnout. Exhaustion reflects the basic individual stress component of burnout, referring to feelings of being overextended and emotionally and physically depleted. Exhaustion prompts one to distance oneself emotionally and cognitively from work, presumably as a way to cope with work overload (Maslach et al., 2001). Other researchers, e.g., Cordes and Dougherty (1993), argued that burnout is a unique, multidimensional, chronic stress reaction that includes more than just an exhaustion reaction. It is an individual stress reaction embedded in a context of complex social relationships and

involves the person's conception of both self and others (Leiter, 1991; Leiter & Maslach, 1988; Maslach & Jackson, 1981a).

Cynicism

The depersonalization/cynicism dimension component represents the interpersonal context of burnout, referring to feelings of negative, callous, or detached response to various aspects of the job. Reduced personal accomplishment/efficacy focuses on the importance of self-evaluation as central to the experience of burnout, referring to feelings of incompetence and lack of achievement and productivity at work (Cordes & Dougherty, 1993). Depersonalization is an attempt to cope by putting distance between one's self and service recipients. For example, within the fields of human services, the emotional demands of the job itself can be emotionally exhausting, resulting in the inability to be responsive to the needs of the service recipients. The emotional demand on human service and educational workers becomes more manageable when they depersonalize the service recipients as impersonal objects of one's work. Depersonalization is the dimension of burnout that is most associated with human services. The MBI-GS corresponding dimension of cynicism reflects indifference or a distant attitude towards work referring to the work itself, and not necessarily to personal relationships at work (Maslach et al., 1996). That is, outside of education and human services, people cope by resorting to cognitive distancing, developing cynical attitudes when they become exhausted and discouraged (Maslach et al., 2001). The relationship of cynicism (depersonalization) from coping with exhaustion is found consistently throughout the burnout literature (Schaufeli & Enzmann, 1998; Cordes & Daugherty, 1993; Schaufeli et al., 1993).

Professional Efficacy

Professional efficacy (personal accomplishment) seems to be a function of either exhaustion,

or cynicism, or a combination of both (Byrne, 1994; Lee & Ashforth, 1996). Personal Accomplishment assesses feelings of competence and successful achievement in one's work with people, while professional efficacy has a broader focus, encompassing both the social and non-social aspects of one's work (Maslach et al., 1996).

Early research on burnout questioned whether it was a unique concept, equating burnout with many alternative psychological constructs like stress, depression, and job dissatisfaction (Schaufeli & Enzmann, 1998). Depression, stress, job dissatisfaction, and burnout all suffer from two problems: 1) the concepts are plagued with definitional ambiguity, and 2) these terms are related and can only be separated in relative ways. Trying to create sharp boundaries between these concepts would be artificial. It ultimately is answered by one's judgment, based upon definition and is dependent on his/her theoretical assumptions (Schaufeli & Enzmann, 1998). Relative distinctions can be made between: 1) burnout and job stress in regard to time, and 2) between burnout and both job satisfaction and depression in regard to domain.

Burnout and Stress

According to Lazarus and Launier (1978), one is experiencing job stress when demands at work tax or exceed one's adaptive resources. According to Brill (1984), stress is accompanied by mental and physical symptoms as a result of a temporary adaptation process. The distinction between burnout and job stress is a matter of time. Burnout refers to the long-term breakdown in adaptation accompanied by chronic malfunctioning at work (Schaufeli & Enzmann, 1998). Burnout then can be considered as prolonged job stress. That is, one who suffered from a job stress would return to normal, while one suffering from burnout would not do so because burnout is the result of prolonged chronic job stressors (Maslach et al., 2001). Therefore burnout can only be retroactively distinguished from job stress based on whether the adaptation was

successfully performed (resolving job stress), or unsuccessfully performed, resulting in a breakdown in adaptation (burnout) (Maslach, & Schaufeli, 1993).

Burnout and Depression

Depression is a clinical syndrome. According to the DSM III, depression is a dysphoric mood or loss of interest in or pleasure from all or almost all activities and pastimes. That is, depression is global, context free, and pervasive into all aspects of one's life (Baker et al 2000; Glass & Mcknight, 1996; Leiter & Durup, 1994; Warr, 1987). Burnout, on the other hand, is situation specific and work related. The two subjects are related but differentiated psychologically by domain.

Burnout and Job Satisfaction

Maslach et al. (2001) have reported that job satisfaction and burnout are inversely related ($r = -.40$ to $-.52$). This relationship follows expected logic that burnout and job dissatisfaction are related but not the same concept. Reduced sense of accomplishment or effectiveness is a central component of the experience of burnout, and it diminishes opportunities for satisfying experiences at work. However, dissatisfaction with work may aggravate subsequent experiences with burnout making the relationship somewhat circular. Most empirical studies with the MBI show that job satisfaction is only moderately negatively correlated with emotional exhaustion, and depersonalization, while only slightly positively correlated with personal accomplishment (Maslach, & Schaufeli, 1993; Riggan, Goodley, & Hafer, 1984; Zedeck, Maslach, Mosier, & Skitka, 1988). These studies show that while job dissatisfaction and burnout are clearly linked, they are not identical constructs.

Burnout Occupational and Demographic Norms

Much of the research on burnout has contributed to the establishment of demographic and occupational norms. Gender, age, race, marital status, and educational background are the most studied demographic norms. Mental health workers, police officers, physicians, social service workers, and nurses make up the most studied occupation-specific norms. The availability of these norms in the literature provides reference points for assessing the relative levels of burnout within a given setting (Maslach et al., 1996).

Although included in the possible causes of burnout, demographic characteristics are not causes, but co-factors. Gender is not a cause of burnout but is linked to factors such as role expectation that act together as causal agents to aggravate burnout (1996). Of all biographical characteristics, age is the most consistently related to burnout. Burnout is more often observed in younger employees when compared to those over thirty or forty (Birch, Marchant, & Smith, 1986; Maslach et al., 1996; Poulin & Walter, 1993). Maslach (1982) and Pines and Aronson (1988) found work experience to be related to burnout, in that those employees with less experience seemed to be more susceptible to burnout. Because older employees are more likely to have more experience, Pines and Aronson's findings support the observation of age as a co-factor for burnout. The relationship between gender and burnout is not as clear. Some studies show that burnout occurs more often in women than in men. The inconsistency of burnout's relation to gender is most likely attributable to role expectations and job level. Nurses are more likely to be women, and police officers are more likely to be men, and supervisors or managers are more likely to be men. Within such groups, gender would have different mediating roles and the impact of gender on burnout would then vary by the group studied. Unmarried people, especially men, seem to be more susceptible to burnout (Maslach & Jackson, 1985; McDermott,

1984; Raquepaw & Miller, 1989). Single people seem to experience higher levels of burnout than those who are divorced (Maslach et al., 1996). It has been suggested that family support may serve as an important resource for managing emotional demands of work (Greenglass, 1986; Leiter, 1990; Lieter & Durup, 1996). Those with higher education are more prone to burnout. This may be attributed to higher expectations of those individuals who have graduated from college (Birch et al., 1986; Mor & Laliberte, 1984). This finding is different from the relationship found in job satisfaction, where higher education is related to higher job satisfaction.

Sources of burnout are most likely related to the organizational environments in which people work (Maslach, & Leiter, 1996). Emotional exhaustion and depersonalization/cynicism dimensions arise from workload demands and personal conflicts. Primarily, demands to do too much in too little time deplete staff members' capacities to be involved energetically and emotionally with their jobs. Also, personal conflict with other employees, supervisors, subordinates, etc., undermines employees' confidence in their work setting (Schaufeli & Enzmann 1998). Conflict has an impact on emotional energy both through its demands on the individual's attention and through its weakening of the employee's confidence in the social environment of the organization (Maslach & Leiter 1997). Conflict can be an indication of incompatible values among members of the organization or between the individual and the organization itself. Employees' abilities to cope with conflict and work load depend on resources available to them (Schaufeli & Enzmann ,1998). Burnout research has focused on supportive relationships between the employee and his/her coworkers, as well as supervisors. The level of supervisor support is usually negatively related to exhaustion while coworker support is more closely related to personal accomplishment (Lee & Ashforth, 1996). Personal accomplishment is influenced by the availability of social support and opportunities to develop

professionally (Maslach & Leiter, 1997). A poor relationship with one's supervisor implies a lack of control over work responsibilities and access to necessary resources. Coworker support has fewer implications for control over work, resulting in less impact on exhaustion, but the worker co-worker relationship's impact on self-evaluations of accomplishment or effectiveness affect perceived levels of personal accomplishment (Lee & Ashforth, 1996). Skill use and development confirms the employee's value to the organization and confirms a consistency between individual and group (Maslach & Leiter, 1997). When in conflict, the lack of skill use or development aggravates exhaustion through the perception of repetitive tedium in work and a lack of career direction (1997). Participation in decision-making affects employees' work and allows them to exercise a sense of autonomy over their contributions. Participation in decision-making implies power sharing and a means to enact one's values through his or her work (Jackson, 1983).

Organizational Sources of Burnout

The high levels of burnout in workers today does not reflect something that has gone wrong with the workers, but that there has been a fundamental change in the workplace and the nature of the job (Maslach & Leiter, 1997). Maslach and Leiter (1997) attribute this change to:

1. Global economics, which has: removed community control of jobs, relocated jobs to other countries, increased the competition for jobs, and lowered wages and benefits.
2. The use of sophisticated technology and tight human resource management to replace and reduce jobs, resulting in new demands for the remaining workers.
3. A redistribution of power from the workers gained through unions back to companies.
4. Failing corporate citizenship through downsizing in order to increase short-term profits.

5. The tying of CEOs' salary to stock values, causing a decrease in the intrinsic worth of workers' jobs as CEOs exploit the intrinsic value of corporations for personal gain.

These changes leave workers dealing with value conflicts, feeling overloaded, lacking control over what they do, not feeling rewarded for their work, experiencing a break down in community, and generally feeling not being treated fairly. From Maslach and Leiter's (1997) perspective, burnout arises from chronic mismatches between people and their work setting in the terms of some or all of the following six areas:

1. Work overload (i.e., requiring too much in too little time with too few resources)
2. Lack of control (i.e., having no opportunities to make choices and decisions, using one's abilities to think and solve problems)
3. Lack of reward (i.e., inadequate monetary rewards as well as internal rewards such as recognition and appreciation)
4. Lack of community (i.e., a loose and non-supportive social fabric; social isolation and chronic and unresolved problems)
5. Lack of fairness (i.e., employee's are inequitably treated and respected and self worth is not confirmed)
6. Value conflict (i.e., the requirements of the job do not agree with personal principles)

The above six areas of worklife come together in a framework that encompasses the major organizational antecedents of burnout (Maslach & Leiter, 1997). Ideally, employers and employees achieve a mutually agreeable balance on these six areas through the explicit negotiations of a psychological contract. Matches arise when the process establishing a psychological contact leaves critical issues unresolved. Mismatches arise when the working relationship changes to something that the staff member finds unacceptable (Maslach & Leiter,

1997). Therefore, the extent of work demands being consistent with staff expectations of demands, mediates matches and not the absolute level of an organizational problem. That is, the mismatch focus is on the relationship rather than the needs or objectives of the organization or for the individual (1997).

A focus on mismatches is consistent with the work of Maslach, Leiter, Schaufeli and their associates. People evaluate the balance of reward and effort relative to other people, and burnout arises from strained interactions with a variety of people at work and has its principal manifestations in problematic interactions (Dierendonck, Schaufeli & Sixma, 1994; Maslach & Leiter, 1997). Maslach & Leiter's model helps to explain the relationship between the organizational environment and the individual. They believe that,

Systematic and presentiment qualities of work environments played a definitive role in the relationships people developed with their work. Specifically, a match of employees' expectations or aspirations with the reality of their work environment promoted engagement with work, a state characterized by energy, involvement, and effectiveness. In contrast, serious mismatches of employees' expectations or aspirations with the reality of the work environment promoted burnout (Areas of Worklife Measure Description 2002, p. 1).

Maslach and Leiter (1997) focus on the match or fit between the worker and the workplace, proposing that the greater the match, the greater the likelihood of engagement, and conversely, the greater the mismatch, the greater the likelihood of burnout. Their model builds on prior models of job person fit. The contributing six areas where this mismatch can take place are workload, control, reward, community, fairness, and values. Their model focuses attention on

the relationship between the person and the social environment, rather than either one in isolation.

Research taking into account matches between person and job contributes to the creation of interventions to aid individuals experiencing burnout tailored to specific occupations. At the present no specific data exist for the agribusiness industry. Consequently, the intent of this study was three-fold:

1. Provide normative sample data for the instruments used based upon the agribusiness sector.
2. Determine the degree of fit of this agribusiness sample data with existing industry norms.
3. Determine the relationships between burnout and job satisfaction for the agribusiness sector.

Method

Subjects

The sample represented the largest single division of a large-scale agricultural company, consisting of 21 retail stores selling farming supplies, equipment, and consulting services. There were approximately 300 employees representing a wide range of responsibilities from sales to maintenance, including 21 managers, 3 district managers, and 1 regional manager (summary demographics, see Table 1).

Table 1

Demographic Summary

	Percent
Caucasian	97.4%
Working Full Time	92.3%
Male	77.9%
Without College Degree	63.6%
Paid Hourly Wage	59.0%
Receiving Incentive/Commission Pay	64.6%
Working for the Company Less than 1 year	13.3%

Procedure

The present study surveyed employees in group settings at each store location. Surveys were anonymous. Employees were distinguished by demographic items and questions representing: salary or hourly as pay basis, length of employment in similar occupation, length of employment with company, and length of time at current position. Employees were informed that they were completing a survey examining the job perceptions of employees in agribusiness to be used for the completion of a Master's Thesis at the Western Kentucky University. They were also told that the completed results would be made available upon completion of the project to anyone interested.

All organization locations were visited, and the survey was administered with a common administrator in all sites. Individuals absent or off site for business purposes were not surveyed. A total of 195 questionnaires were completed and returned. The final response rate was 65%.

Descriptive statistics were generated on the demographic data and each item on the survey instrument. An ANOVA was performed to determine if differences existed between the scores of participants in the study with regard to the selected demographic characteristics of gender, educational level and length of employment with organization, and length of time in occupation (race was excluded due to lack non-white subjects [$N = 4$]; work type, part time ($N = 10$), full time ($N = 182$), or casual ($N=1$) was excluded due to the predominance of full time employees in the sample). The three burnout sub-scales of emotional Exhaustion, Cynicism and Professional Efficacy were the dependent variables. The Pearson Product Moment Correlation statistic was used to determine if a relationship existed between the years of occupational experience and emotional exhaustion, cynicism and professional efficacy. The Pearson Product Moment Correlation was also used to determine if a relationship existed between the age of workers and emotional exhaustion, cynicism and professional efficacy.

Instruments

Criterion measures - Maslach Burnout Inventory. The MBI is the most universally used instrument to measure burnout (Schaufeli & Enzmann, 1998). The MBI-GS was the instrument used to determine the level of burnout in the organization that was the subject of the study. The MBI-GS consists of 16 statements describing the feelings an individual might have as a result of being over-stressed or burned out. Respondents were asked to indicate the frequency which they experienced these feelings by selecting from a list of six response choices: 0 = Never; 1 = A few times a year or less; 2 = Once a month or less; 3 = A few times a month; 4 = Once a week; to 5 = A few times a week; and 6 = Everyday.

The MBI-GS measures burnout on three sub-scales: (a) Emotional Exhaustion, including references to fatigue, but with no direct references to people being the source of fatigue, (b)

Cynicism, an indifferent or distant attitude toward work and referring to the work itself and not to personal relationships at work, and (c) Professional Efficacy, encompassing both social and nonsocial aspects of organizational accomplishments and focusing on expectations, including both past and present accomplishments and expectations of continued effectiveness at work.

The MBI-GS is not designed to categorize individuals as burned out. Instead, it is most beneficial in identifying areas within the organization that would improve the working conditions.

Predictor measure 1 - Hoppock Job Satisfaction Blank. The Hoppock Job Satisfaction Blank (1935) is an effective general measure of job satisfaction that has been in use for 70 years. It consists of a battery of four questions related to satisfaction with a person's job. Responses are made on a seven-point scale of varying statements. The four questions are summed yielding a possible score range of 4 to 28.

Predictor measure 2 - Areas of Worklife Survey. The Areas of Worklife Survey (AWLS) was developed to assess organizational environments from the perspective developed in The Truth about Burnout (Maslach & Leiter, 1997). The development of the measure is based on the principle that systematic and persistent qualities of work environments play a definitive role in the relationships people develop with their work. Specifically, a match of employees' expectations or aspirations with the reality of the work environment promotes engagement with work, a state characterized by energy, involvement, and effectiveness. In contrast, a serious mismatch of employees' expectations or aspirations with the reality of the work environment promotes burnout.

The AWLS measure focuses on six qualities that have played a prominent role in organizational research: Workload, Control, Reward, Community, Fairness, and Values. The

qualities are measured on a five point Likert scale (Center for Organizational Research and Development, 2002).

For this study, participants were given the surveys with the AWLS on top, followed by the following surveys combined into a single survey: in order (MBI-GS, Hoppock, and demographic questions).

Analysis

Levels of burnout were categorized by comparing the normative responses for the MBI to the participant responses. No agribusiness sample exists for comparison of relative levels of burnout, so the responses were compared to a National Forestry sample. The National Forestry Sample provides a closer match than most studied occupations like clergy, legal, and health services.

Organizational sources of burnout were investigated by comparing the Participants AWLS scores to normative responses. Participants' scores were correlated with the MBI burnout scores and the Hoppock Job satisfaction score. An ANOVA was computed for the AWLS scores and demographic variables of gender, age, education, marital status, number of children, length of employment at this or similar occupation, length of employment at this occupation, time in present position, hourly or salary payment basis, and whether the employee received any incentive pay. Demographic variables were examined comparing their burnout and job satisfaction responses.

These analyses will help understand the sources, levels, and distribution of Burnout in Large Scale Agribusiness.

Results

Analyses of the responses of the agribusiness sample provided the following descriptive information on the MBI-GS:

Burnout

The normative response categories and their corresponding values for emotional exhaustion, depersonalization and personal accomplishment on the MBI-GS are presented in Table 2.

Table 2

Maslach Burnout Inventory Normative Score Categorization

Response Category	Emotional Exhaustion	Cynicism	Professional Efficacy
High	≥ 3.2	≥ 2.2	≥ 5.0
Moderate	2.01-3.19	1.01-2.19	4.01-4.99
Low	≤ 2.0	≤ 1.0	≤ 4.0

The response categories and their corresponding values for participants' responses on Emotional Exhaustion, Cynicism, and Professional Efficacy on the MBI-GS are presented in Table 3.

Table 3

Response Categories for Participants on MBI-GS (Emotional Exhaustion, Cynicism and Professional Efficacy)

	Mean	SD	Burnout Category
Exhaustion	2.44	1.59	Moderate
Professional Efficacy	4.97	0.95	Moderate (High End)
Cynicism	2.13	1.64	Moderate (High End)

Emotional Exhaustion

Participants reported that at least a few times per month, 62.6% felt used up at the end of the work day and emotionally drained by the experience. As measured by Maslach’s scale described in Table 1, the mean Exhaustion Score for respondents was 2.44 (Table 3), which indicated a moderate level of Emotional Exhaustion (see Table 3a for break down of burnout categories).

Table 3a

Break Down by Percent Participants in Burnout Categories

	Low		Moderate		High	
	Percent	N	Percent	N	Percent	N
Emotional Exhaustion	51.8%	101	15.4%	30	32.8%	64
Professional Efficacy	16.4%	32	15.9%	32.3	67.7%	132
Cynicism	33.8%	66	22.6%	44	43.6%	85

Cynicism

As measured by Maslach’s scale described in Table 1, the mean Cynicism Score for respondents was 2.13 (Table 3), indicating a moderate degree of Cynicism (see Table 3a for break down of burnout categories).

Professional Efficacy

As measured by Maslach’s scale described in Table 1, the mean Professional Efficacy Score for respondents was 4.97 (Table 2), indicating a moderate degree of Professional Efficacy. However, 67.7 % of the individual respondents scores fell into the high Professional Efficacy range on the scale (see Table 3a for break down of burnout categories).

A Comparison of Respondents' Scores to National Norms

Respondents in this study reported a moderate level of Emotional Exhaustion, a moderate amount of Cynicism, and a moderate degree of Professional Efficacy. There is not an agribusiness norm against which to compare the sample. Therefore, a large multinational sample from a forestry company (N=9055) was used for comparison (Baker, Demerouti, & Schaufeli, 2002). Agribusiness workers scored higher than the forestry sample for Exhaustion and comparative to levels of Cynicism and Professional Efficacy. The comparison of respondents' scores for each sub-scale of the MBI-GS to the forestry sample is presented in Table 4.

Table 4

Comparison of Respondent Scores to a Multinational Forestry Sample

Burnout Scales	Agribusiness Workers N=195		Burnout Category	Multinational Forestry Sample n=9055		Burnout Category
	M	SD		M	SD	
Emotional Exhaustion	2.44	1.59	Moderate	1.48	1.41	Low
Cynicism	2.13	1.64	Moderate (high end)	1.48	1.69	Moderate
Professional Efficacy	4.97	.95	Moderate (high end)	4.66	1.69	Moderate

Compared to the forestry sample, agribusiness workers showed higher scores in all subcategories than forestry workers. Forestry workers felt Emotional Exhaustion and Cynicism to a lesser degree than agribusiness workers; however, agribusiness workers felt a higher degree of Professional Efficacy ($M=4.97$ versus $M=4.66$).

Areas of Work Life

Table 5 shows the mean scores for the responses to each of the categories of the Areas of Worklife Survey that was administered to the participants in this study (See normative data Appendix A).

	M	SD	Normative Mean	Normative SD
Workload	3.27	.77	2.92	.88
Control	3.37	.77	3.46	.70
Reward	3.30	.83	3.13	.89
Community	3.54	.67	3.37	.85
Fairness	2.99	.82	2.71	.87
Values	3.21	.70	3.28	.75

Based on the results of the responses, the highest mean score of 3.54 was in the category of Community, while the highest mean score compared to the norm was in Control ($M=3.37$). The lowest mean score was in the category of Fairness ($M=2.99$) for the respondents, compared to the lowest mean score ($M = 2.71$) for the norm group.

With the exception of the Control sub-scale of the AWLS, the mean scores of the participants in this study are slightly greater than the normative means. Thus, it can be inferred that perspectives of the participants in this study do not differ markedly from other groups. In the Control area, the difference in mean scores, though different, is also not markedly so.

Correlation of MBI-GS, Areas of Worklife Survey, and Job Satisfaction

Table 6 shows the relationship of the Emotional Exhaustion (EE), Cynicism (CY), and Professional Efficacy (PE) scores to the six qualities on the AWLS and the Hoppock Job Satisfaction Score for the participants in this study.

Table 6

Correlations of MBI Subcategories to Worklife Scores and Job Satisfaction Score

Qualities	EE	CY	PE	Job Sat.
Workload	-.615**	-.416**	.020	.311**
Control	-.287**	-.385**	.258**	.394**
Reward	-.593**	-.580**	.245**	.593**
Community	-.388**	-.448**	.247**	.501**
Fairness	-.460**	-.579**	.235**	.530**
Values	-.453**	-.605**	.306**	.431**

** Correlation is significant at the .001 level (2-tailed)

Table 6a

Correlation of Job Satisfaction and MBI Sub Categories

Qualities	EE	CY	PE	Job Sat
EE	1.000	.700**	-.086	-.607**
CY	.700**	1.000	-.305**	-.685**
PE	-.086	-.305**	1.000	.431**
Job Sat.	-.607**	-.685**	.431**	1.000

** Correlation is significant at the .001 level (2-tailed)

Job Satisfaction shared some relationship to the AWLS and the MBI-Gs sub scores as expected. This is consistent with the expected relationships of a positive relationship of job satisfaction to Professional Efficacy and the negative relationship to Emotional Exhaustion and Cynicism.

Mean scores of the MBI and job satisfaction by demographic representation

Tables 7 through 16, display burnout and Job Satisfaction by demographic representation. (For summary F scores, see Appendix B)

Table 7

Relationship of Burnout and Job Satisfaction by Gender

Gender (missing 2)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
Male (n=152)	2.54	1.6	2.23	1.65	5.01	.95	19.9	4.04
Female (n=41)	2.15	1.52	1.78	1.57	4.82	.92	20.12	4.21

All women were employed in administrative office positions, thereby creating a distinct separate group within the company. Gender was related to Workload, $F(1,191) = 9.30, p = <.05$). Women had higher Workload Scores ($M = 3.36, SD = 70$) than men ($M = 2.94, SD = 1.77$), indicating a better match of expectations to Workload.

Table 8

Relationship of Burnout and Job Satisfaction by Age

Age (missing 1)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
30 and under (n=41)	2.73	1.73	2.46	1.60	4.90	.79	19.09	4.08
31 to 40 (n=52)	2.64	1.50	2.31	1.69	4.93	.96	19.19	4.41
41-50 (n=52)	2.49	1.65	2.04	1.73	5.01	1.07	20.25	4.26
51 and over (n=49)	1.90	1.38	1.71	1.44	5.02	.94	21.23	3.11

Age displayed a relationship to Job Satisfaction, $F(3, 190) = 3.00, p < .05$), Fairness $F(3, 190) = 2.69, p < .05$) and Emotional Exhaustion $F(3, 190) = 2.68, p < .05$). For Job Satisfaction and Emotional Exhaustion, post hoc tests did not attribute the overall significant effect to any specific category. For Fairness, Employees 30 and under had lower Fairness Scores ($M=2.74, SD = .90$) than 51 and over ($M=3.12, SD = .65$). That is, employees 51 and over had a better match on expectations of Fairness than younger employees 30 and under.

Table 9

Relationship of Burnout and Job Satisfaction by Education

Degree Held (missing = 2)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
No College Degree (n=81)	2.16	1.67	2.02	1.65	5.01	1.03	20.05	4.17
Some College (n=43)	2.33	1.34	2.00	1.65	4.89	.99	20.07	3.75
College degree (n=60)	2.78	1.48	2.27	1.59	4.95	.82	20.56	3.88
Grad Degree (n=9)	2.76	2.29	2.36	1.76	5.02	.93	19.98	6.09

Education displayed a relationship with Workload, $F(3,189) = 3.416, p = <.05$). Post hoc tests did not attribute the overall significant effect to any specific category.

Table 10

Relationship of Burnout and Job Satisfaction by Children

Number of Children (missing 2)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
None (n=38)	2.71	1.63	2.23	1.58	4.83	.87	18.13	4.44
1 child (n=43)	2.21	1.51	2.11	1.53	4.90	.96	20.42	4.18
2 children (n=61)	2.41	1.63	2.15	1.75	5.10	.89	20.70	4.15
3 children (n=35)	2.40	1.72	1.89	1.47	5.06	.94	19.94	3.37
4 children (n=9)	3.31	1.05	2.64	2.10	5.09	.86	20.11	3.44
5 or more children (n=7)	1.43	.59	1.63	2.00	4.33	1.68	21.00	1.92

Number of Children displayed a relationship with Job Satisfaction, $F(5,187) = 2.24, p = <.05$). Individuals with no children had lower Job Satisfaction ($M = 18.13, SD = 4.45$) than those Individuals with 2 children ($M=20.71, SD = 4.15$).

Table 11

Relationship of Burnout and Job Satisfaction by Marital Status

Marital status (missing=4)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
Single (n=22)	2.68	1.67	1.92	1.51	4.96	.76	18.85	3.62
Married (n=146)	2.38	1.59	2.09	1.61	5.04	.92	20.42	3.87
Divorced (n=21)	2.54	1.55	2.38	1.67	4.38	1.06	18.10	4.59
Other (n=2)	2.50	2.12	3.20	3.96	4.08	1.53	15.50	9.19

Married marital status displayed a relationship with Job Satisfaction, $F(3,187) = 3.6$, $p = <.05$), and Professional Efficacy ($F(3,187) = 3.79$, $p = <.05$). For Job Satisfaction, post hoc tests did not attribute the overall significant effect to any specific category. For Professional Efficacy, married people had higher Professional Efficacy Scores ($M=5.05$, $SD = .92$) than those who were divorced ($M=4.38$, $SD = 1.06$).

Table 12

Relationship of Burnout and Job Satisfaction by Length at This or Similar Occupation

Length at this or similar occupation (missing=2)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
0-11 months (n=12)	1.39	.88	1.28	1.52	4.99	1.16	21.39	2.71
1-5 years (n=45)	2.73	1.70	2.48	1.84	4.92	.86	18.82	4.57
6-10 years (n=53)	2.63	1.40	2.24	1.68	5.02	.91	20.19	3.77
11-20 years (n=42)	2.38	1.50	2.06	1.44	4.93	1.02	19.91	3.63
21+ years (n=41)	2.17	1.42	1.84	1.49	4.98	.98	20.71	4.41

Length of time at the current or a similar occupation was related to Values, $F(4,188) = 3.70$, $p = <.05$). Individuals with 0-11 months experience in the agribusiness occupation had a better Value match ($M=4.0$, $SD = .35$) than individuals with 1-5 years experience ($M=3.36$, $SD = .68$), and 6-10 years ($M=3.33$, $SD = .73$). Fairness displayed a significant relationship with time in this or similar occupation but failed to meet assumption of homogeneity of variances.

Table 13

Relationship of Burnout and Job Satisfaction by Length of Employment with This Organization

Length of employment with this organization (missing =2)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
0-11 months (n=26)	1.74	1.35	1.04	1.26	5.08	.86	21.41	3.87
1-5 years (n=59)	2.82	1.61	2.57	.91	4.94	.91	19.00	3.85
6-10 years (n=50)	2.71	1.77	2.29	1.76	5.03	.817	20.16	4.45
11-20 years (n=46)	2.16	1.31	2.18	1.53	4.85	1.18	19.74	3.96
21+ years (n=12)	1.76	1.36	1.17	1.15	5.08	1.04	22.08	2.84

Length of time worked at the organization was related to Cynicism, $F(4,188) = 5.65, p = <.05$), Workload, $F(4,188) = 2.78, p = <.05$), Reward, $F(4,188) = 2.945, p = <.05$), Fairness, $F(4,188) = 7.201, p = <.05$), Values, $F(4,188) = 2.35, p = <.05$) and Job Satisfaction, $F(4,188) = 2.68, p = <.05$). For Cynicism, individuals new to the organization, 0 to 11 months, had lower Cynicism Scores ($M = 1.04, SD = 1.27$) than individuals working longer, 1 to 5 years ($M = 2.5, SD = 1.61$), 6 to 10 years ($M = 2.29, SD = 1.74$), 11 to 20 years ($M = 2.18, SD = 1.53$). However, Individuals working 1 to 5 years had a higher Cynicism Score than individuals working 21 plus years ($M=1.17, SD = 1.15$). For Workload, new individuals, 0 to 11 months, had higher Workload Scores ($M = 3.43, SD = .81$) than individuals working 1 to 5 years ($M = 2.87, SD = .71$), indicating a better match of expectations of workload for new employees. For Reward, new individuals, 0 to 11 months had higher reward scores ($M = 3.72, SD = .71$) than individuals working for the organization 11 to 20 years ($M = 3.08, SD = .78$). For Fairness, individuals working for the organization 0 to 11 months had higher Fairness Scores ($M = 3.46,$

$SD = .75$) than individuals working 1 to 5 years ($M = 2.81, SD = .60$), 6 to 10 years ($M = 2.74, SD = .77$), and 11 to 20 years ($M = 2.87, SD = .66$). For Values and Job Satisfaction, post hoc tests did not attribute the overall significant effect to any specific category. Emotional Exhaustion displayed a significant relationship with time in organization but failed to meet assumption of homogeneity of variances.

Table 14

Relationship of Burnout and Job Satisfaction by Length of Time in Present Position

Length of time in present position (missing =2)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
0-11 months (n=28)	1.83	1.38	1.04	1.22	5.05	.87	21.42	3.75
1-5 years (n=82)	2.77	1.62	2.43	1.67	5.04	.89	19.29	4.16
6-10 years (n=39)	2.56	1.77	2.40	1.80	4.87	.93	19.97	4.53
11-20 years (n=31)	2.20	1.27	2.13	1.33	4.94	1.13	20.00	3.46
21+ years (n=13)	1.65	1.25	1.52	1.40	4.74	1.14	21.39	3.20

The length of time worked in the present position was related to Cynicism, $F(4,188) = 4.29, p = <.05$), Workload, $F(4,188) = 2.60, p = <.05$), Reward, $F(4,188) = 2.81, p = <.05$), Community, $F(4,188) = 2.55, p = <.05$), Fairness, $F(4,188) = 6.47, p = <.05$), Values, $F(4,188) = 2.55, p = <.05$). Cynicism did not meet the assumption of Homogeneity of Variances, but still had a significant after doubling the tabled F score. Individuals new to their present position, 0 to 11 months ($M = 1.04, SD = 1.22$) had lower Cynicism Scores than individuals working in their present positions for 1 to 5 years ($M = 2.43, SD = 1.67$), and 6 to 10 years ($M = 2.39, SD = 1.80$). For Workload, individuals new to their position, 0 to 11 months had higher Workload Scores ($M = 3.39, SD = .79$) than individuals working in their present position 1 to 5 years ($M = 2.89, SD =$

.77), indicating new employees have a better match for workload expectations than employees working 1 to 5 years in their present position. For Fairness scores, individuals working 0 to 11 months in the same position had higher fairness scores ($M = 3.43, SD = .67$) than individuals working 1 to 5 years ($M = 2.82, SD = .78$) and 6 to 10 years ($M = 2.69, SD = .95$), indicating that individuals working less than 1 year in their present position had a better match of Fairness expectations than those working 1 to 5 years and 6 to 10 years in their present position. For, Values, individuals working 0 to 11 months in the present position had higher Value Scores ($M = 3.78, SD = .73$) than individuals working 6 to 10 years ($M = 3.31, SD = .81$), indicating that individuals working less than a year in their present position had a better match of Value expectations than individuals working 6 to 10 years in their present position. Job Satisfaction displayed a significant relationship with time in present position but failed to meet assumption of homogeneity of variances.

Table 15

Relationship of Burnout and Job Satisfaction by Paid by Type

Paid By (missing=4)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
Hourly (n=117)	2.28	1.67	2.23	1.79	4.91	.99	19.56	4.31
Salary (n=74)	2.66	1.43	1.97	1.37	5.04	.90	20.65	3.61

Type of pay showed a relationship with Workload, $F(1,189) = 21.67, p < .05$), and Values, $F(1,189) = 4.71, p < .05$). For Workload, hourly workers had higher workload scores ($M = 2.73, SD = 1.67$) than salary ($M = 3.23, SD = .75$), indicating a better match for hourly workers for Workload expectations. For Values, salary workers had higher Value Scores ($M = 3.58, SD$

= .67) than hourly workers ($M = 3.36, SD = .69$), indicating a better match in Value expectations for salary workers.

Table 16

Relationship of Burnout and Job Satisfaction by Incentive Pay

Do you receive incentive pay? (missing=6)	Emotional Exhaustion		Cynicism		Professional Efficacy		Job Satisfaction	
	M	SD	M	SD	M	SD	M	SD
Yes (n=125)	2.56	1.59	2.11	1.57	5.12	.83	20.25	3.99
No (n=64)	2.10	1.50	2.10	1.77	4.64	1.09	19.67	4.20

Receipts of incentive pay was related to Professional Efficacy, $F(1,187) = 11.47, p = <.05$), Emotional Exhaustion, $F(1,187) = 3.76, p = <.05$), and Workload, $F(1,187) = 13.579, p <.05$). For Professional Efficacy, individuals who receive incentive pay had higher Professional Efficacy Scores ($M = 5.11, SD = .83$). Professional Efficacy did not meet the assumption of Homogeneity of Variances but still had a significant after doubling the tabled F score. For Emotional Exhaustion, individuals who receive incentive pay ($M=2.56, SD = 1.59$) had higher Emotional Exhaustion Scores than those who did not receive incentive pay ($M = 2.09, SD = 1.5$). For Workload, individuals who received incentive pay had lower Workload Scores ($M = 2.90, SD = .78$) than individuals who did not receive incentive pay ($M = 3.32, SD = .66$), indicating better match of Workload expectations for those individuals who did not receive incentive pay.

Discussion

Burnout followed the predicted relationship with job satisfaction. Two subcategories of the MBI-GS showed a negative correlation with Job Satisfaction; that is, Emotional Exhaustion is high in employees with more than one year’s service and more than one year’s time in their present position. Cynicism is high in employees with more than one year’s service but not

necessarily in employees with more than one year's time in their present position. One subcategory of the MBI-GS, Professional Efficacy, showed a positive relationship with Job Satisfaction.

Respondents showed relatively high mean scores for being able to effectively solve work-related problems and for making contributions on the job. In addition, respondents overall indicated that they felt they are good at their jobs every day and felt exhilarated about accomplishments at work and about worthwhile accomplishments. This supports Cordes and Dougherty's (1993) assertion that feelings of incompetence and lack of achievement and productivity at work lead to burnout and reduced personal accomplishment/efficacy. When looking at the high Professional Efficacy scores, a factor outside of this study may have contributed to the high Professional Efficacy scores while the Emotional Exhaustion and Cynicism scores were moderately high.

In general, The AWLS correlated negatively with burnout, as expected, because, according to Maslach and Leiter (1996), burnout is most related to the organizational environments in which people work. The workload sub-score did not correlate with Professional Efficacy. As noted above, it is believed that something outside the scope of this study may have mitigated the effects of workload and Professional Efficacy scores. At the organization that was the subject of the study, the survey respondents indicated that they sometimes did not have enough time to do their work, worked intensely for long periods of time, or were undecided about whether they were too tired to do the things they enjoyed when they came home from work.

The AWLS correlated positively with Job Satisfaction. The majority of the respondents indicated having control over their work environment, being appreciated for what they do, feeling a sense of community and cooperation with their coworkers, feeling a sense of fairness in

the organization, and feeling, in general, that their values were in line with those of the organization.

The responses of participants at the large-scale agribusiness selected for this study matched the expected demographic relationships with burnout and job satisfaction. The sample did not display any unusual occupational specific characteristics.

The results of this study are consistent with empirical studies that show that although job satisfaction and burnout are clearly linked, they are not identical constructs. The MBI has shown that Job Satisfaction is only moderately negatively correlated with Emotional Exhaustion and Cynicism, while only slightly positively correlated with Professional Efficacy (Maslach & Schaufeli, 1993; Riggall, Goodley, & Hafer, 1984; Zedeck, Maslach, Mosier, & Skitka, 1988).

There were several problems with this study to take into account: several surveys were combined into a single survey possibly resulting in a response bias; there was managerial change occurring at the upper levels of the company possibly affecting the outcome of participants responses; the forestry sample used for comparison of the MBI-GS scores was comprised of participants from foreign countries and a different occupation; the agribusiness sample is from a single agribusiness.

Based upon the results of this study, several recommendations for further study seem warranted. It is recommended that future research on the relationship of job burnout and job satisfaction be conducted to support the findings of this study. The average employee of the sampled company originated from small farm families, and as such, a better understanding of the culture of the small farmer may yield important insights into the relationship of professional efficacy, workload expectations, job satisfaction, and burnout in agribusiness. In addition, follow-up studies should be conducted on a broader scale relative to sample size, diversity of

sample group, and number of companies included in the population. A study of significantly more respondents in different worker groups, both managerial and non-managerial, as well as employed in more companies within the same industry, would yield greater insight than the findings of this study. Such a study would also provide additional support to the growing body of empirical evidence supporting the view that burnout is a multifaceted response to stress involving more than just a reaction to exhaustion and includes an individual's self concept and concept of others.

It is also recommended that this study be replicated at future intervals to empirically detect changing or similar trends in variables that affect burnout and job satisfaction levels of employees in agribusiness. Empirical identification of new trends and problems would assist management in taking positive steps toward making any changes in current management practices.

Comparison studies of burnout levels and Job Satisfaction among management and non-management level employees would also provide important insights. Such investigations would help to determine whether unique characteristics are associated with position level in the organization and whether unique mechanisms might be needed to address job burnout and enhance Job Satisfaction at different levels.

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Appendix A

The AWLS normative sample:

N=1492

Gender: 480 Males
 912 Females
 100 Unspecified

Tenure at Organization: 264 < 1 year
 424 1 - 5 years
 253 6 – 10 years
 178 11 – 15 years
 124 16 – 20 years
 151 > 20 years

Appendix B

Burnout, AWLS , and Demographic variable F Scores

	JobSat	EE	PE	CY	Workload	Control	Reward	Community	Fairness	Values
Gender	.126	1.949	1.346	2.506	9.294*	1.495	.077	.065	.897	.160
Age	3.0*	2.676*	.173	1.909	1.983	2.227	.538	.234	2.688*	1.716
Educ.	.139	1.941	.173	.415	3.416*	.761	1.095	1.521	1.941	.261
Marital	3.610*	.257	3.749*	.597	.189	.646	1.097	1.153	.876	.943
Children	2.239*	1.547	1.143	.481	.365	.713	.790	1.112	1.066	.646
Time at this occupation	1.671	2.254	.071	1.761	1.205	.940	3.385	1.879	4.736x	3.698*
Time at this organization	2.627*	3.588x	.390	5.646*	2.777*	.931	2.945*	3.331	7.201*	2.354*
Time in present position	1.892	3.119x	.464	4.849Y	2.602*	.041	2.813*	2.555*	6.470*	2.553*
Salary or hourly	3.360	2.501	.808	1.181	21.669*	1.213	2.157	2.194	.800	4.712*
Incentive pay	.861	3.762*	11.399y	.001	13.579*	.545	.269	.375	.001	1.179

X = f score significant but failed test of homogeneity of variance

Y= F score significant but failed test of homogeneity of variance (Significant with double f correction)

* is significant at the .05 level