

FULL AND PART TIME EMPLOYEE STRESS AND JOB SATISFACTION AT TWO
UPSTATE NEW YORK COLLEGES

by

James C. Brown

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education in Educational Leadership

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ABSTRACT

The purpose of this quantitative cross-sectional survey design research was to examine the differences between 227 full-time and part-time (employee status) faculty and staff (employee position) members at two upstate New York colleges and their self-reported levels of stress and their perceptions of job satisfaction. The data suggested that significant differences exist in the area of employee status (full-time versus part-time) in 6 of 12 dimensions of stress: overload, resources and communication, job security, pay and benefits, psychological well-being, and job satisfaction (aspects of the job). This research was the first such study in the United States to use the ASSET shortened organizational stress evaluation tool to collect data about employee status and employee position in higher education institutions.

DEDICATION

This document and the doctoral journey is perhaps my greatest legacy to my three children, Kaitland, Walker, and Zoe Brown; the importance of formal education as a key to unlock the mind's infinite thoughts and a passport to endless personal and professional opportunity and fulfillment. This document is dedicated to my wife Susan, without whose unconditional love and support this journey would ever have been possible. To my parents, Crist J. and Katherine J. Brown who taught me my work ethic, the importance of education and a love for learning and who supported me in countless ways during my greatest triumphs and my darkest hours. To my mother and father-in law, Anthony S. and Helen Milograno for their love and encouragement. To my brother John C. Brown, and my brother-in-law, Anthony J. Milograno, who, like my parents, supported me in countless ways during my greatest triumphs and my darkest hours. To my beloved departed Aunt, Attorney Mary Panarites Gaspar, who I so wish was alive today to share in this joy, and only now do I fully understand her years of guidance and wisdom decades beyond her years. To my Uncle, Bela Gaspar, for his love and support. To my beloved departed Uncle, Teacher, and Superintendent of Schools Constantine J. Panarites who showed me through his life the importance of family first. To my Aunt Angeline and Uncle Peter J. Brown who always knew just what to say and who I miss so dearly. To my dear friend and lifetime mentor, Dr. Don T. Muilenberg, thank you is not enough. Finally, to my peer mentor and friend during this nearly four year doctoral journey, Dr. Lynn M. List. We finally made it. This doctoral dissertation, the fulfillment of a lifetime dream, is dedicated to all of you, with all of my thanks and heartfelt love and appreciation.

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CHAPTER 1: INTRODUCTION

Beam, Kim, and Voakes (2003) reported, “Job-related stress among higher education faculty has not been studied often” (¶ 9). In a 2003 survey of 160,000 of the United Kingdom’s Association of University Teachers, “93% of its members suffered from work-related stress and 62% from ‘excessive’ strain” (Tytherleigh, Webb, Cooper, & Ricketts, 2005, p. 41). Contributing to increased levels of stress in the workplace in general is the presence of new technologies that were created with the intention of saving time (Ogan & Chung, 2003). According to Hall and Parsons (2001), Ogan and Chung, and Tytherleigh et al., the introduction of cellular phones, pagers, and the Internet has created new stressors that are added to the well known workplace stress factors of lack of time, lack of resources, and heavy workloads.

Not all stress is detrimental. In many cases, stress helps trigger higher levels of enthusiasm and creativity (Cartwright & Cooper, 2002; Le Fevre, Matheny, & Kolt, 2003; McEwen, 2005; Rojas & Kleiner, 2000). Screening for occupational stress for higher education faculty and staff members is not prevalent in the United States but is needed to provide leaders with an inventory of potential predictive characteristics of occupational stress (Beam et al., 2003; Fisher, 1994). Available research on higher education faculty and staff is concentrated in the United Kingdom and Australia (Fisher, 1994; Tytherleigh et al., 2005; Vakola & Nikolaou, 2005). The current research study might provide higher education leaders with new insights with respect to recognizing the occupational stress factors that affect their employees and using this understanding to implement preventive, mitigating, and corrective measures.

Chapter 1 of the dissertation provides background information about the importance of research on occupational stress among educational leaders. Included in the chapter are discussions of the problem and purpose of the research study, the theoretical framework utilized for the research, and the design chosen to accomplish the goals of the study. A description of the assumptions, scope, limitations, and questions and hypotheses follows. Operational definitions of terms and phrases are provided, and the chapter concludes with a summary.

Background of the Problem

Faragher, Cooper, and Cartwright (2004) asserted that “workplace characteristics can directly influence the mental and physical well-being of employees, adversely affecting an organization’s overall performance” (p. 1). Identifying the presence of stress, whether positive or negative, and developing appropriate workplace mechanisms to recognize and manage workplace stressors are two critical responsibilities toward maintaining employee job satisfaction and productivity (Faragher et al., 2004; Love & Edwards, 2005). AbuAlRub (2004) held that “stress is a contributing factor to organizational inefficiency, high staff turnover, absenteeism because of sickness, decreased quality and quantity of care, increased costs of health care, and decreased job satisfaction” (¶ 1). Ogan and Chung (2003) suggested that, while technology such as cell phones, pagers, computers, and personal data assistants were expected to bring time savings and efficiencies to the workplace, a more common outcome has been increased stress rather than increased productivity. Ogan and Chung further suggested that there no longer exists a separation between the workplace and leisure activities thus yielding a 24-hour-a-day work mindset and further adding to occupational stress.

Due to the proliferation of technological devices such as cell phones, computers, and other related devices, “periodic de-stressing through the course of a difficult day is not only healthy, but it is a high-tech, self-care habit” (Donnelly, 2004, ¶ 6). Nearly 10 years ago, DeFrank and Ivancevich (1998) suggested that the new technologies such as e-mail, voice mail, and fax that first emerged in the mid to late 1990s were causing managers and non-managers high levels of stress because the devices increased workloads. DeFrank and Ivancevich concluded, “The emerging nature of the relatively un-chartered research waters of the relationships between these variables, as well as non-traditional multi-disciplinary links to addiction theory are fertile ground for pioneering doctoral research” (¶ 8). DeFrank and Ivancevich’s work in 1998 brought to light the importance of researching the differences between workplace stressors and the outcomes of stress in the context of a societal evolution emerging out of new workplace demands.

Researchers at London’s Priory Psychiatric Clinic, a famous detoxification institution, have been prompted to take a new approach in research on stress and addictions by the emergence of technologies, especially text-messaging and compulsive Internet surfing where “these patients form a new wave of ‘contact addictions,’ reflecting big changes seen in the nature of addictive behaviour” (Simpson, 2003, ¶ 1). The field of higher education similarly deserves a renewed understanding of the dimensions of higher education workplace stressors and the factors that contribute to these stressors while “examining previously unstudied populations within postsecondary education could help researchers identify such new factors” (Brewer & McMahan, 2003, p. 125). The significant social and theoretical concerns associated with the problem of occupational stress and stressors are evident in the literature, but they are an understudied aspect of

higher educational institutions in the United States, especially insofar as the populations of faculty and staff are concerned (Beam et al., 2003; Brewer & McMahan, 2004; Elliot, 2003; Fisher, 1994).

Statement of the Problem

To ensure a culture of learning and organizational efficiency in which higher education leaders recognize the signs of stress in their faculty and staff, it is essential that leaders be willing to mitigate occupational stressors in order to create a healthier work environment. Faragher et al. (2004) asserted, "Workplace characteristics can directly influence the mental and physical well-being of employees, adversely affecting an organization's overall performance" (p. 1). Developing appropriate workplace mechanisms to identify and manage workplace stressors is critical to employee job satisfaction and perceived productivity. Beam et al. (2003) maintained, "Job-related stress among higher education faculty has not been studied often" (¶ 9). Data from a 2003 survey of 160,000 of the United Kingdom's Association of University Teachers showed that "93% of its members suffered from work-related stress and 62% from 'excessive' strain" (Tytherleigh et al., 2005, p. 41).

Occupational stress screening for higher education faculty and staff members is not prevalent in the United States; yet, is needed in order to provide higher education leaders with an inventory of potential predictive characteristics of occupational stress (Beam et al., 2003; Brewer & McMahan, 2004; Fisher, 1994). No documented research could be found in the United States that examines the potential differences between occupational stressors in the higher education workplace with respect to levels of stress

and self-reported perceptions of job satisfaction among full-time and part-time faculty and staff members.

In all organizations, including higher education institutions, identifying employees who are in trouble and prone to stress and workplace violence is a leaders' responsibility (Kaupins, Coco, & Cope, 2005). The current quantitative cross-sectional survey research examined the differences between full-time and part-time (i.e., employee status) faculty and staff (i.e., employee position) and the levels of stress and the self-reported perceptions of job satisfaction among 227 faculty and staff members at two upstate New York colleges. Employee status and position were the independent variables, and self-reported levels of stress and job satisfaction were the dependent variables.

Purpose of the Study

The purpose of the quantitative cross-sectional survey research was to examine the differences between full-time and part-time faculty and staff members at two upstate New York colleges and their self-reported levels of stress and perceptions of job satisfaction. The research methodology was quantitative, using a cross-sectional survey design to collect and analyze "data at one point in time" (Creswell, 2005, p. 355), primarily because of time limitations and the financial commitment that a longitudinal study would involve.

The ASSET (A Shortened Stress Evaluation Test) instrument used in the research was designed as a stress evaluation tool most often used with a cross-sectional design and conducive to a quantitative approach as opposed to a qualitative or mixed-methods approach (Cartwright & Cooper, 2002). The instruments to measure levels and characteristics of stress that were used before the creation of the ASSET instrument were

lengthy questionnaires that resulted in low response rates and “statistical concerns about the extent to which the respondents [could] be considered representative of the work population surveyed” (Faragher et al., 2004, p. 191). The short ASSET instrument was chosen for the current research in part to elicit higher response rates within the target population in higher education.

Significance of the Problem

The effective screening of higher education employees and employees in general within any organization is critical for initiating corrective and preventative measures that address negative stressors in the workplace. “The most common problem is that, in an attempt to provide a full risk assessment, questionnaires are extremely long and detailed” thus resulting in very poor response rates from employees in all job categories (Faragher et al., 2004, p. 191). The inconsistency of available valid and reliable comparative research data in the United States creates confusion, low levels of predictability, and disparity in approaches to assessing and mitigating occupational stress for higher education administrators and leaders in the United States (Elliot, 2003).

The lack of data on U.S. higher education employees and their experiences with stress justified the need for the current research. In her analysis of higher education stress and strain on employees at one university in the United States, Elliott concluded, “Nonetheless, work and family initiatives are in the early stages of development at many institutions of higher education, and more research is needed to guide human resource policies in this arena” (p. 162). The predominant focus on higher education occupational stress research in the United States has been on faculty; full- and part-time staff have been largely ignored (Brewer & McMahan, 2003).

With respect to leadership literature, there has been little consistency and predictability. Wren (1994) reported,

Despite the mountains of literature on leadership, very little is known. . . . A leading researcher on leadership, reviewed some 3,000 studies in 1974 and concluded: 'Four decades of research on leadership have produced a bewildering mass of findings . . . The endless accumulation of empirical data has not produced an integrated understanding of leadership.' . . . A recent reviewer of the leadership literature concluded: '[after] over 5,000 studies . . . the confused state of the field can be attributed in large part to the sheer volume of publications, the disparity of approaches, the proliferation of confusing studies, and the absence of an integrating conceptual framework'. (p. 387)

The current research might provide a more informed knowledge base about stress in higher education by providing educational managers and supervisors with targeted, standardized predictive research and analysis regarding higher education occupational stressors in faculty and administrative full-time and part-time staffs as groups. The research might also provide educational leaders with new tools to recognize characteristics that adversely affect their employees thus allowing for mitigating, corrective, and preventative measures to be implemented (Tytherleigh, Jacobs, Webb, Ricketts, & Cooper, 2007). It is hoped that the present study added clarity to an area of research that impacts organizational efficiency yet suffers from a lack of short, standardized, valid, and reliable measures.

Nature of the Study

The research study was conducted with a quantitative cross-sectional survey design in which one collects and analyzes “data at one point in time” (Creswell, 2005, p. 355). There are limitations associated with generalizing data produced by qualitative studies and the target population size, therefore a quantitative approach was selected. Furthermore, the quantitative approach allowed single-layer rather than multiple-layer data scrutiny of the data pool (Horn, 2004).

Quantitative Analysis

Quantitative analysis “is an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature” (Creswell, 2005, p. 597). The quantitative method of research tends to yield a final document marked by objectivity and a lack of researcher bias. Dube and Pare (2003) suggested, “In quantitative research, well-known standardized statistical analysis methods (e.g., analysis of variance or regression) have helped researchers confirm or disconfirm hypotheses” (¶ 67). The scholarly dispute regarding the choice of quantitative or qualitative measures did not go unnoticed by federal legislators when the No Child Left Behind (NCLB) Act of 2001, 2002 was enacted.

Measurement associated with the NCLB Act takes many forms, but quantitative measures are clearly seen as the federal government’s new standard for program evaluation in the education-specific environment (Horn, 2004). For the present study, there was an intention to provide greater objectivity to the area of study, specifically within the field of educational leadership, and a quantitative cross-sectional survey design accomplished this goal. The literature suggested that, while qualitative and other forms of

measurement might have a place in research, the trend in educational research insofar as the federal government is concerned is to focus more heavily on the scientific rigor associated with quantitative research methods (Dube & Pare, 2003; Horn, 2004).

The ASSET Instrument

A Stress Screening and Evaluation Tool (ASSET) model questionnaire was used for the research. ASSET is a “short, but psychometrically sound instrument for screening for stress within a risk assessment exercise” (Faragher et al., 2004, p. 200; Tytherleigh et al., 2005). Faragher et al. stated that the use of ASSET is the first stage of a possible 2-stage assessment process in which the second stage is a more in-depth analysis that uses the first stage’s results as foundation. The great length of most other stress questionnaires has resulted in low response rates and “statistical concerns about the extent to which the respondents can be considered representative of the work population surveyed” (Faragher et al., 2004, p. 191). Unlike longer questionnaires, the ASSET instrument encouraged higher response rates from the higher education population participating in the study.

The ASSET instrument had been established to have good convergent validity, which is “the extent to which a scale correlates with other measures of the same construct” (Faragher et al., 2004, p. 198), high face validity, and strong reliability as evidenced through predominantly high Cronbach’s alpha coefficients for the various ASSET factors (Faragher et al., 2004; Johnson & Cooper, 2003). Strong validity and high reliability coefficients are further supported by a growing pool of normative data with “which organizations [could] ‘benchmark’ their performance” (Faragher et al., 2004, p. 199). Furthermore, Faragher et al. attributed high response rates to the short length of the survey instrument.

Research Questions

The higher education workforce has a unique composition with traditional teaching faculty, department heads such as deans, vice presidents, and presidents, clerical and professional staff, and other employees such as campus security officers and maintenance and related personnel who have critical support roles in an institution's overall mission (Tytherleigh et al., 2005). Research about occupational stress is not new in the United States or overseas (Tytherleigh et al., 2005, 2007). However, there is no research in the United States about higher education occupational stress and the differences, if any, between categories of employees (i.e., position and status) and levels of stress and employee job satisfaction (Beam et al., 2003).

The following research questions guided the research study:

1. Does a statistically significant difference exist between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?
2. Does a statistically significant difference exist between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?
3. Does a statistically significant difference exist between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?

4. Does a statistically significant difference exist between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?
5. Does a statistically significant interaction exist between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?
6. Does a statistically significant interaction exist between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?

Hypotheses

Previous studies on occupational stress in higher education and categories of employees impacted by that stress were limited to the United Kingdom, New Zealand, and Australia (Tytherleigh et al., 2005, 2007). Effective screening of higher education employees, and employees in general within any organization, is critical for initiating corrective and preventative measures to address negative stressors in the workplace. “The most common problem is that, in an attempt to provide a full risk assessment, questionnaires are extremely long and detailed,” thus resulting in very poor response rates from employees in all job categories (Faragher et al., 2004, p. 191). The current

study was conducted in the United States, using a short occupational stress survey instrument that has been shown in the United Kingdom to be valid and reliable (Cartwright & Cooper, 2002; Tytherleigh et al., 2005, 2007). The findings might expand the scope of standardization for the understanding of occupational stressors and add to the body of knowledge about higher education occupational stress, potentially resulting in the establishment of a higher education occupational stress inventory. To that end, the following hypotheses were constructed:

H₀1: No statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

H_a1: A statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

H₀2: No statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

H_a2: A statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

H₀3: No statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

H_a3: A statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

H₀4: No statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

H_a4: A statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

H₀5: No statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

H_a5: A statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as

categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

H₀₆: No statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

H_{a6}: A statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

ASSET is designed to identify specific potential sources and outcomes of stress and does not yield a single score for level of workplace stress. Rather, the criteria for the measure of workplace stress is indicated in the current study by significant differences observed in one or more sources or outcomes of stress identified in 11 of ASSET's subscales, each measuring some dimension of stress. A finding of statistical significance for one or more of the subscales would allow for the specific null hypothesis to be rejected. The criteria for the measure of job satisfaction are indicated in the current research by a significant difference observed in the Aspect of the Job ASSET subscale. A finding of statistical significance for this subscale would allow for this specific null hypothesis to be rejected.

Theoretical Framework

Research in occupational stress has been studied broadly in terms of the three major theoretical areas of leadership, human resources, and psychology. While the primary focus of the research study was the impact of occupational stress on higher education leadership, references to other major fields were necessary in order to properly frame the research and multidisciplinary approach associated with the overall analysis, conclusions, and recommendations of the research.

The Leadership Framework

Higher education leaders should seek to proactively use the results of occupational stress research and related studies in order to produce meaningful change for employees within their organizations (Tytherleigh et al., 2005). Establishing appropriate occupational stress interventions cannot necessarily be done across all higher education organizations; rather “each [higher education institution] must take on responsibility for ensuring a healthy work environment” (p. 58). Ensuring a healthy work environment requires leadership at all levels of an organization. In particular, it requires transformational and principle-centered leaders who can use their diverse skills to identify and predict occupational stressors, commit the necessary resources, and clearly show that they give long-term support for these efforts (Kalimo, Pakkin, Mutanen, & Toppinen-Tanner, 2003; Tytherleigh et al., 2005).

Bass and Stogdill (1990) asserted, “Leadership . . . appears as a manner of interaction involving behavior by and toward the individual ‘lifted’ to a leadership role by other individuals” (p. 17). With transformational and principle-centered leadership styles, higher education leaders can form the core support network necessary to

implement the required changes through the analysis of research tools similar to what was used in the current research study. While the literature did not yield a single agreed-upon definition of leadership, it provided indicators of effective leadership such as the meticulous care and nurturing of followers and the time commitment that enables leaders and followers to harmoniously function within the organization (Wren, 1994).

Transformational leadership. Bass (1999) noted,

Transformational leaders uplift the morale, motivation, and morals of their followers, [while] transactional leaders [in comparison] cater to their followers' immediate self-interests. The transformational leader emphasizes what you can do for your country; [in contrast to] the transactional leader, [who focuses] on what your country can do for you. (p. 9)

Bass referred to a colleague's study that "showed that transformational leaders display more citizenship behaviors such as altruism, conscientiousness, sportsmanship, courtesy, and civic virtue, as well as imbue their subordinates with these same values" (p. 12).

Deluga (1988) concurred, "The transformational manager cultivates employee acceptance of the work group mission. The manager-employee relationship is one of mutual stimulation and is characterized by four factors, including (1) charisma, (2) inspiration, (3) individual consideration, and (4) intellectual stimulation" (p. 457).

The transformational leadership model rests on the leadership trait of character and the foundational principles of relationships. Barlow, Jordan, and Hendrix (2003) asserted that a leader produces "an image that arouses trust in followers, develops relationships with subordinates that enable subordinates to move toward individual and collective goal attainment and uses their knowledge, skills and material resources to

accomplish the group's mission" (p. 563). Barlow et al. used a leadership model of character to analyze the historical foundations of leadership as well as introduce current leadership research. Barlow et al. provided references to several analyses of the history of leadership, many varied approaches for analyzing leadership in a historical context, and tangible leadership examples.

In citing a 1991 analysis by Josephson (as cited in Barlow et al., 2003), the authors best summarized the historical context of leadership when they suggested,

Character is the foundation of effective leadership in that what leaders achieve when they lead will be shaped more by the collection of dispositions, habits, and attitudes that make up their character than by their education and skills. . . . [I]t is character that determines whether they will effectively use their knowledge and skills. (p. 565)

Closely tied to the transformational leadership model, although perhaps not as well known in the academic literature, is the model of principle-centered leadership.

Principle-centered leadership. With respect to principle-centered leaders, the literature suggested,

Principle-centered leaders are those who understand and accept the principles by building them into the center of their lives, into the center of their relationships with others, into the center of their agreements and contracts, into their management process, and into their mission statement. (Covey, 1990, p.87)

Covey asserted that "a value-based map may provide some useful description, but the principle-centered compass provides invaluable vision and direction. An accurate map is a good management tool, but a compass set on 'true north' principles is a leadership and

empowerment tool” (p. 20). In the concept of principle-centered leadership, one recognizes the important characteristics of other major effective leadership models that are applied by individual leaders within their own beliefs and core morals and ethics.

Initially, leaders of any organization must take their morality cues from the governing body or from their environment, be it a legislature, a board of trustees, or a similar organization. Principle-centered leadership is effective because it is grounded in the core foundations of leaders and followers. Covey (1990) perhaps best harnessed principle-centered leadership when he stated,

[Principle-centered leaders] are not extremists—they do not make everything all or nothing. They do not divide everything into two parts, seeing everything as good or bad, as either/or. They think in terms of continuums, priorities, hierarchies. They have the power to discriminate, to sense the similarities and differences in each situation. This does not mean they see everything in terms of situational ethics. They fully recognize absolutes and courageously condemn the bad and champion the good. (p. 36)

The blending of the transformational and principle-centered principles in higher education leaders provided the broad theoretical framework for the current research study. Effective screening of higher education employees and employees in general within any organization is critical for initiating corrective and preventative measures to address negative stressors in the workplace. “The most common problem is that, in an attempt to provide a full risk assessment, questionnaires are extremely long and detailed” thus resulting in very poor response rates from employees in all job categories (Faragher et al., 2004, p. 191). Higher education leaders are in the best position to identify stress-

related problems and implement mitigating solutions within their respective workplaces (Tytherleigh et al., 2005).

The Human Resources Framework

Human resource management has historically been grounded in issues such as employee benefits, career development, training, and related personnel and technical matters of employment (Murphy, 1995). While employee assistance programs (EAPs) have been a part of human resources services since the 1940s, their role has changed dramatically from treating employees with occasional stressful episodes to treating seriously troubled ones.

In the federal sector, the National Institute for Occupational Safety and Health (NIOSH) has listed psychological disorders as one of the top ten leading work-related diseases and injuries. The [NIOSH] model highlights the complexity of the problem of stress, as it cuts across work and non-work domains. These cross-cutting effects suggest that the study of job stress, and the design of stress management interventions, should be approached from a multi-disciplinary perspective, to produce an accurate picture of the nature of stress and how it should be managed. (Murphy, 1995, p. 43)

It is essential that human resource management leaders in higher education adopt a multidisciplinary approach to analyzing higher education occupational stressors and implement prevention and intervention programs to address these issues. The theoretical constructs grounded in human resource management are critical areas of study included in the multidisciplinary approach used in this doctoral research.

Higher education leaders should review the results of stress-related psychological research in the context of the need to understand the importance of psychology to the theoretical framework of the current research and the need for supervisory interventions (Tytherleigh et al., 2005) such as EAP and related programs. With the emergence and prominence of the National Institute for Occupational Safety and Health (NIOSH) in the late 1980s and early 1990s (Murphy, 1995) and the American Psychological Association's first publication of the *Journal of Occupational Health Psychology* in 1996, the issue of occupational health psychology as it relates to leadership and human resources, in particular stress in the workplace, has acquired more importance and visibility.

Definition of Terms

Kuhn (as cited in Stiles, 2005) noted, "Since new paradigms are born from old ones, they ordinarily incorporate much of the vocabulary and apparatus, both conceptual and manipulative, that the traditional paradigm had traditionally employed" (p. 20). Consequently, although the term *higher education institution* might seem familiar, its meaning can vary from the traditional meaning given to the phrase. Higher education institutions are accredited colleges and universities that grant undergraduate and graduate degrees from associate through doctoral degrees on either traditional campus-based or online learning environments (U.S. Department of Education, 2005). For the purposes of the research study, no other terms require clarification outside the realm of their common meaning.

Assumptions

An assumption in scholarly research has the same meaning as in every day use and refers to taking something for granted (Hughes & Tomkiewicz, 1994). For the purpose of the current research, it was assumed that all participants would answer the questionnaire honestly. It was further assumed that all participants were fairly representative of employees of other institutions of higher education in the United States. Differences between higher education institutions such as 2-year, 4-year, and master's and doctoral degree granting institutions were assumed to exist.

Scope

The scope of the research included two New York State higher education institutions. The potential pool of survey participants or the target population was approximately 1,084 full- and part-time faculty and staff members ($N = 1,084$). It is believed that each higher education institution, with its respective staff characteristics, is representative of the universe of higher education institutions in the United States and their staff (U.S. Department of Education, 2005). The two institutions chosen for the study were referred to as Institution A, a 2-year comprehensive community college offering associate degrees and certificate programs and Institution B, a 4-year comprehensive liberal arts and professional studies college offering bachelor's, master's, and professional doctoral degree programs.

Both institutions are located in central New York State, and both offer coursework in traditional campus-based and online/distance learning environments. Both higher education institutions are fully accredited by the Middle States Commission on Higher Education. These institutions were selected because of their relative similarities in

organizational structure and because both institutions' organizational chief executive officers gave permission for the administration of a survey to their employees. The selection of institutions for the research was achieved by means of convenience sampling.

According to the U.S. Department of Education's National Center for Education Statistics, a total of 3,194,169 full- and part-time employees were working at both public and private U.S. colleges and universities in the fall of 2003 (U.S. Department of Education, 2005). These employees were generally categorized as professional and non-professional staff and further subdivided within each general category to more accurately reflect their job responsibilities within the institutions. The population selected for the current research study was similar to the general categories and subcategories identified by the U.S. Department of Education. While sampling error is a part of all research, efforts to maximize the generalizability of the study findings to the entire population of professional and non-professional higher education employees in the United States were made by "hav[ing] a good sampling frame list, as large a sample from the population as possible [in light of survey constraints], use of a good instrument, and rigorous administration procedures" (Creswell, 2005, p. 360). In this research, the characteristics of the population to be studied were known.

Limitations

As the study developed, it was acknowledged that the study would be subject to the following limitations:

1. Only individuals who agreed to participate voluntarily would be surveyed.
2. A limited population and the limited time available to conduct the research might have reduced the data set.

3. Convenience sampling does not provide the same power of generalizability as random sampling, but the target population was known to exhibit similar characteristics to other populations employed by higher education institutions within the United States (Gay & Airasian, 2000).
4. Data were collected from participants by means of self-reporting of responses, a procedure known to produce bias.
5. Some of the participants might have known the researcher and might have positive or negative feelings that might have affected their responses.
6. The quantitative cross-sectional research design might have had the inherent limitation that the participants' mindset at the specific time the survey was completed might have caused outlier-type responses related to the respondents' emotional disposition during survey completion.

Delimitations

The research was limited to surveying part-time and full-time employees at two higher education institutions located in New York State. The research focused on the potential differences between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) in the higher education workplace with respect to levels of stress and self-reported perceptions of job satisfaction among faculty and staff members. Only employees of the two higher education institutions were included in the research conducted with a quantitative cross-sectional survey design method for data collection and related analysis.

Summary

Occupational stress is not a new phenomenon. The establishment of the Journal of Occupational Health Psychology in 1996 and independent and collaborative efforts between the American Psychological Association and the NIOSH raised the subject of occupational stress to a new level of scholarly prominence. The American Psychological Association suggested,

Organizations can become healthy by incorporating health promotion activities, offering employee assistance programs, having flexible benefits and working conditions, treating employees fairly, and offering programs for employee development, health and safety, and the prevention of work stress. (as cited in Kelloway & Day, 2005, p. 223)

There are few studies on higher education job-related stress as it relates to faculty and staff members at higher education institutions (Beam et al., 2003). Through a multidisciplinary approach using literature and research in the fields of leadership, human resources, and psychology, the current research might provide a unique contribution to the literature with a study on faculty and staff employed at two higher education institutions in the United States. The foundational theoretical framework that supported the research is presented in chapter 2 as a review of the literature.

CHAPTER 2: REVIEW OF THE LITERATURE

Kelloway and Day (2005) asserted that “Freud’s identification of an intimate connection between work and mental health is consistent with a vast body of scientific literature” (p. 223). Stress in the workplace is not a new phenomenon, but there are few studies on higher education job-related stress in faculty members at higher education institutions (Beam et al., 2003). No research could be found that examined the potential differences in the United States between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) in the higher education workplace with respect to levels of stress and self-reported perceptions of job satisfaction of faculty and staff members as two general categories of higher education employees. The problem appears to be that occupational stress screening of higher education faculty and staff members is not prevalent within the United States, so the need exists to provide higher education leaders with an inventory of potential predictive characteristics of occupational stress (Beam et al., 2003; Fisher, 1994).

Chapter 1 presented statements of problem and purpose, a discussion of the significance of the research, the theoretical framework, and the research questions that guided the study. Chapter 2 provides literature about the historical underpinnings of the stress concept and occupational stressors in the higher education workplace. The purpose of the quantitative cross-sectional survey design research was to examine the potential differences between full-time and part-time faculty and staff members at two upstate New York colleges and their self-reported levels of stress and the perceptions of job satisfaction. The literature suggested that knowledge of leadership in higher education, a study of the field of human resources, and an understanding of occupational stress in the

field of psychology would provide the foundation for the research study. Chapter 2 provides this framework.

Documentation

In total, 72 references were used in the completion of the research. Primary resources included (a) the University of Phoenix Apollo Library's extensive online collection, including ProQuest Digital Dissertations and ProQuest and the EBSCOhost databases; (b) germinal texts; (c) research studies; (d) the United States Department of Education Web sites; and (e) the NIOSH Web site. Of the 72 references, 55 (75%) were derived from scholarly journals directly related to higher education, leadership, human resources, psychology, and occupational stress. The remaining 25% of the references included germinal and related or supportive texts in the aforementioned fields, a doctoral dissertation, and the user's guide for the ASSET survey instrument used for this research study.

Of the 72 references used in this research, only 13 (17%) were published before 2000, with two germinal pieces having been published in 1977 and 1970 respectively. The documentation reviewed provided confirmation that no documented United States-based research could be found that examined potential differences between employee position and employee status in the higher education workplace with respect to levels of stress and self-reported perceptions of job satisfaction of full-time and part-time faculty and staff members as two general categories of higher education employees.

Historical Overview

The current study might add information to the literature on general occupational stress and higher education occupational stress in the United States as it relates to specific

categories of higher education faculty and staff. The literature suggested that knowledge of higher education leadership, a study of the field of human resources, and an understanding of occupational stress in the field of psychology would provide a relevant theoretical framework for the research. A review of the research population and sample is presented, followed by a discussion of the independent and dependent variables. The subsequent section of the literature review frames occupational stress in the context of leadership and human resources literature.

The Independent Variables – Employee Position and Status

Independent variables influence an outcome referred to as the dependent variable (Creswell, 2005; Wang, 2006) and are characteristics or “factors that can be manipulated by practitioners” (Varadarajan, 2003, p. 368). The effective screening of higher education employees and employees in general within any organization is critical for initiating corrective and preventative measures in order to address negative stressors in the workplace. “The most common problem is that, in an attempt to provide a full risk assessment, questionnaires are extremely long and detailed,” thus resulting in very poor response rates from employees in all job categories (Faragher et al., 2004, p. 191). The inconsistency of available valid and reliable comparative research data in the United States creates confusion, low levels of predictability, and disparity in approaches to assessing and mitigating occupational stress for higher education administrators and higher education leaders in the United States (Elliot, 2003).

The lack of data on the topic of stress for employees in higher education justified the need for the current research. Elliott analyzed stress and strain on employees at one university in the United States and concluded, “Nonetheless, work and family initiatives

are in the early stages of development at many institutions of higher education, and more research is needed to guide human resource policies in this arena” (p. 162). The predominant focus on higher education occupational stress research in the United States has been on faculty only; full- and part-time staffs have been largely ignored (Brewer & McMahan, 2003). Tytherleigh et al. (2005) suggested in their research using the ASSET instrument with employees in higher education institutions in the United Kingdom that future research “should provide separate benchmarks for academic and general staff” (p. 55).

The independent variables of employee position (i.e., faculty versus staff) and status (i.e., full-time versus part-time) were further subdivided for the research study into the four main groups of (a) full-time faculty, (b) full-time staff, (c) part-time faculty, and (d) part-time staff. Employees in each category provided self-reported data on the ASSET survey. The differences, if any, between the members of these groups and their self-reported levels of stress and perceptions of job satisfaction were measured.

Dependent Variables: Levels of Stress and Perceptions of Job Satisfaction

Dependent variables are influenced by the independent variables (Creswell, 2005; Zohar, 1999). In the current research, the employee status and employee position served as the influencing factors or independent variables. The self-reported levels of stress and perceptions of job satisfaction served as the dependent variables as measured by the 12 separate ASSET subscales, each measuring some dimension of stress.

Levels of Stress

Antiniou, Davidson, and Cooper (2003) asserted that, while faculty and staff at higher education institutions are not classified as holding high-stress occupations

compared to “dentists, doctors, pilots, police, miners and social workers, they are no less subject to high levels of stress than those high-stress occupations noted herein” (p. 592). Levels of stress established in the ASSET model are measured by core perceptions of job scales within the ASSET instrument, including independent measurements of “work relationships, work-life balance, overload, job security, control, resources and communication, pay and benefits, and job overall” (Tytherleigh et al., 2005, p. 44; Vakola & Nikolaou, 2005).

The self-reported levels of stress and perceptions of job satisfaction are based upon the model of stress established by Cooper and Marshall (as cited in Donald et al., 2005; Johnson et al., 2005; Tytherleigh et al., 2005). The ASSET model, based upon Cooper and Marshall’s work in 1977, is divided into the following four sections: (a) perceptions of the job, (b) attitudes toward the organization, (c) health, and (d) supplementary biographical information (Cartwright & Cooper, 2002; Tytherleigh et al., 2005).

Perceptions of the Job

The sources of stress that comprise the aggregate levels of stress and perceptions of job satisfaction are further subdivided into 8 primary areas, and 7 of these are dependent variables. The category of aspects of the job is an ASSET measure equivalent to a measure of job satisfaction. The subsections are (a) work relationships, (b) work-life balance, (c) overload, (d) job security, (e) control, (f) resources and communication, (g) pay and benefits, and (h) aspects of the job (Cartwright & Cooper, 2002; Tytherleigh et al., 2005).

Work relationships. Support or a lack of support from peers and supervisors can be a significant source of stress that influences overall levels of employee stress and the employees' perceptions of job satisfaction (Cartwright & Cooper, 2002; Tytherleigh et al., 2005). Relationships form the core of employees' ability to function within an organization and leaders' ability to motivate employees and change the organization. The importance of relationships in the workplace is often overlooked (Anderson & Anderson, 2001). Anderson and Anderson noted,

Too often we encounter executive and management development curricula that are one-dimensional and/or based on a single yearly training event. They often focus on externally based skills, such as finance, marketing, and business development, and neglect internal dimensions, such as mindset, emotions, and relationships. (p. 192)

Work relationships and the importance of relationships in general were best described by Peters (2003) when he stated, "Great leaders really are . . . there . . . they really are . . . intensely concentrated on you . . . they really are real . . . they really do connect. Investing in relationships means two big things: (1) sincerity, [and] (2) time. Neither can be faked" (p. 333). Lack of support from peers and supervisors and poor relationships contribute to higher levels of stress and employee burnout while trends toward stronger relationships through a process of feedback and appreciation advance well-being and lower employees' levels of stress (Kalimo et al., 2003). Regarding change agents and training in organizations, Bolman and Deal (2003) noted that relationships can bring about intense personal feelings. They stated,

As Machiavelli observed many years ago in *The Prince*, ‘It must be realized that there is nothing more difficult to plan, more uncertain of success, or more dangerous to manage than the establishment of a new order of [things]; for he who introduces [change] makes enemies of all those who derived advantage from the old order and finds but lukewarm defenders among those who stand to gain from the new one.’ (p. 370)

Although a pessimistic view of change and work relationships, the quotation nonetheless accurately describes the real potential and importance that relationships have as sources of stress.

Work-life balance. A significant source of stress for individuals can be the constant juxtaposition of work influencing home life and home life influencing work performance, job satisfaction, and individual relationships (Cartwright & Cooper, 2002). Tack (as cited in Guthrie, Woods, Cusker, & Gregory, 2005) asserted, “The world of higher education tends to place extremely high, and often unrealistic, demands on the time and energy of its leaders. In maintaining this expectation this process may be driving away the very leaders that most campuses need” (p. 112). The expectations placed upon higher education leaders manifest themselves in the workplace in several different ways.

Guthrie et al. (2005) conducted a qualitative analysis of 11 college student affairs personnel. Although a small sample, the personnel studied represented 11 separate higher education institutions in the United States. By analyzing the commonalities and differences in student affairs and personnel at various levels within higher education institutions and the methods they used to address the work-life balance, a model of balance was formulated. Guthrie et al. asserted that the following four crucial strategies

were necessary to attain a work-life balance within the confines of their model: “self-knowledge, intentionality, commitment to self-care, and reflection” (p. 116). Self-knowledge is an understanding of one’s values and priorities and was a common theme in Guthrie’s study. Intentionality refers to life as a series of choices. A study participant explained,

The only way to avoid imbalance is to choose to deliberately be balanced, to think about what you are doing, to think about what’s coming up, to make choices to try to maintain balance . . . if you’re not careful, if you just put your mind into neutral, and let it drag you along where it will go, you’ll go in all the wrong places. (as cited in Guthrie et al., 2005, pp. 121-122)

Commitment to self-care revolves around personal health and the concept that one cannot help others if one is ill and out of balance. Finally, reflection was a key component in the model of balance although some study participants considered it difficult to attain because “sometimes there is too much noise, making it difficult to reflect” (Guthrie et al., 2005, p. 122). The work-life balance in general occupations, and higher education specifically, remains a challenge for leaders. The ASSET model provides a measure of the difficulty of balancing the work-life relationship as another source of stress that influences the overall levels of employee stress and their perceptions of job satisfaction (Cartwright & Cooper, 2002).

Overload. Overload can refer to both the amount of work employees are responsible for overseeing as well as the amount of time employees spend doing their job (Barnett, 2004; Cartwright & Cooper, 2002). Each of these factors is a significant source of stress, and along with work-life imbalance, work overload in higher education

institutions in the United Kingdom and Australia “are among the most frequently reported stressors” (Tytherleigh et al., 2005, p. 56). In spite of some conclusive results, the literature in the field is inconsistent or lacking, especially for the United States (Barnett, 2004).

Occupational stress among higher education faculty has not been studied often, especially in the United States (Beam et al., 2003). A much larger base of higher education research exists in the United Kingdom (Collins & Parry-Jones, 2000; Donald et al., 2005; Johnson et al., 2005; Tytherleigh et al., 2005, 2007). Tytherleigh et al. (2005) surveyed higher education faculty and staff at 14 higher education institutions in the United Kingdom ($N = 3,809$). Higher education workers were found to be more stressed than non higher education workers (Tytherleigh et al., 2005). The authors concluded that it is essential for higher education managers to identify the levels of stress within the various categories of employees and to develop “management interventions” to address the negative effects of stress on higher education employees (p. 58).

The lack of scientific research in the United States, and perhaps around the world, might be due to a false belief that higher education employees, specifically faculty members, are not in a stressful environment and that work overload is neither an issue of concern nor worthy of scholarly research (Collins & Parry-Jones, 2000). Collins and Parry-Jones stated,

In the past and to some extent the present, academic life may have been perceived as involving considerable privileges, with conditions of employment and hours of work allowing opportunity for flexibility. The lecturer [faculty member] may be viewed as a fortunate person who does not “get their hands dirty,” plays with

theory, reads, writes, enjoys long lunch hours, late starts, early finishes and long holidays. This stereotype of academic life, however, is likely to be false. For around twenty years universities have experienced substantial cuts in their resources, whilst student numbers have expanded. From the mid-1980s to the mid-1990s, the number of university students increased by 64 percent, while the number of teaching staff only increased by 11 percent. (p. 771)

Work overload, whether expressed as a measure of time or work volume, is a significant workplace stressor that influences overall levels of employee stress and their perceptions of job satisfaction.

Job security and pay and benefits. Although ASSET independently measures job security and pay and benefits, the two variables are discussed together for this analysis because they are most often combined in the literature as being both a source of stress and as factors generally outside of the immediate control of the employee (Fields, Dingman, Roman, & Blum, 2005). Both variables are independently measured and reported separately in the current research study. Job security can be approached from two primary perspectives that relate to occupational stress. One perspective relates to whether one will have a job. The other relates to one's job becoming obsolete because of changes within the organization (Cartwright & Cooper, 2002; Tytherleigh et al., 2005). Pay and benefits have perhaps the singularly largest effect upon employees' overall level of stress and their perceptions of job satisfaction.

One of the outcomes of stress that is not included in the ASSET model is the employee leaving the organization for the same type of job, leaving the organization for another job or no job at all, or moving within the organization to another type of job

(Fields et al., 2005). ASSET measures employee commitment to the organization and the organization's commitment to the employee. Those surveyed remain employed by the organization under study and thus have not separated from the employer (Cartwright & Cooper, 2002).

Both job security and pay and benefits are critical factors that affect not only the employees' levels of stress but also how they deal with occupational stress. Stress about job security occurs when the opportunity of leaving a job or moving to another position within the same organization is not available. Fields et al. (2005) suggested that external unemployment figures can create additional stress because employees might believe that they have nowhere to go to find another job and that their jobs are the most secure positions available. While stress can take on multiple meanings, including the "interaction and the relationships of the individual with their environment," stress remains a fluid target that is influenced by many factors (Michailidis & Asimenos, 2002, p. 137).

Understanding the multidimensional complexity of the potential differences between job security and pay and benefits is critical for higher education leaders to better assess their employees and mitigate occupational stress. Fields et al. (2005) concluded the following in their study of 1,556 employees who participated in the United States National Employment Survey:

Managers concerned about reducing turnover may be advised to devote more effort to understanding employee perceptions about the gains to be realized by moving to other organizations or other parts of the current organization. Our study results also challenge managers to avoid the inherently human tendency to accept

a single mental model or schema that predicts why employees may leave a current job. Our results indicate that a single model of employee turnover has severe limitations and understanding the current conditions that may affect employee decisions requires considering a range of models or schemas that may differ depending on the type of move an employee is considering. (p. 79)

Although Fields et al.'s (2005) study was not targeted specifically to higher education, the conclusions were consistent with similar findings about the multidimensional aspects of occupational stress as it relates to the variables of job security and pay and benefits (Cartwright & Cooper, 2002; Michailidis & Asimenos, 2002; Tytherleigh et al., 2005).

Control. The perceptions of the amount of control employees have to make decisions and act have a significant effect on the overall levels of employee stress and perceptions of job satisfaction (Cartwright & Cooper, 2002). With a relatively small sample of 30 administrators, faculty, and coordinators in a large institution of higher education in Greece, Michailidis and Asimenos (2002) concluded that "all three groups perceive the amount of control they have over things that concern their job to be very low, which is a factor that leads to extreme amounts of stress" (p. 141).

Resources and communication. Poor training, the lack of equipment to perform the job, inadequate support resources, poor information networks, and a lack of communication are added stressors that affect the overall levels of employee stress and perceptions of job satisfaction (Cartwright & Cooper, 2002). The literature supported the assertion that, although employees at all levels of employment in institutions of higher education are dedicated to their positions and various disciplines and specialties, they nonetheless are *demotivated* and simultaneously stressed by a lack of resources, support,

funding, and communication within their organizations (Michailidis & Asimenos, 2002; Tytherleigh et al., 2005).

Aspects of the job. The dependent variable of aspects of the job is an ASSET measure of job satisfaction and equates to an individual's perception of the job itself and the job environment such as exposure to hazardous conditions and repetitive tasks (Cartwright & Cooper, 2002). Like leaders in any organization who must change to meet the demands of their constituents, higher education faculty and staff must adapt to the demands of their specific constituents. According to Tytherleigh et al. (2005),

A negative impact from ongoing changes in universities is now being reported in relation to academics' productivity, as well as their health, well-being, and levels of stress and tension. Increased numbers and diversity of students, new teaching modalities, and unrealistic deadlines have left many staff feeling disconnected from their institutions and unwilling to exert extra effort on their behalf. (p. 44)

Within the context of the current research, the variable of aspects of the job can serve as a factor that influences overall levels of stress and perceptions of job satisfaction or serve as an outcome of stress itself in the form of job dissatisfaction (Cartwright & Cooper, 2002).

Attitudes toward the Organization

The attitudes toward the organization scale within the ASSET instrument is divided into two subscales that are perceived commitment of the organization to the employee and commitment of the employee to the organization (Cartwright & Cooper, 2002). Cartwright and Cooper suggested that the ASSET model of stress includes factors that affect employee commitment but are not directly related to the workplace. Each scale

is designed to measure the extent to which an organization as a whole is committed to the employee and conversely the extent to which an employee is dedicated to the organization (Cartwright & Cooper, 2002). This ASSET scale is designed to measure the effect of stress and includes stress that originates outside of the workplace. The category of attitudes toward your organization is 1 of the 4 ASSET areas containing 2 of the 12 subscales that contribute to the analysis of the overall self-reported levels of workplace stress and self-reported levels of job satisfaction in the current research study, each addressing some dimension of stress.

Your Health

The third major section of the ASSET instrument is the *your health* scale and is divided into two subscales of physical health and psychological well-being (Cartwright & Cooper, 2002). Cartwright and Cooper suggested, “Poor employee health can be indicative of excessive workplace pressure and experienced stress. Thus, poor health is an outcome of stress which can be used to ascertain whether workplace pressures have positive and motivating or negative and damaging effects” (p. 11).

Similar to the attitudes toward the organization measure in the ASSET instrument, physical health and psychological well-being might be altered by factors outside of the workplace (Cartwright & Cooper, 2002). Individuals’ choice to live an unhealthy lifestyle, significant issues in a relationship such as divorce, or dealing with death or related events can have an effect upon their health (Cartwright & Cooper, 2002). The category of your health is 1 of the 4 ASSET areas containing 2 of the 12 subscales that contribute to the analysis of the overall self-reported levels of workplace stress and self-reported levels of job satisfaction in the current research study.

Supplementary and Biographical Information

The supplementary information contained within the ASSET instrument is designed to capture important stress-related information to allow for additional meaningful analysis and for the grouping of variables (Cartwright & Cooper, 2002). This section of ASSET is divided into the following six subsections that were adapted to the present study: (a) your current job, (b) you and your family, (c) your education and lifestyle, (d) disability, (e) your interests, and (f) supplementary information (a subcategory). In the current research, this section of ASSET allows for a profile of the participants to be quantified. A final section within the supplementary information subcategory is a comments subsection that gives the participants an opportunity to write any comment they wish to offer on any topic, related or unrelated to the research study.

Summary

The sources of stress that serve as the foundational variables in the ASSET model and influence the self-reported levels of stress and perceptions of job satisfaction are based upon the model of stress established in 1977 by Cooper and Marshall (as cited in Donald et al., 2005; Johnson et al., 2005; Tytherleigh et al., 2005). The ASSET model, based upon Cooper and Marshall's work, includes four key sections that are (a) perceptions of the job, (b) attitudes toward the organization, (c) health, and (d) supplementary biographical information (Cartwright & Cooper, 2002; Tytherleigh et al., 2005).

Through an analysis of the sources of stress identified by the ASSET model, the current research might provide a more informed knowledge base about stress in higher education. Findings might provide educational leaders with targeted, standardized

predictive research and analysis regarding higher education occupational stressors for faculty and administrative staff as groups. The research might provide these leaders with new insights and enable them to recognize characteristics that adversely affect their employees thus allowing for mitigating, corrective, and preventative measures to be implemented (Tytherleigh et al., 2007).

Vakola and Nikolaou (2005) studied 292 employees in various Greek organizations using the ASSET model as the basis of their research. They determined that levels of stress were significantly higher in organizations lacking in strong relationships, effective communication methods, and strong organizational commitment. In a study of 2001 Australian worksites, Savery and Luks (2001) analyzed the issue of empowerment, which is represented as *control* in the ASSET model, as it relates to levels of stress among employees. Employees expressed high levels of stress when they perceived that they had little control over decisions that were made within the organization. However, professionals in management positions also expressed high levels of stress even though they had a high level of decision-making authority within the organization.

With the ASSET model, Donald et al. (2005) assembled data from 16,001 employees representing 15 unique organizations in the United Kingdom, both in the public and private sector. One of the ASSET measures is *organizational commitment to employees* and *employee commitment to the organization*, both as measures of levels of stress or as an outcome of stress within the ASSET model (Tytherleigh et al., 2005). Donald et al. concluded that, as measures of the level of stress within an organization, “organizational commitment will influence employee commitment and there will

therefore be an indirect relationship between employee commitment and performance” (p. 19).

Donald et al. (2005) suggested that future research be conducted to explore the potential differences between commitment to the organization and the organization’s commitment to the employee and the “influence on both performance and other work behaviors” (p. 19). The current research study explored those differences specifically within the full-time and part-time faculty and staff in the higher education workforce within the United States and with the levels of stress and workplace stressors as enumerated within the ASSET model (Tytherleigh et al., 2005),

Perceptions of Job Satisfaction

Employee job satisfaction and levels of stress are inextricably linked (Cooper & Cartwright, 2002). Extensive research on the relationship between stress and job satisfaction has been conducted in high-stress jobs such as medicine, law enforcement, and social work (Antiniou et al., 2003; Salmond & Ropis, 2005). Beam et al. (2003) concurred, “Job-related stress among higher education faculty has not been studied often” (¶ 9). As negative stress increases, employee job satisfaction usually decreases. Nevertheless, inconsistency exists within the research indicating that, even within historically stressful positions such as those filled by police officers and nurses, stress and job satisfaction are not always correlated (Johnson et al., 2005).

Johnson et al. (2005) analyzed 26 occupations in the United Kingdom, using ASSET normative data available to date and discovered that, even among employees within historically stressful positions (i.e., police officers, teachers and nurses), differences in job satisfaction appeared with respect to the levels of contact that these

individuals had with their constituents. In particular, head teachers and senior police officers were singled out as having lower levels of stress and higher levels of job satisfaction. Front-line practitioners experienced high stress and low job satisfaction levels while their supervisory counterparts did not experience these high levels of stress or low levels of job satisfaction. Johnson et al. concluded that “there are some interesting differences between roles within the same occupational setting, for example, teachers and head teachers, police [officers] and senior police [officers]” (p. 15).

Johnson et al.’s findings were inconsistent with previous research indicating that professionals within organizations (i.e., managers) also expressed high levels of stress even though they had a high level of decision-making authority within the organization (Savery & Luks, 2001). With respect to the medical field, Salmond and Ropis (2005) reported,

High stress leads to negative work environments that rob nurses of their spirit and passion about their job. Low job satisfaction in nurses is linked empirically to chronic absenteeism, decreased morale, reduced job performance, burnout, increased tardiness, high turnover, and substance abuse. Moreover, high stress affects overall quality of care. Loss of compassion for patients, and increased incidences of mistakes and on-the-job injuries are consequences of high stress levels. (p. 301)

Within higher education, job security and commitment levels both from the employee to the organization and the organization to the employee have a significant effect upon levels of job satisfaction (Tytherleigh et al., 2005). While the teaching, law enforcement, and nursing fields have undergone dramatic changes in the past decade

(Johnson et al., 2005), higher education has also experienced significant changes both in the constituencies served by colleges and universities (i.e., the students) and in the organizational structures and mission of those institutions of higher education (Tytherleigh et al., 2005). Job satisfaction is no longer influenced solely by classroom interactions between faculty and students or administrative or staff interactions but by the complete organizational shift from traditional ground-campus delivery methods to completely online or hybrid (part-ground, part-online) coursework and business operations (Tytherleigh et al., 2005). Staff needed to process transcripts, bills, library books, and related functions find that they require new training. Organizational change is a significant factor in higher education workplace stress and job satisfaction, primarily resulting from faculty and staff who feel significantly increased levels of stress, a disconnect with the employee's institution, and an unwillingness to put forth additional effort beyond the regular work day (Tytherleigh et al., 2005).

As a dependent variable in the present research, job satisfaction is directly influenced by the workplace stressors established within the constructs of the ASSET model. Identifying the potential differences between full-time and part-time (i.e., employee status) faculty and staff (i.e., employee position) and their self-reported levels of stress and job satisfaction was critical to the research. Johnson et al. (2005) presented a general analysis of the occupational normative data revealed by current ASSET data collected in the United Kingdom, but no literature exists to sufficiently explain these differences in the field of higher education in the United States as well as within the specific separate categories of full-time and part-time faculty and staff (Tytherleigh et al., 2005).

Framing Occupational Stress: A Multi-disciplinary Approach

Within the context of the population of higher education faculty and staff in the United States and the sample of full- and part-time faculty and staff at two upstate New York colleges, the leadership and human resources fields are two primary areas in the theoretical foundations of the research. These areas have commonalities that link to the problem of the scarcity of research in the United States in the area of occupational stress in higher education and faculty and staff as two distinct groups within higher education institutions.

The Higher Education Leadership Framework

The responsibility for proactively using the results of occupational stress research and related studies to produce meaningful change for employees within their organizations should fall on higher education leaders (Tytherleigh et al., 2005). Establishing appropriate higher education occupational stress interventions cannot necessarily be done across most higher education organizations; rather “each [higher education institution] must take on responsibility for ensuring a healthy work environment” (Tytherleigh et al., 2005, p. 58). Leaders at all levels of higher education organizations are needed, especially transformational and principle-centered leaders who can use their diverse their skills to identify and predict occupational stressors, commit the necessary resources, and clearly show their long-term support for efforts to identify and mitigate workplace stress (Kalimo et al., 2003; Tytherleigh et al., 2005). Transformational and principle-centered leadership were briefly discussed in chapter 1. The next section includes further discussion regarding leadership in higher education and in the context of the healthy working environment (Tytherleigh et al., 2005).

The current research examined full and part-time higher education faculty and staff at two upstate New York colleges. Faculty and staff are very different categories of employees that are further subdivided into employees with full- and part-time employment status. The literature suggested that vast differences in the culture of academics (i.e., faculty) and administration (i.e., staff) exist with respect to attitudes and behaviors (Del Favero, 2005).

For the purposes of the current research, the differences were heightened because many individuals who can effect change in the area of ensuring a healthy working environment belong to both the academic and administrative domains thus being pulled in both directions (Del Favero, 2005; Tytherleigh et al., 2005). In a quantitative survey of 421 academic deans at doctoral and research institutions in the United States, Del Favero confirmed the assertion regarding the differences in faculty and administration when he stated,

This study takes the approach that leadership is complicated by the demands of the various, often conflicting, cultures defining colleges and universities.

Institutional cultures are fragmented into academic and administrative domains.

Then within academic domains, profound and extensive differences exist between and among academic disciplines. These cultural dialectics are particularly important in the study of academic deans' leadership because deans are not only immersed in both academic and administrative cultures, but their successful performance depends on an ability to bridge the two by serving both effectively.

Bridging behavior is also critical within the academic culture, particularly for deans serving multidisciplinary units (e.g., arts and sciences), as they must seek to

understand and communicate the preferences of faculty from often widely different disciplinary cultures. Academic and administrative cultures are two separate and, in many aspects, competing domains. Put differently, faculty and administrators are known to hold different implicit models of their work environment. Faculty value scholarship while administrators value organizational efficiency and accountability. (p. 71)

The administrators closest to the faculty in higher education institutions are department chairs, and they are themselves facing challenges associated with competing roles and job-related stress. The situation adds strain to their roles as faculty members, administrators, and departmental leaders (Del Favero, 2005, Gabbidon, 2005). In a study of 78 criminal justice/criminology department chairs in randomly selected institutions of higher education in the United States, the competing interests of faculty and administrative leadership were further amplified (Gabbidon, 2005). Gabbidon suggested that senior-level faculty members who have achieved promotion and tenure should fill chair-level positions. Respondents believed that, although programs were considered important, chairs were hampered in their abilities to lead through budget and staffing constraints within their departments and experienced job-related stress and competing roles (Del Favero, 2005; Gabbidon, 2005).

The leadership research in higher education within the United States addressed job-related stress, role conflict, and related measures (Brewer & McMahan, 2003; Olsen, 1993). Nevertheless, there is a lack of research with respect to the comprehensive analysis of occupational stress in higher education as it relates to the individual categories of positions held within institutions of higher education. Moreover, literature after the

turn of the 21st century suggested that future research should focus on these differences in positions (Del Favero, 2005; Gabbidon, 2005; Michailidis & Asimenos, 2002; Tytherleigh et al., 2005).

Michailidis and Asimenos (2002) suggested that supervisors play a critical role in managing stress among their employees. Through analysis using the ASSET instrument, the present research study might provide useful cumulative and segmented data on employees in positions of leadership within higher education organizations in the United States (Cartwright & Cooper, 2002).

The Human Resources Framework

Human resource departments, more commonly known as HR departments, are common in today's medium and large organizations, including colleges and universities. Functioning in an environment of ever-changing laws, rules, and regulations, human resource managers are faced with the often daunting task of balancing the "recruitment and selection of new employees, training of employees, assessment of work efficiency, compensation of employees as well as labor relations" (Treven, 2006, p. 120). A relatively new phenomenon called the *presenteeism* problem has emerged in the workplace; it involves employees coming to work in greater numbers than in the past when they are experiencing physical or emotional problems (Milano, 2005). Milano explained,

Causes of presenteeism include health conditions as ordinary as a bad cold, minor injury, seasonal allergy, or nasty headache. While less visible, personal difficulties outside of work can also affect job performance. An employee might

be seriously distracted by child or elder care pressures, financial problems, or marital strains. Basically, “they’re there, and yet, they’re not there.” (p. 32)

The assignment of a new name to a relatively old dilemma (i.e., employees with personal problems) only increases the role that human resource managers play in occupational stress identification and mitigation. Employee assistance programs (EAPs) are the most recognizable manifestation of employers reaching out to their employees to manage the work-life balance. While EAPs have been a part of the human resources landscape since the 1930s, their purpose has changed dramatically. The programs used to be available for treating employees with occasional episodes of stress, but today they often offer services to deeply troubled employees (Murphy, 1995). Smewing and Cox (1998) reported,

EAPs have been described as ‘job based programmes operating within a work organization for the purpose of identifying troubled employees, motivating them to resolve their troubles and providing access to counseling or treatment for those employees who need these services. (p. 276)

In the United States, EAPs and related providers are certified through the private Employee Assistance Professionals Association, much like college and university accrediting bodies. Smewing and Cox (1998) provided one of very few comprehensive analyses of the state of EAPs in a higher education setting in the United Kingdom as compared to the programs in use in the United States. Smewing and Cox suggested that, in addition to the presence of EAPs that are located either on a workplace site and staffed by university counselors or provided by off-site professionals, training supervisors have become another critical component in preventing and mitigating occupational stress

(Kaupins et al., 2005). In all organizations, identifying employees who are in trouble and prone to stress and workplace violence is the higher education leaders' responsibility. Smewing and Cox described a theme that is prevalent but changing in today's university setting and noted that, while universities "have traditionally taken a paternalistic view toward their students, it is rare for such an approach to be extended to staff" (p. 283).

The two institutions that participated in the current study have full-time human resource offices on their respective campuses. One of the two colleges in the present research study has not embraced EAPs (Institution A) at present. The other (Institution B) has a program available to employees and hosted by an off-site professional counseling organization. As higher education institutions continue to change rapidly, as evidenced by the literature, and reflect increased workloads, stress, and job dissatisfaction that yield poor work performance (Polonsky, Juric, & Mankelow, 2003), human resource managers and higher education leaders need reliable data on occupational stress to implement meaningful change within their organizations (Tytherleigh et al., 2005). Elliott (2003) concluded in her analysis of higher education stress and strain on employees at one university in the United States, that "nonetheless, work and family initiatives are in the early stages of development at many institutions of higher education, and more research is needed to guide human resource policies in this arena" (p. 162).

With the emergence and prominence in the late 1980s and early 1990s of the NIOSH (Murphy, 1995) and the American Psychological Association's first publication of the *Journal of Occupational Health Psychology* in 1996, the issue of occupational health psychology in the context of leadership and human resources and, in particular, stress in the workplace, has reached a new level of importance and visibility. Germinal

literature suggested that very little consensus existed regarding a single definition of stress (Cartwright & Cooper, 2002; Goldberger & Breznitz, 1982; Michailidis & Asimenos, 2002; Selye, 1980). Osler, Selye, Wolff, and Lazarus have contributed the most substantive offerings to the definition and understanding of stress and stressors in the past (as cited in Selye, 1980). These coincide with present day models that were created by Cooper and Marshall (1977) and served as the foundation of the ASSET model used in the current study (Cooper & Cartwright, 2002; Cooper & Marshall, 1977; Tytherleigh et al., 2005). Michailidis and Asimenos summarized the divergent definitions of stress as follows:

Stress is a result of the interaction and the relationships of the individual with their environment. It can be defined as the pressure that the environment exerts on the individual. The excessive psychological and physiological pressure force the organism to react to the pressure in order to overcome it and this leads the individual to make some adjustments. Stress occurs every time individuals try to adjust to an environment composed of unpleasant events like pressures at work, marital problems, [and] financial problems. (p. 137)

Stress and stressors are considered “objective elements in the environment that may create stress” depending upon how individuals perceive and cope with or manage the threat or stress (Kelloway & Day, 2005, p. 224; Michailidis & Asimenos, 2002).

The literature suggested that, although differing definitions of stress exist, three predominant types have emerged that are stimulus-based, response-based, and stressor strain-based (Cartwright & Cooper, 2002). Stimulus-based stress is environmental or situational while response-based stress is based upon individuals’ mental or physical

response to a particular environmental or situational stimulus. Understanding the basic premises behind each type of stress provides a valuable context for higher education leaders to better evaluate their work environments and to use the results of occupational stress research to implement meaningful changes within their organizations (Tytherleigh et al., 2005).

Much like Cooper and Marshall's (1977) pioneering model of stress that established the ASSET model and the eight primary sources of stress (Cartwright & Cooper, 2002), Sauter (as cited in Kelloway & Day, 2005) asserted there are six categories of stress that mirrored the ASSET model and brought about some convergence of theories and consistency to a field of literature marked by inconsistency. The six categories are "1) workload and work pace; 2) role stressors (such as conflict, ambiguity, and inter-role conflict); 3) career concerns; 4) work scheduling; 5) interpersonal relationships; and 6) job content and control" (Sauter, as cited in Kelloway & Day, 2005, p. 224). Understanding the basic foundations of psychological and physiological stress definitions and the sources of occupational stress provides an important context for higher education leaders who might use the results of the present research to bring about meaningful change within their organizations.

Conclusion

In discussing the American Psychological Association's definition of a psychologically healthy workplace, Kelloway and Day (2005) stated,

Organizations can become healthy by incorporating health promotion activities, offering employee assistance programs, having flexible benefits and working

conditions, treating employees fairly, and offering programs for employee development, health and safety, and the prevention of work stress. (p. 223)

Establishing appropriate higher education occupational stress interventions cannot necessarily be done across most higher education organizations; rather, “each [higher education institution] must take on responsibility for ensuring a healthy work environment” (Tytherleigh et al., 2005, p. 58). The literature suggested that vast differences existed between higher education faculty, faculty-administrators, and staff (Del Favero, 2005). The literature further suggested that future research should focus on these differences in positions (Del Favero, 2005; Gabbidon, 2005; Michailidis & Asimenos, 2002; Tytherleigh et al., 2005). Michailidis and Asimenos maintained that leaders play a critical role in managing stress for their employees.

Little consensus exists in the literature regarding a common definition of stress (Cartwright & Cooper, 2002; Goldberger & Breznitz, 1982; Michailidis & Asimenos, 2002; Selye, 1980). Higher education leaders, through effective human resource management founded upon a basic understanding of the psychology of stress, can provide the foundation for proactive efforts toward ensuring healthy workplace environments (Tytherleigh et al., 2005). In all organization, it is the higher education leaders’ responsibility to identify employees who are in trouble and prone to stress or workplace violence (Kaupins et al., 2005).

Summary

Leadership research in higher education within the United States addressed job-related stress, role conflict, and related measures (Brewer & McMahan, 2003; Olsen, 1993). However, there is a lack of studies with respect to the comprehensive analysis of

occupational stress in higher education as it relates to the individual categories of positions held within institutions of higher education. Moreover, literature after the turn of the 21st century suggested that future research should focus on these differences in positions (Del Favero, 2005; Gabbidon, 2005; Michailidis & Asimenos, 2002; Tytherleigh et al., 2005).

Chapter 1 presented the foundation for the study and described the problem, purpose, and significance of the research as well as the research questions and the theoretical framework. Chapter 2 expanded on the foundation provided in chapter 1 by providing literature based on the historical underpinnings of the stress concept, especially occupational stressors in the higher education workplace. The literature suggested that knowledge of higher education leadership and a study of the field of human resources could provide the foundation for the current research. Chapter 2 further framed the research study in the context of leadership and human resources literature. Chapter 3 will provide the theoretical foundation for the selection, validity, reliability, planning, administration, and evaluation of the ASSET model survey instrument as the basis for the collection of the primary data for the study.

CHAPTER 3: METHOD

The purpose of the quantitative cross-sectional survey design research was to examine the potential differences between full-time and part-time faculty and staff members at two upstate New York colleges and their self-reported levels of stress and perceptions of job satisfaction. Chapter 2 expanded on the foundation of chapter 1 by providing literature based upon the historical underpinnings of the stress concept with a focus on occupational stressors in the higher education workplace. The literature review suggested that knowledge of leadership in higher education, a study of the field of human resources, and an understanding of occupational stress in the context of the field of psychology would provide the foundation for the research. Chapter 2 framed the research in the context of the leadership, human resources, and psychological literature.

Chapter 3 provides a discussion of the ASSET model survey instrument and the rationale for the selection of the instrument, its validity and reliability, and the details of its administration. The ASSET survey was used for the collection of the primary data. Chapter 3 further includes a discussion of the study's research design, the appropriateness of the design, the population and sample, issues associated with confidentiality, and the methods for data collection and analysis.

Research Method and Design Appropriateness

The current research study utilized a quantitative cross-sectional survey design in which data are collected and analyzed "data at one point in time" (Creswell, 2005, p. 355). A quantitative approach was the method of choice primarily because of the limitations associated with generalizing the data produced by qualitative studies in which population size is typically small as well as the desire to apply single-layer rather than

multiple-layer data scrutiny to the data pool (Horn, 2004). Additionally, identification of the potential differences between groups of higher education employees is most effectively accomplished through quantitative analysis because survey design research instruments are used to describe relationships and differences among variables (Creswell, 2005; Dube & Pare, 2003).

Quantitative Analysis

The research process generated quantitative data. Quantitative analysis “is an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature” (Creswell, 2005, p. 597). The quantitative method of research tends to yield a final document marked by objectivity and a lack of researcher bias. Dube and Pare (2003) stated that “in quantitative research, well-known standardized statistical analysis methods (e.g., analysis of variance or regression) have helped researchers confirm or disconfirm hypotheses” (¶ 67).

The selection of a quantitative cross-sectional survey design was intended to objectively strengthen the area of study, specifically within the educational leadership field of study. The literature had suggested that, while qualitative and other forms of measurement might have a place in research, the trend in education research insofar as the federal government is concerned focuses more heavily on the scientific rigor associated with the principles of quantitative research (Dube & Pare, 2003; Horn, 2004). Both germinal and current literature suggested that while a longitudinal research study is the preferred method in the area of stress research, a quantitative cross-sectional survey design causes minimal interference with survey participants and provides educational leaders with meaningful results that can reasonably be collected within an organization in

a short amount of time (Cartwright & Cooper, 2002; Cooper & Marshall, 1977; Tytherleigh et al., 2005). Qualitative methods for short-term research such as the length of this research study or a longitudinal study were neither practical nor necessary (Cartwright & Cooper, 2002).

The Independent and Dependent Variables - Summary

The predominant focus on higher education occupational stress research in the United States has been on faculty only; full- and part-time staff has been largely ignored (Brewer & McMahan, 2003). Tytherleigh et al. (2005) suggested in their research using ASSET with employees in higher education institutions in the United Kingdom that future research “should provide separate benchmarks for academic and general staff” (p. 55).

The independent variables of employee position (i.e., faculty versus staff) and status (i.e., full-time versus part-time) are further subdivided for into four main groups: (a) full-time faculty, (b) full-time staff, (c) part-time faculty, and (d) part-time staff. Members in each category provided self-report type data on the ASSET survey. The potential differences between the members of these groups and their self-reported levels of stress and perceptions of job satisfaction (i.e., the dependent variables) were measured.

Dependent variables are influenced by independent variables (Creswell, 2005; Zohar, 1999). In the current research, full-time and part-time faculty and staff served as the influencing factors or independent variables. The self-reported levels of stress and perceptions of job satisfaction served as the dependent variables as measured by the ASSET survey instrument. While chapter 2 included a detailed description of the

independent and dependent variables, table 1 summarizes each to further frame this discussion.

Table 1

Summary of Independent and Dependent Variables

Independent Variables	Employee Status (full- time vs. part-time)	Employee Position (faculty vs. staff)
ASSET Subscales		
Dependent		
Variables: Perceived		
Stress (11)	Summary Description	
Work Relationships	Support or lack of support from peers	
Work Life Balance	Work influencing home life and home life influencing work	
Overload	Amount of work employees are responsible for and the amount of time that they spend doing their job	
Job Security	Whether an employee has a job or whether a job may become obsolete	
Control	Perceptions of the amount of control employees have to make decision and act within their employment	
Resources & Communication	Issues of proper training, equipment, support resources, information networks and communications	
Pay & Benefits	Perception of adequate compensation for the a particular job	
Commitment to	Employees perception of the organizations commitment to the	

employee	employee
Commitment to Organization	Employees commitment to the organization
Physical Health	Employees perception of their physical health
Psychological Wellbeing	Employees perception of their psychological well-being
Dependent Variable: Job Satisfaction (1)	
Aspects of the Job	Employees perceptions of the overall job itself

Supplementary and Biographical Information

The supplementary information contained within the ASSET instrument is designed to capture important stress-related information to allow for additional meaningful analysis and for the grouping of variables (Cartwright & Cooper, 2002). This section of ASSET is divided into six subsections that have been adapted for the present study. The subsections are (a) your current job, (b) you and your family, (c) your education and lifestyle, (d) disability, (e) your interests, and (f) supplementary information (a subcategory). This section of ASSET allowed for a profile of the participants of the current research to be quantified. A final section within the supplementary information subcategory is a comments section. The comments subsection gives participants an opportunity to write comments they wish to offer on any topic, related or unrelated to the research study.

Summary

The sources of stress that serve as foundational variables in the ASSET model and influence the self-reported levels of stress and perceptions of job satisfaction are based upon the model of stress established by Cooper and Marshall (as cited in Donald et al., 2005; Johnson et al., 2005; Tytherleigh et al., 2005). The ASSET model, based upon Cooper and Marshall's work in 1977, is divided in the categories of perceptions of the job, attitudes toward the organization, health, and supplementary biographical information (Cartwright & Cooper, 2002; Tytherleigh et al., 2005).

The current research might provide a more informed knowledge base about stress in higher education, especially for educational leaders who could use standardized predictive research and analysis regarding higher education occupational stressors for faculty and administrative staff as groups. The findings might provide these leaders with new insights and enable them to recognize characteristics that adversely affect their employees and to implement mitigating, corrective, and preventative measures (Tytherleigh et al., 2007).

Appropriateness of Design

The choice of quantitative research methodology with a cross-sectional survey design was appropriate for the study. In this design, data are collected "at one point in time" (Creswell, 2005, p. 355). A cross-sectional survey design approach was selected primarily due to time limitations and the financial commitment that a longitudinal study would involve.

The ASSET instrument was designed as a shortened stress evaluation tool that is most often used within [a] cross-sectional design and is conducive to a quantitative

approach as opposed to a qualitative or mixed-methods approach (Cartwright & Cooper, 2002). The length of most stress questionnaires resulted in low response rates and “statistical concerns about the extent to which the respondents [could] be considered representative of the work population surveyed” (Faragher et al., 2004, p. 191). In part, the use of the ASSET instrument in the current research was to elicit higher response rates within the higher education population selected. The quantitative analysis “is an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature” (Creswell, 2005, p. 597). The quantitative method of research tends to yield a final document marked by objectivity and a lack of researcher bias (Creswell, 2005). Dube and Pare (2003) stated that “in quantitative research, well-known standardized statistical analysis methods (e.g., analysis of variance or regression) have helped researchers confirm or disconfirm hypotheses” (¶ 67).

The research conducted utilized a quantitative instrument to measure the potential differences between full-time and part-time higher education faculty and staff (i.e., independent variables) and dependent variables of the self-reported levels of stress and self-reported levels of job satisfaction. The dependent variables of levels of stress and perceptions of job satisfaction were measured in part by measures of the employees’ perceived commitment to the organization and the perceived commitment of the organization to employees (Cartwright & Cooper, 2002). These variables are most appropriately measured through the use of a quantitative cross-sectional approach.

Population, Sampling, and Data Collection Procedures and Rationale

Population

The target population for the current study was full- and part-time higher education employees at two upstate New York colleges, and a random sample was selected from the target population. According to Creswell (2005), a sample “is a subgroup of the target population that the researcher plans to study for the purpose of making generalization about the target population” (p. 398). The sample is a small group that, if studied correctly, produces findings that can be generalized to the entire population. To survey all full-time and part-time college faculty and staff in the United States is neither possible nor necessary. The goal of the research was to obtain data from a small, manageable, and representative group (Creswell, 2005).

Creswell (2005) further stated that “to reduce sampling error, select as large a sample from the population as possible. The larger the sample, the more the participants will be representative of the entire population” (p. 359). It was not expected that the results of the research would be fully generalizable to the overall higher education population within the United States, and this was acknowledged as a limitation of the research study.

Neuman (2003) stated that “a researcher samples so he or she can draw inferences from the sample to the population. Researchers are not interested in samples in themselves; they want to infer to the population” (p. 233). Neuman further noted, “Everything else being equal, the larger the sample size, the smaller the sampling error” (p. 233). According to the U.S. Department of Education’s National Center for Education Statistics, 3,194,169 full- and part-time employees were working at both public and

private U.S. colleges and universities in the fall of 2003 (U.S. Department of Education, 2005). These employees were generally categorized as professional and non-professional staff and further subdivided within each general category to more accurately reflect their job responsibilities within their institutions. Although the small population of two upstate New York colleges might not be considered representative of the entire higher education faculty and staff population of the United States, it was representative of the categories adopted by the U.S. Department of Education.

While sampling error is a part of all research, efforts to maximize the generalizability of the study's findings to the entire population of professional and non-professional higher education employees was maximized by "hav[ing] a good sampling frame list, as large a sample from the population as possible [in light of survey constraints], use of a good instrument, and rigorous administration procedures" (Creswell, 2005, p. 360). The use of sound quantitative research methods enhanced the veracity of the results and credibility of the final conclusions and recommendations of the research. The literature suggested that sampling an entire population is not advisable, cost-effective, or efficient, but it can provide a sound basis for further research (Neuman, 2003; Su, 2006). Su studied 632 accounting students in the United States and Taiwan and concluded that the small sample selected might not be generalizable to the population of U.S. or Taiwanese accounting students and that the characteristics of the students might not be similar to the overall population. However, generalizability need not be the only measure of successful research. Su further concluded,

The findings of the present study are essential to training the new generation in learning how to avoid the pitfalls of inappropriate decision making that have

underlying cultural differences and promote clear decision for effective implementation. This study can begin to help international managers better understand how business ethics is perceived and conducted across cultures. This research is laying the foundation for further research in cross-cultural ethics in accounting. (pp. 156-157)

Lee, Burkam, Ready, Honigman, and Meisels (2006) studied over 8,400 kindergarten students across the United States in 50 school districts. Lee et al. noted that small samples, short-term research, and studies “lacking in scientific rigor” were contributing factors to poor historical research (p. 170). Lee et al. secured substantial funding from the United States Department of Education to conduct a costly longitudinal study of kindergarten students. While the present research was neither longitudinal nor financially supported, it exhibited strong scientific rigor. While the sample population was not generalizable to the entire higher education faculty and staff population in the United States, it nonetheless exhibited strong characteristics of that larger population (Lee et al., 2006; Su, 2006).

According to Gay (1996), “at approximately $N=5,000$ and beyond, the population size is almost irrelevant and a sample size of 400 is adequate. Thus, the larger the population, the smaller the percentage needed to get a representative sample” (p. 125). For the target population of 1,084 in the present research, a sample of 278 to 285 was an adequate sample for statistical purposes (Krejcie & Morgan, 1970). In the present research study a stratified random sample was selected, further refining the representation of each group (Creswell, 2005; Neuman, 2003). The use of sound quantitative methods enhanced the veracity of the results and the credibility of the conclusions and

recommendations only insofar as the population of both higher education institutions was concerned. While the final sample studied in this research could not be scientifically generalized to the entire population of higher education employees in the United States, some commonalities could be identified that can provide higher education leaders with a template for current action within their institutions and guidelines for future research.

The target population of two upstate New York colleges ($N = 1,084$) and the random sample selected from within that population is small in comparison to the overall United States population of higher education faculty and staff categories since it represents only .031% of 3,194,169. The characteristics of the target population selected for the present study closely represented the greater population. The population of full- and part-time higher education faculty and staff exhibited characteristics that have been established by the United States Department of Education (U.S. Department of Education, 2005).

Sampling

The data were collected from a preprinted paper form completed by randomly selected voluntary participants drawn from the target population at the two colleges. A stratified sample including self-reported faculty full-time and faculty part-time and staff full-time and staff part-time was randomly selected from the target population (Creswell, 2005). Neuman (2003) stated that “researchers use stratified sampling when a stratum of interest is a small percentage of a population and random processes could miss the stratum by chance” (p. 233). In the colleges selected for the research, faculty and staff were not equally proportioned across both institutions (see Table 2), and without stratified sampling it is possible that one group might be over- or under-represented.

Informed Consent

Of the 1,084 full- and part-time faculty and staff members at the two upstate New York colleges, a randomly selected sample of 60% from each group was drawn at each institution. The employees were selected using ascending numbers assigned from the respective Microsoft EXCEL[®] spreadsheets the human resource offices provided. Signed informed consent statements are generally not required for survey design research studies. Nevertheless, each potential participant received a pre-survey explanatory letter (see Appendix A) along with the ASSET instrument (Neuman, 2003).

Additionally, an informed consent cover letter (see Appendix B) was mailed with the survey, providing potential participants with appropriate informed consent informational language. Participants were advised that, if they returned the surveys, their return served as their informed consent. A final level of informed consent was provided in the form of a check box on the front of the ASSET survey itself. To be included in the final analysis, participants had to have checked the box, further indicating their informed consent. Full-time and part-time faculty and staff members had an opportunity to identify their employment status by completing Question 1 (Q1) on the ASSET survey instrument.

Table 2

Stratified Sampling of Faculty and Staff (N = 1,084)

Strata	Faculty	Faculty	Staff	Staff	Total
	full-time	part-time	full-time	part-time	
Institution					
Institution A: Two-year college	82	72	185	44	383

Institution B: Four-year college	133	176	330	62	701
Total	215	248	515	106	1,084
Total		43		57	100
(% of total faculty & staff)					

Confidentiality

Confidentiality, anonymity, and voluntary participation are three critical components associated with protecting the identity of research participants and maximizing their participation in a research study (Creswell, 2005; Neuman, 2003). Participants received an initial letter (see Appendix A) that, in part, discussed the importance of confidentiality and advised the participants that their names had been randomly selected and could not be matched with returned survey results thus ensuring that individual results would remain anonymous. With the exception of the initial mailing of the introductory letter (see Appendix A) and the follow-up mailing of the ASSET survey instrument, it was not possible to match outgoing mail with incoming survey responses.

The ASSET survey instrument (see Appendix C) was intentionally coded in the preprinting phase of production in order to distinguish between the two colleges when the surveys were returned. This procedure allowed the sharing of organizational-level macro data with educational leaders after the completion of the research study. Leaders of both institutions might use the findings for problem identification and implementation of mitigating steps toward the reduction of higher education occupational stress within each college (Tytherleigh et al., 2007). There were no foreseeable risks to survey participants.

The small size of the sample of full-time and part-time faculty and staff members (< 500 between both schools) could allow specific groups of participants to stand out in the results. Potential participants were advised of this fact in the informed consent letter and were reminded that it would not be possible to link a particular survey result with them as individuals. Data were secured in a locked residence basement in a locked case and shared in raw form with a statistical assistant and the doctoral dissertation mentor and committee members. Personal identifiable data such as name, date of birth, social security number, were purposely not present on the returned survey forms. Nevertheless, the paper forms returned will be kept for a minimum of 3 years and will be cross-shredded after that time.

Geographic Location

This quantitative cross-sectional survey design research study was conducted at two upstate New York colleges in the United States.

Data Collection

The pencil-and-paper version of the ASSET survey instrument completed by the participants was used for all data collection. Although a computerized, web-based version of the ASSET instrument was available along with computerized scoring, it was not an affordable option. The ASSET instrument is under copyright of the Robertson Cooper Company in the United Kingdom, and Robertson Cooper granted permission for the use of the ASSET instrument and for inclusion of a sample of the instrument in this document (see Appendix D). Permission to use the premises at both Institution A and Institution B were obtained from both college presidents (see Appendix E). A multi-wave communication campaign was utilized following Dillman's (1978) total design method in

order to maximize response rates for mailed survey instruments (Elliott, 2003; Rickenbach & Overdeest, 2006). The pre-survey letter included the following:

1. The researcher's name, address, email, and phone number.
2. The researcher's educational affiliation and the reason for the survey.
3. The voluntary nature of participation.
4. The objective of the research.
5. Who would be involved, when, and why?
6. How the information would be used.
7. How the research would benefit employees and the organization.
8. The procedures to maintain the respondents' anonymity.
9. The fact that their responses would be sent directly back to the researcher for scoring.
10. The fact that each organization (college) was committed to change in terms of the results of the survey (Cartwright & Cooper, 2002).

Once completed, the ASSET instruments were returned in a self-addressed and prepaid envelope. Two weeks after the initial mailing of the survey instrument to the stratified random sample of participants, a reminder post card (see Appendix F) was sent out to the entire mailing list. The groups were determined by analysis of question 1 (Q1) on the ASSET instrument. Data input and analysis were initiated only after receipt of all anticipated surveys after the multi-wave communication plan had been implemented.

Instrumentation

The ASSET model questionnaire used for the present research is a "short, but psychometrically sound instrument for screening for stress within a risk assessment

exercise” (Faragher et al., 2004, p. 200; Tytherleigh et al., 2005). Faragher et al. stated that the ASSET is the first stage of a possible two-stage assessment process in which the second stage is a more in-depth analysis using the first-stage results as a foundation for further analysis. The length of most stress questionnaires has resulted in low response rates and “statistical concerns about the extent to which the respondents can be considered representative of the work population surveyed” (Faragher et al., 2004, p. 191). In part, the purpose of using the ASSET instrument in the current research was to elicit high response rates within the higher education population selected.

The ASSET instrument had been established to have good convergent validity, which is “the extent to which a scale correlates with other measures of the same construct” (Faragher et al., 2004, p. 198), high face validity, and strong reliability as evidenced through predominantly high Cronbach’s alpha coefficients for the various ASSET factors (Faragher et al., 2004; Johnson & Cooper, 2003). Strong validity and high reliability coefficients are further supported by a growing pool of normative data by “which organizations can ‘benchmark’ their performance” and high response rates attributed to the shortened length of the survey instrument (Faragher et al., 2004, p. 199). Figure 1 illustrates the dimensions included in the ASSET model.

The short, yet valid and reliable design of the ASSET model survey instrument was conducive to the type of research for the current study (Faragher et al., 2004). The ASSET model was developed in the United Kingdom and has been used in both higher education and non-higher education workplace settings in the United Kingdom and in Greece (Cartwright & Cooper, 2002; Faragher et al., 2002; Tytherleigh et al., 2005;

Vakola & Nikolaou, 2005). The researcher was the first to use the ASSET instrument to study higher education occupational stress within the United States.

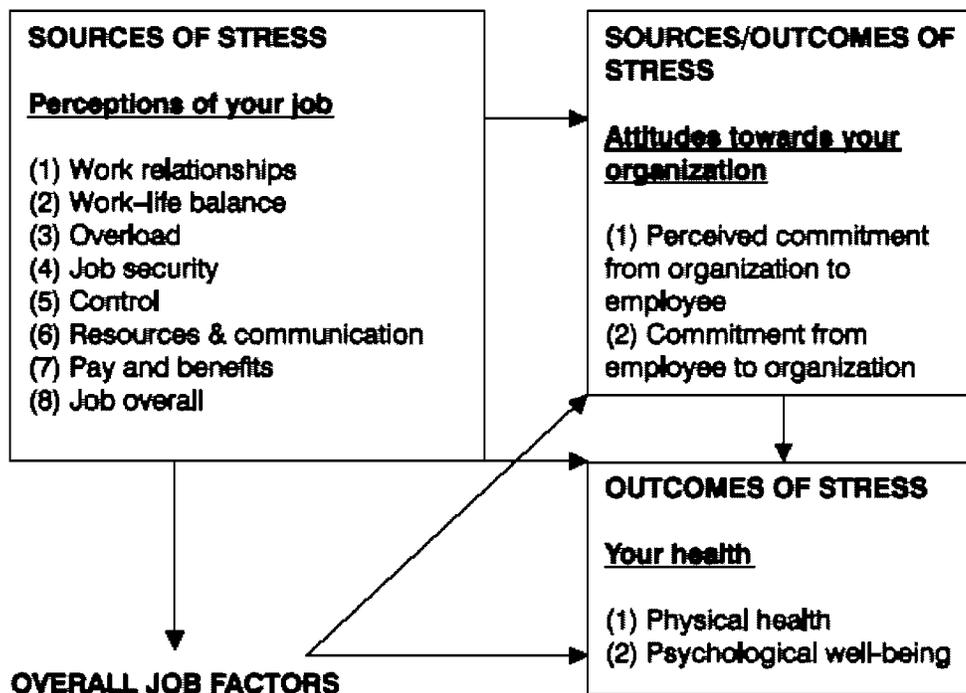


Figure 1. The ASSET model (Cartwright & Cooper, 2002; Tytherleigh et al. 2005; reprinted with permission of Robertson Cooper Limited)

Validity: Internal and External

Internal and external validity refer to researchers' ability to explain and control the various threats or uncontrolled variables common to the research for each type of validity (Cooper & Schindler, 2003; Gay & Airasian, 2000; Neuman, 2003). Internal validity refers to whether the dependent variables share a true causal relationship with the independent variables (Neuman, 2003). In the current study, the dependent variables were the outcomes of stress, and the independent variables were employee status and position. External validity, also referred to as ecological validity (Gay & Airasian, 2000, p. 372), refers to whether the findings of the study can be generalized to both events and settings beyond the study itself (Cooper & Schindler, 2003; Neuman, 2003).

Internal Validity

The literature reported that the common threats to internal validity (Cooper & Schindler, 2003; Gay & Airasian, 2000; Neuman, 2003) were (a) selection bias, (b) history, (c) maturation, (d) testing, (e) instrumentation, (f) mortality, (g) statistical regression, (h) diffusion of treatment or contamination, (i) compensatory behavior, and (j) experimenter expectancy. Each is briefly summarized in the next sections within the context of the study.

Selection bias. Selection bias is a threat that can exist if participants are not randomly selected for control and experimental groups (Cooper & Schindler, 2003; Neuman, 2003). In this quantitative cross-sectional research study, a stratified random sampling of participants was selected for each group, and no control group was used thus minimizing the threat. Members of each group exhibited similar characteristics of full-time and part-time faculty and staff members of higher education institutions in the United States, and each had an equal chance of being selected to participate in the research study (U.S. Department of Education, 2005).

History. History refers to events that are not part of the experiment or study but might affect the dependent variable (Gay & Airasian, 2000). The history threat to internal validity is most often noted in longitudinal studies or experimental studies with pre-tests and post-tests (Gay & Airasian, 2000). In the current research study, a cross-sectional design was used therefore history was not anticipated as a threat to internal validity.

Maturation. Neuman (2003) referred to maturation as some alteration within the participants such as a “biological, psychological, or emotional process” that can change over time (p. 253). Similar to the thread of history, maturation is most frequently a threat

that occurs during longitudinal studies or experiments requiring reasoning or physical ability over time, neither of which were present in the research (Gay & Airasian, 2000; Neuman, 2003). Maturation was not seen as a threat to internal validity in this research study.

Testing. Testing can be a threat to a dependent variable (Neuman, 2003). Gay and Airasian (2000) referred to the testing threat as “pretest sensitization” (p. 374). While participants received a pre-survey letter introducing them to the research, they did not receive a copy of the survey unless they were randomly selected to participate. The testing threat is most often heightened when participants are given the same test or survey and asked to recall the same factual information from pre-test to post-test (Gay & Airasian, 2000). Testing was seen as a minimal threat in the research study.

Instrumentation. The instrumentation threat refers to the potential use of unreliable or inconsistent instruments as well as improper or inconsistent procedures in the administration of instruments or observations made by researchers (Gay & Airasian, 2000; Neuman, 2003). Previous sections of the dissertation detailed the strength of the ASSET instrument as well as the data collection and analysis procedures employed for the study. Instrumentation was not seen as a threat to the research study.

Mortality. Mortality refers to whether a participant stays with a study or drops out (Gay & Airasian, 2000; Neuman, 2003). The mortality threat is most commonly associated with longitudinal studies where volunteers are utilized. The cross-sectional design nature of this study minimized the threat. Mortality was not seen as a threat to the research study.

Statistical regression. The statistical regression threat refers to participants who are selected for a study because they scored extremely high or low on tests, in particular pre-tests (Gay & Airasian, 2000). Participants for the present research study were chosen based upon their employment at an institution of higher education. They were subsequently randomly selected from that group using commonly accepted research practices for random sampling. Statistical regression was not seen as a threat to the research study.

Diffusion of treatment or contamination. Diffusion of treatment or contamination is a threat to internal validity when participants in an experiment communicate with one another and reveal their own role or circumstances in a study (Neuman, 2003). While it is possible that participants in this research study communicated with one another regarding their participation, it was not anticipated that it would be widespread due to the random nature of the selection process. Post-survey interviews or some other outside information are viewed as the primary methods to detect this threat (Neuman, 2003). Diffusion of treatment or contamination was seen as a minimal threat to the research study.

Compensatory behavior. Compensatory behavior is a threat to internal validity defined as something of value given to one person or group and not given to another with the second group learning about the first group's benefit or compensation (Neuman, 2003). In the current research study, nothing of value was offered to any participants. Compensatory behavior was not seen as a threat to the research study.

Experimenter expectancy. Experimenter expectancy is the researcher's desires that are directly or indirectly communicated with research assistants or research participants (Neuman, 2003). The fact that the researcher was known to many of the

participants in the research had been raised as a possible limitation of the study, but the researcher did not discuss the study hypothesis with any of the potential participants.

Experimenter expectancy was seen as a minimal threat to the research study.

External Validity

Gay and Airasian (2000) suggested seven major threats to external validity. They are (a) pretest-treatment interaction, (b) selection-treatment interaction, (c) multiple treatment interference, (d) specificity of variables, (e) treatment diffusion, (f) experimenter effects, and (g) reactive effects. According to Gay and Airasian, the threats are categorized as threats to the population and threats to “ecological validity” (p. 377). The stratified random sampling of participants and the quantitative cross-sectional design nature of the research study helped minimize or eliminate external validity threats. Mitigation of many of the same threats to internal validity translate into controlling factors that help to mitigate or eliminate potential external threats such as those found under experimenter effects as previously discussed. While the scientific strength of the ASSET instrument, selection of a stratified random sample, and use of the total design method for mailed surveys (Dillman, 1978) are all mitigating factors to potential threats to external validity in the research study, the limitation remains that the results cannot be statistically generalized to the entire United States population of higher education faculty and staff members. This limitation, however, is explained and mitigated in other sections of the dissertation thus preserving the external and internal validity of the study.

Data Analysis

Responses for each instrument received entered into a previously formatted database provided by the Robertson Cooper Limited Company. All data were entered and

primarily analyzed using the Statistical Package for the Social Sciences (SPSS® version 14.0) software.

Operational Definitions

Operational definitions are concrete measures of abstract concepts or how one defines and measures the variables in the study (Creswell, 2005; Neuman, 2003). In the present study, the quantitative ASSET instrument was used for measuring the independent and dependent variables. The ASSET instrument is divided into 4 major sections, and 3 of these sections are identified as either a source of stress or an effect of stress (Cartwright & Cooper, 2002). A supplementary section that collected biographical/demographic data was also captured. These sections are summarized in Table 3, and each operational definition is detailed in chapter 2 of the dissertation and fully expanded upon in the presentation of the data in chapters 4 and 5.

Table 3

Operational Definitions of ASSET Constructs—Summary of the Function of the Questionnaires (Cartwright & Cooper, 2002)

ASSET section	Source of stress	Effect of stress	Other	Measurement
Perceptions of the job	Work relationships			37 items divided into 8 subscales that measure perceptions of the job
	Work-life balance			
	Overload			
	Job security			
	Control			
	Resources & communication			
	Pay & benefits			

Table 3 (*Continued*)

Aspects of the job	Aspects of the job (job satisfaction)	
Attitudes	Perceived commitment of	9 items divided
towards the	organization to	into 2 scales
organization	employee	that
		measure
		attitudes
		towards the
		organization
	Perceived commitment of	
	employee to	
	organization	
Health	Psychological well-being	19 items
		divided into
		2 subscales
		to measure
		health

Table 3 (*Continued*)

Physical health		
Supplementary	Biographical	Does the sample represent the organization?

ASSET scores result in *sten* (standardized ten) formats. A *sten* is a standardized score based on a scale of 1-10 ($M = 5.5$, $SD = 2$). The *sten* system enables meaningful comparison to the norm group of similar ASSET data previously collected (Cartwright & Cooper, 2002). The two independent variables (i.e., employee position and status) are measured by self-reporting on the ASSET instrument. Employee position refers to faculty versus staff, and employee status refers to full-time versus part-time. The two dependent variables (i.e., self-reported levels of workplace stress and self-reported levels of job satisfaction) were measured through analysis of a combination of the 12 ASSET subscales. Workplace stress was measured by analysis of 11 ASSET subscales, each of which measured some dimension of stress. Job satisfaction was measured by the ASSET subscale of *aspects of the job*.

Primary Instrument Analysis

Analysis of the results of the ASSET data collected from the survey instruments followed a 4-step process that accompanies a review of *sten* scores for 3 of 4 areas in the ASSET instrument (Cartwright & Cooper, 2002).

Table 4

ASSET Instrument Data Analysis: Summary of Measurement (Cartwright & Cooper, 2002)

Step	Area	Sten values/other
Step 1: Investigation of biographical data		Comparison of group scores to strata
Step 2: Investigation of the effects of stress (dependent variables)	Attitudes toward the organization	<p>Comparison with other group scores in the strata shows who is under the greatest stress</p> <p>Mean < <i>sten</i> 3 = very low levels of commitment</p> <p>Mean < <i>sten</i> 4 = low levels of commitment</p> <p>Mean <i>sten</i> 4 to <i>sten</i> 7 = average</p> <p>Mean > <i>sten</i> 7 = high levels of commitment</p> <p>Mean > <i>sten</i> 8 = very high levels of commitment</p>
	Health	<p>Mean < <i>sten</i> 3 = very good health levels</p> <p>Mean < <i>sten</i> 4 = good health levels</p>

Table 4 (*Continued*)

		Mean <i>sten 4</i> to <i>sten 7</i> = average
		Mean > <i>sten 7</i> = poor health levels
		Mean > <i>sten 8</i> = very poor health
Step 3: Investigate the sources of the pressure	Perceptions of the job	Comparison of individual and group scores within the strata as well as normative data
		Mean < <i>sten 3</i> = very low levels of the stressor
		Mean < <i>sten 4</i> = low levels of the stressor
		Mean <i>sten 4</i> to <i>sten 7</i> = average
		Mean > <i>sten 7</i> high levels of the stressor
		Mean > <i>sten 8</i> = very high levels of the stressor
Step 4: Revisiting the biographical data		Group scores analyzed for trends to allow for possible intervention

The ASSET instrument has been established to have good convergent validity, which is “the extent to which a scale correlates with other measures of the same construct” (Faragher et al., 2004, p. 198), high face validity, and strong reliability as

evidenced through predominantly high Cronbach's alpha coefficients for the various ASSET factors (Faragher et al., 2004; Johnson & Cooper, 2003). A growing pool of normative data by "which organizations can 'benchmark' their performance" further supported the strong validity and high reliability coefficients, and high response rates were attributed to the shortened length of the survey instrument (Faragher et al., 2004, p. 199). In a 2005 statistical analysis of 3,808 respondents using the ASSET instrument, "a series of Cronbach's alphas were calculated for each of the questions for the 12 subscales to identify the reliability of the ASSET with these data . . . all but two factors returned coefficients in excess of 0.70" (Tytherleigh et al., 2005, p. 48).

The focus of the present research questions and hypotheses was on the potential differences in self-reported levels of stress and self-reported levels of job satisfaction between the designated strata previously discussed. There was no intention to study and attempt to explain the potential differences between the two types of colleges, Institution A as a two-year college and Institution B as a four-year college. Using SPSS[®] computer analysis software, there were additional statistical analysis including calculations of Cronbach's alphas for each ASSET subscale to gauge the internal consistency of the sample (Tytherleigh et al., 2007) and a 2 x 2 between subjects analysis of variance (ANOVA). The analysis selected for the research was consistent with the types of analysis recommended by the authors of the ASSET instrument and previous researchers who have utilized the instrument (Cartwright & Cooper, 2002; Tytherleigh et al., 2005, 2007).

Summary

Effective screening of higher education employees and employees in general within any organization is critical for initiating corrective and preventative measures to address negative stressors in the workplace. “The most common problem is that, in an attempt to provide a full risk assessment, questionnaires are extremely long and detailed” thus resulting in very poor response rates from employees in all job categories (Faragher et al., 2004, p. 191). The inconsistency with respect to the availability of valid and reliable comparative research data in the United States created confusion, a low level of predictability, and disparity in approaches for assessing and mitigating occupational stress for higher education administrators and higher education leaders in the United States and highlighted the need for the present research. In her analysis of higher education stress and strain on employees at one university in the United States, Elliott (2003) concluded, “Work and family initiatives are in the early stages of development at many institutions of higher education, and more research is needed to guide human resource policies in this arena” (p. 162).

Chapter 3 examined the selection, validity, reliability, planning, administration, and evaluation of the ASSET model survey instrument as the basis for the collection of the primary data for the research. Furthermore, chapter 3 discussed and re-emphasized this study’s research design and its appropriateness, the population and sample, the use of the ASSET instrument for the research study and the instrument’s reliability and validity. Other topics included in the chapter were the internal and external validity of the study, confidentiality, and the data collection and analysis procedures used for the administration and evaluation of the ASSET survey instrument. Chapter 4 will present

the detailed results and statistical findings elicited with the application of the research design outlined in chapter 3, which was based upon the foundation established in chapters 1 and 2.

CHAPTER 4: RESULTS

The effective screening of higher education employees and employees in general within any organization is critical for initiating corrective and preventative measures in order to address negative stressors in the workplace. Prior to the first use of ASSET, long questionnaires were utilized to conduct organizational stress screening, resulting in very poor response rates from employees in all job categories (Faragher et al., 2004, p. 191). The inconsistency of available valid and reliable comparative research data in the United States created confusion, low levels of predictability, and disparity in approaches to assessing and mitigating occupational stress for higher education administrators and higher education leaders in the United States (Elliot, 2003). The inconsistency in the data highlighted the need for the current research.

In her analysis of higher education stress and strain on employees at one university in the United States, Elliott concluded, “Nonetheless, work and family initiatives are in the early stages of development at many institutions of higher education, and more research is needed to guide human resource policies in this arena” (p. 162). The predominant focus on higher education occupational stress research in the United States has been on faculty only; full- and part-time staffs have been largely ignored (Brewer & McMahan, 2003). The purpose of the quantitative cross-sectional survey design research was to examine the potential differences between full-time and part-time faculty and staff members at two upstate New York colleges with their self-reported levels of stress and perceptions of job satisfaction.

Chapter 3 examined the selection, validity, reliability, planning, administration, and evaluation of the ASSET survey instrument as the basis for the collection of the

primary data for the research. The research design and its appropriateness were discussed, and data collection and analysis procedures were described. Chapter 4 presents the detailed results and statistical findings.

The chapter starts with a review of the data collection process with a discussion of the sample size, the characteristics of the sample, and how the sample size was determined. Next, there is a discussion of the data collection tool utilized, and the data analysis procedures are presented including how the data were gathered, analyzed, and recorded. Finally, the results and findings are presented in the context of each of the research questions and hypotheses, leading to the conclusions and recommendations found in chapter 5.

Data Collection Process

Once the appropriate institutional review boards approved the data collection proposal (see Appendix G) and related permissions were obtained, data collection began in late January 2007. This section explains the characteristics of the population and sample. The next section discusses the specific data collection process.

Population

The target population for the current study was full- and part-time higher education employees at two upstate New York colleges, and a random sample was selected from the target population. According to Creswell (2005), a sample “is a subgroup of the target population that the researcher plans to study for the purpose of making generalization about the target population” (p. 398). The sample is a small group that, if studied correctly, produces findings that can be generalized to the entire population. To survey all full-time and part-time college faculty and staff in the United

States is neither possible nor necessary. The goal of the research was to obtain data from a small, manageable, and representative group (Creswell, 2005). It was not expected that the results of the research would be fully generalizable to the overall higher education population within the United States, and this was acknowledged as a limitation of the research study.

According to the U.S. Department of Education's National Center for Education Statistics, 3,194,169 full- and part-time employees were working at both public and private U.S. colleges and universities in the fall of 2003 (U.S. Department of Education, 2005). These employees were generally categorized as professional and non-professional staff and further subdivided within each general category to more accurately reflect their job responsibilities within their institutions. Although the small population of two upstate New York colleges might not be considered representative of the entire higher education faculty and staff population of the United States, it was representative of the categories adopted by the U.S. Department of Education.

Although sampling error is a part of all research, efforts to maximize the generalizability of the study's findings to the entire population of professional and non-professional higher education employees was maximized by "hav[ing] a good sampling frame list, as large a sample from the population as possible [in light of survey constraints], use of a good instrument, and rigorous administration procedures" (Creswell, 2005, p. 360). The use of sound quantitative research methods enhanced the veracity of the results and credibility of the final conclusions and recommendations of the research. While the final sample studied cannot be scientifically generalized to the entire population of higher education employees in the United States, some commonalities

could be identified that may provide higher education leaders with a template for current action within their institutions as well as guidelines for future research.

The target population of two upstate New York colleges ($N = 1,084$) and the random sample selected from within that population is small in comparison to the overall United States population of higher education faculty and staff categories since it represents only .031% of 3,194,169. The characteristics of the target population selected for the present study closely represented the greater population. The population of full- and part-time higher education faculty and staff at the two upstate New York colleges in this study possess similar characteristics to those of other faculty and staff at institutions of higher education in the U.S. already established by the United States Department of Education (U.S. Department of Education, 2005).

Sampling

The data were collected from a preprinted paper form completed by randomly selected voluntary participants drawn from the target population at the two colleges. A stratified sample including self-reported faculty full-time and faculty part-time and staff full-time and staff part-time was randomly selected from the target population (Creswell, 2005). Neuman (2003) stated that “researchers use stratified sampling when a stratum of interest is a small percentage of a population and random processes could miss the stratum by chance” (p. 233). In the colleges selected for the research, faculty and staff were not equally proportioned across both institutions (see Table 5), and without stratified sampling it is possible that one group might be over- or under-represented. Table 4 further reflects the actual stratified random sample selected with the response from each group and the respective percentages for each group against the population .

The ASSET surveys were uniformly mailed to 60% of the initial population of each group. A 4.4% error level at 90% confidence was achieved or a 5.2% error level at 95% confidence (Creswell, 2005; Gay & Airasian, 2000; Neuman, 2003). Each institution was asked to provide a spreadsheet containing the name, preferred mailing address including the potential participants' city, state, and zip code, email address, and the group they belonged to. The email addresses were incomplete, so they were not used and were ultimately discarded from the final master database. No other information on the members of each group was collected.

Table 5

Stratified Sampling of Faculty and Staff – Profile (n = 227)

Category	Population (N = 1,084)	Mailed (60%)	Response (raw)	Response %	Response % vs. Population
Strata					
Academic – faculty full-time	215	129	46	35.66	21.40
Academic – faculty part-time	248	149	51	34.27	20.56
Staff – full-time	515	309	114	36.89	22.14
Staff – part-time	106	64	16	25.16	15.09
Total	1084	644*	227	35.25	20.94

*651 were mailed, 644 were
successfully mailed (were not
returned)

The stratified random sample was drawn through a 3-step process. First, a table of random numbers was generated using the random numbers generator contained within Microsoft EXCEL[®]. Next, each member of each group, as provided by the human

resource office at each participating institution, was assigned a number within the maximum for the group. Finally, using the table of random numbers, the sample was drawn for each group, the random sampling was complete, and final data collection was ready to begin.

Data Collection Tools

The sole data collection tool used was the paper and pencil version of the ASSET survey instrument. While a web-based (computerized) ASSET product was available, this alternative was not an affordable option. Administration of the ASSET survey instrument was dictated by procedures outlined in the ASSET Management Guide (Cartwright & Cooper, 2002). The ASSET instrument was purchased from the Robertson-Cooper Company and non-core scale areas were tailored to this research study. The 12 core scales of the ASSET instrument were not modified in any manner in order to insure the validity and reliability of the results as intended under the original instrument design. The final version of the ASSET instrument was approved for use by the Robertson-Cooper Company, in addition to being reviewed by the various institutional review boards affiliated with the present research study. Surveys were returned in sealed envelopes to a pre-determined post office box, recorded, and stored in a vault pending pick-up. Only the researcher retrieved and opened survey related envelopes after delivery to the post office box.

Data Analysis Procedures

The process of data analysis was supervised by a team of seven including the researcher, the researcher's committee of three members, a committee alternate/reader, a content expert statistician familiar with the ASSET instrument, and a professor known to

the researcher. The professor has an extensive background in statistical analysis of the type utilized in the research study. The primary analysis and interpretation team consisted of the researcher, the content expert statistician, and the professor with an extensive statistical analysis background. All analysis was conducted on self-reported data collected from the study participants who completed the ASSET survey instrument and who completed the informed consent section contained on the first page of the ASSET survey instrument. Surveys returned that did not have the informed consent section completed ($n = 4$) were discarded through cross shredding.

Data Gathering and Recording

The researcher alone collected the survey instruments from the mail house assisting in the data collection process, and the researcher alone opened envelopes. Each survey was assigned an ascending case number that corresponded to the entry into the computerized database housing the raw data. Each survey was then entered into a pre-formatted SPSS[®] version 14.0 database. The Robertson-Cooper Company constructed the database in SPSS[®] to allow for analysis of the core scale elements of ASSET.

The Robertson-Cooper Company modified the database to allow for inclusion of supplemental and biographical data indigenous to the present research study. The modification of the database did not alter the core scales of the ASSET survey instrument. The return envelopes were destroyed through cross shredding and the hard copies of the surveys entered into the database were stored in a locked case whose combination was known only to the researcher. The SPSS[®] database with all recorded raw data was maintained on a password-protected computer and shared only with the research team.

Data Triangulation and Accuracy

Data triangulation is the process of making observations from multiple points of view and is most commonly associated with qualitative research involving interviews, visual observations, or written comments provided by research participants (Creswell, 2005; Gay & Airasian, 2000; Neuman, 2003). Neuman suggested there are four types of data triangulation: (a) triangulation of measures, (b) triangulation of observers, (c) triangulation of theory, and (d) triangulation of method. Triangulation of measures was used for the research study. This method of triangulation allows for researchers to take “multiple measures of the same phenomenon” or see similar test scores emerge from the same participants (Neuman, 2003, p. 138). In the present research study, participant data represented by both the aggregate means and Cronbach’s alphas of the 12 ASSET subscales were triangulated against both a general population and higher education specific ASSET normative database. Using the two measures of aggregate means and high Cronbach’s alphas for the 12 ASSET subscales produced results that were found to be comparable to the general population and the higher education specific normative data used to calculate the triangulation.

Data accuracy was insured through a pre-established double review process for each survey returned. All data were entered into the SPSS[®] database by the researcher only. A master ASSET survey instrument was coded in the database, consistent with the survey items. A research assistant read individual responses to the researcher who entered the corresponding number in the database. The researcher then reviewed and compared results a second time, confirming the research assistant’s interpretation of the data on each survey instrument. At the conclusion of the data entry process, the researcher

selected 50 random surveys and re-checked them against the entered data. No errors in entry were detected.

Findings

The purpose of the quantitative cross-sectional survey design research was to examine the potential differences between full-time and part-time faculty and staff members at two upstate New York colleges and their self-reported levels of stress and the perceptions of job satisfaction. The overall response rate for the study (see Table 5) was 35.25% or 227 acceptable responses out of 644 successfully mailed surveys to the original stratified random sample of self-reported full-time and part-time faculty and staff members. This section first presents the overall descriptive statistics for each of the 12 subscales in the ASSET instrument, including the means and standard deviation for each subscale. Next, a series of Cronbach's alphas are presented to support the reliability of the ASSET instrument in the context of the data specific to the research study. Finally, the results of the ANOVA test in the context of each research question are presented.

Descriptive Statistics

Table 6 displays descriptive data for each of the ASSET 12 core subscales, including the mean, standard deviation, and ASSET sten (i.e., standardized ten) score conversion used for further analysis. ASSET scores result in sten formats. A sten is a standardized score based on a scale of 1-10 ($M = 5.5$, $SD = 2$). The sten system enables meaningful comparison to the norm group of similar ASSET data previously collected (Cartwright & Cooper, 2002). Higher education ASSET norm group data mean statistics provided by the Robertson-Cooper Company have been included to support the similar findings of the current research study and are noted as *UK only*. Detailed comparisons in

the data collected and the higher education norms were not performed. Only an aggregate comparison of the sten scores was performed to support potential future research.

Table 6

Core Descriptive Statistics – 12 Scales of ASSET (n = 227)

ASSET Subscale	Norm Mean			
	Mean (n = 227)	(N = 4776; UK Only)	SD (n = 227)	STEN (n = 227)
Work Relationships	17.65	20.57	7.231	3
Work Life Balance	10.38	11.56	4.399	2
Overload	10.37	12.02	4.405	4
Job Security	10.70	11.97	4.052	3
Control	11.29	13.00	4.936	2
Resources & Communication	10.22	12.80	4.081	1
Aspects of the job	20.17	22.93	5.756	2
Pay & Benefits	3.77	3.48	1.685	7
Commitment to employee	22.50	16.82	5.010	9
Commitment to Organization	18.48	18.76	4.204	8
Physical Health	12.83	13.58	3.944	3
Psychological Wellbeing	19.95	23.69	6.923	1

Although the sample for the overall research study was $n = 227$, some of the surveys returned were incomplete. In the case of missing data, SPSS® created a *listwise exclusion* and discarded the entire case for consideration of the particular analysis where data needed for the calculation were omitted. The means and standard deviations yielded

results consistent with previous ASSET research and both the higher education and general population norms of all ASSET data (Tytherleigh et al., 2005, 2007).

The aggregate results of the strata compared to normative higher education data from the UK suggest low to very low levels of stress in the analysis of the employees' perceptions of the job subscales of work relationships, work-life balance, overload, job security, control, resources, and communications and aspects of the job. High levels of stress were associated with the pay and benefits subscale while, as a group, faculty and staff reported very low levels of stress and subsequently high job satisfaction. The aspects of job subscale that most closely correlate to a measure of job satisfaction did, however, produce one of two lower than acceptable Cronbach's alpha scores (0.643). This finding is consistent with previous research (Tytherleigh et al., 2005). The data further suggest that members of the group had a very high level of employee commitment to the organization and a very high perception of the organization commitment to the employees. Finally, the data suggest that members of the group reported good levels of physical health and very good levels of psychological well-being.

Reliability of ASSET

Cronbach's alphas for reliability were calculated using SPSS® version 14.0 (see Table 7). The data suggest good reliability of the ASSET model for this sample with all but 2 subscale coefficients exceeding 0.70. The results are consistent with current and germinal literature in the use of the ASSET instrument (Faragher et al., 2004; Tytherleigh et al., 2005, 2007).

Table 7

Cronbach's Alphas for 12 ASSET Subscales

ASSET Subscale	Cronbach's Alphas (current sample)	Cronbach's Alphas (Tytherleigh et al., 2005)	Cronbach's Alphas (Tytherleigh et al., 2007)
Work Relationships	0.85	0.84	0.89
Work Life Balance	0.73	0.64	0.72
Overload	0.80	0.82	0.82
Job Security	0.63	0.84	0.63
Control	0.86	0.61	0.84
Resources & Communication	0.73	0.73	0.73
Aspects of the job	0.64	0.74	0.63
Pay & Benefits	-	-	-
Commitment to employee	0.84	0.82	0.83
Commitment to Organization	0.84	0.75	0.78
Physical Health	0.76	0.82	0.78
Psychological Wellbeing	0.92	0.75	0.90

General Linear Model Analysis – ANOVA

The purpose of this section is to present the results of the 2 x 2 between subjects analysis of variance (ANOVA) conducted for each of the 12 ASSET subscales that represent measures of workplace stress and job satisfaction. Results are displayed for each of the ASSET subscales where significance was observed and include a table of means, and results of the ANOVA. Results where significance was not observed are displayed in Appendix H. Additional testing where significance was observed was not conducted, however, as the intent of this study was only to identify the threshold differences that would allow for additional research to mitigate and correct identified problem areas. Additional interpretation is found in chapter 5. An alpha level of .05 was used for all statistical tests.

Table 8

Table of Means – Overload

Position	Faculty	Staff	Total
<hr/>			
Status			
Full-time	11.02	11.45	11.33
Part-time	7.94	8.47	8.06
Total	9.37	11.10	10.37

Table 9

ANOVA Results - Overload

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	17.83	.001
Position	1	.49	.51
Status*Position	1	.005	.94
Error	218		
Total	221		

With an alpha level of .05, the effect of status was statistically significant, $p = .001$ for the ASSET subscale of overload. The effect of position, $p = .51$, or the interaction between status and position, $p = .94$, was not statistically significant.

Table 10

Table of Means – Job Security

Position	Faculty	Staff	Total
Status			
Full-time	9.19	10.36	10.04
Part-time	12.84	10.33	12.26
Total	11.17	10.35	10.70

Table 11

ANOVA Results – Job Security

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	7.31	.007
Position	1	.998	.32
Status*Position	1	7.50	.007
Error	215		
Total	218		

With an alpha level of .05, the effect of status and the interaction between status and position was statistically significant, $p = .007$ for each effect, for the ASSET subscale of job security. The effect of position, $p = .32$, was not statistically significant.

Table 12

Table of Means – Resources and Communications

Position	Faculty	Staff	Total
Status			
Full-time	10.72	10.64	10.66
Part-time	9.18	9.06	9.15
Total	9.90	10.45	10.22

Table 13

ANOVA Results – Resources and Communications

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	5.15	.02
Position	1	.02	.88
Status*Position	1	.001	.98
Error	218		
Total	221		

With an alpha level of .05, the effect of status was statistically significant, $p = .02$ for the ASSET subscale of resources and communications. The effect of position, $p = .88$, or the interaction between status and position, $p = .98$, was not statistically significant.

Table 14

Table of Means – Pay and Benefits

Position	Faculty	Staff	Total
Status			
Full-time	3.93	3.95	3.94
Part-time	3.45	3.06	3.36
Total	3.67	3.84	3.77

Table 15

ANOVA Results – Pay and Benefits

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	5.87	.02
Position	1	.44	.51
Status*Position	1	.51	.47
Error	221		
Total	224		

With an alpha level of .05, the effect of status was statistically significant, $p = .02$ for the ASSET subscale of pay and benefits. The effect of position, $p = .51$, or the interaction between status and position, $p = .47$, was not statistically significant.

Table 16

Table of Means – Psychological Well-Being

Position	Faculty	Staff	Total
Status			
Full-time	20.00	20.88	20.63
Part-time	18.50	17.88	18.35
Total	19.20	20.50	19.95

Table 17

ANOVA Results – Psychological Well-Being

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	3.75	.05
Position	1	.01	.91
Status*Position	1	.42	.52
Error	216		
Total	219		

With an alpha level of .05, the effect of status was statistically significant, $p = .05$ for the ASSET subscale of psychological well-being. The effect of position, $p = .91$, or the interaction between status and position, $p = .52$, was not statistically significant. Though not less than the established alpha for this research study, the probability value equal to alpha does yield statistical significance.

Table 18

Table of Means – Aspects of the Job (Measure of Job Satisfaction)

Position	Faculty	Staff	Total
Status			
Full-time	20.23	21.18	20.92
Part-time	18.26	18.94	18.42
Total	19.17	20.90	20.17

Table 19

ANOVA Results – Aspects of the Job (Measure of Job Satisfaction)

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	4.822	.03
Position	1	.717	.40
Status*Position	1	.020	.89
Error	216		
Total	219		

With an alpha level of .05, the effect of status was statistically significant, $p = .03$ for the ASSET subscale of aspects of the job. The effect of position, $p = .40$, or the interaction between status and position, $p = .89$, was not statistically significant.

The purpose of the following section is to present the findings in the context of each research question and hypothesis for the outcome of each item. Further discussion will be presented in chapter 5 regarding the items that were found to be significantly different. ASSET is designed to identify specific potential sources and outcomes of stress and does not yield a single score for level of workplace stress. Rather, the criteria for the measure of workplace stress is indicated in the current study by significant differences observed in one or more sources or outcomes of stress identified in 11 of ASSET's subscales, each measuring some dimension of stress. A finding of statistical significance for one or more of the subscales would allow for the specific null hypothesis to be rejected. The criteria for the measure of job satisfaction are indicated in the current research by a significant difference observed in the Aspect of the Job ASSET subscale. A

finding of statistical significance for this subscale would allow for this specific null hypothesis to be rejected. An observation of statistical significance in one or more of the 12 ASSET subscales supports the multi dimensional nature of stress as found in the literature (Tytherleigh et al., 2005, 2007).

Research question and hypothesis #1. Research Question #1 stated, “Does a statistically significant difference exist between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?” The corresponding statement of Null Hypothesis #1 was H_01 : No statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The Alternative Hypothesis #1 was H_a1 : A statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

No statistically significant difference was found between employee positions (i.e., faculty versus staff) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The null hypothesis was not rejected.

Research question and Hypothesis #2. Research Question #2 stated, “Does a statistically significant difference exist between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?”

The corresponding statement of Null Hypothesis #2 was H_02 : No statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The Alternative Hypothesis #2 was H_a2 : A statistically significant difference exists between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

A statistically significant difference was not found between employee position (i.e., faculty versus staff as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The null hypothesis was not rejected.

Research question and Hypothesis #3. Research Question #3 stated, “Does a statistically significant difference exist between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?” The corresponding statement of Null Hypothesis #3 was H_03 : No statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The Alternative Hypothesis #3 was H_a3 : A statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher

education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

A statistically significant difference was found between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The null hypothesis was rejected.

Research question and Hypothesis #4. Research Question #4 stated, “Does a statistically significant difference exist between employee status (full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?” The corresponding statement of Null Hypothesis #4 was H_04 : No statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The Alternative Hypothesis #4 was H_a4 : A statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

A statistically significant difference was found between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The null hypothesis was rejected.

Research question and Hypothesis #5. Research Question #5 stated, “Does a statistically significant interaction exist between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?” The corresponding statement of Null Hypothesis #5 was H_05 : No statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The Alternative Hypothesis #5 was H_a5 : A statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

A statistically significant interaction was found between employee position and employee status as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The null hypothesis was rejected.

Research question and Hypothesis #6. Research Question #6 stated, “Does a statistically significant interaction exist between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?” The corresponding statement of

Null Hypothesis #6 was H_06 : No statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The Alternate Hypothesis #6 was H_{a6} : A statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

A statistically significant interaction was not found between employee position and employee status as categories of employees in higher education institutions in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The null hypothesis was not rejected.

Summary

Occupational stress screening of higher education faculty and staff members is not prevalent within the United States. It is needed in order to provide higher education leaders with an inventory of potential predictive characteristics of occupational stress (Beam et al., 2003; Fisher, 1994). The purpose of the quantitative cross-sectional survey research was to examine the potential differences between full-time and part-time faculty and staff members at two upstate New York colleges and their self-reported levels of stress and the perceptions of job satisfaction. Data were collected at two upstate New York colleges using the paper and pencil version of the ASSET shortened stress evaluation tool ($n = 227$).

Through analysis of the data for 12 ASSET subscales, each measuring some dimension of stress, it was found that 6 of the 12 scales yielded statistically significant results. The 6 ASSET subscales are (a) overload, (b) job security, (c) resources and communication, (d) pay and benefits, (e) psychological well-being, and (f) aspects of the job (i.e., job satisfaction). The ASSET subscale of job security yielded the most significant differences in both status and employee position. Statistical analyses were consistent with germinal and current literature (Cartwright & Cooper, 2002; Tytherleigh et al., 2005, 2007).

Chapter 4 briefly restated and provided a detailed examination of the data collection processes, including a discussion of the sample size, the characteristics of the sample, and how the sample size was determined. The data collection tool utilized was discussed along with the data analysis procedures, including how the data were gathered, analyzed, and recorded. Finally, the results and findings were presented in the context of each of the research questions and hypotheses. Chapter 5 will present a further analysis of the data presented in chapter 4 in the context of four major discussion areas: (a) the significant research study questions and hypotheses, (b) conclusions, (c) implications of the findings, and (d) future recommendations.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Whether employees experience positive or negative stress, it is important to put into place appropriate workplace mechanisms to identify and manage workplace stressors and ensure employee job satisfaction and productivity that (Faragher et al., 2004; Love & Edwards, 2005). AbuAlRub (2004) held that “stress is a contributing factor to organizational inefficiency, high staff turnover, absenteeism because of sickness, decreased quality and quantity of care, increased costs of health care, and decreased job satisfaction” (¶ 1). Ogan and Chung (2003) suggested that, while technology (i.e., cell phones, pagers, computers, and personal data assistants) were expected to bring time savings and efficiencies to the workplace, they have produced increased stress rather than increased productivity. Ogan and Chung further suggested that there no longer exists a separation between the workplace and leisure activities thus yielding a 24-hour-a-day work mindset and further adding to occupational stress.

Occupational stress screening of higher education faculty and staff members is not prevalent within the United States and is needed to provide higher education leaders with an inventory of potential predictive characteristics of occupational stress (Beam et al., 2003; Brewer & McMahan, 2004; Fisher, 1994). Research regarding higher education faculty and staff has been concentrated in the United Kingdom, New Zealand, and Australia (Fisher, 1994; Tytherleigh et al., 2005, 2007). No documented research could be found in the United States that examined the potential differences between occupational stressors in the higher education workplace with respect to levels of stress and self-reported perceptions of job satisfaction among full-time and part-time faculty and staff members.

In all organizations, identifying employees who are in trouble and prone to stress and workplace violence is higher education leaders' responsibility (Kaupins et al., 2005). The quantitative cross-sectional survey design research examined the differences between full-time and part-time faculty and staff members and the levels of stress and the self-reported perceptions of job satisfaction among 227 faculty and staff members at two upstate New York colleges. Through the administration of the ASSET shortened stress evaluation instrument to a stratified random sample, significant differences were found in the self-reported levels of stress from specific sources and self-reported levels of job satisfaction for employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time) at two upstate New York colleges.

From the outset, it was acknowledged that the study would be subject to the following limitations:

1. Only individuals who agreed to participate voluntarily would be surveyed.
2. A limited population and the limited time available to conduct the research might have reduced the data set.
3. Convenience sampling does not provide the same power of generalizability as random sampling, but the target population was known to exhibit similar characteristics to other populations employed by higher education institutions within the United States (Gay & Airasian, 2000).
4. Data were collected from participants by means of self-reporting of responses, a procedure known to produce bias.
5. Some of the participants might have known the researcher and might have positive or negative feelings that might have affected their responses.

6. The quantitative cross-sectional research design might have had the inherent limitation that the participants' mindset at the specific time the survey was completed might have caused outlier-type responses related to the respondents' emotional disposition during survey completion.

Chapter 4 briefly restated and provided a detailed examination of the data collection processes, including a discussion of the sample size, the characteristics of the sample, and how the sample size was determined. Data collection processes were examined in detail, including a discussion of the sample size, the characteristics of the sample, and how the sample size was determined. The data collection tool utilized was discussed, along with the data analysis procedures including how the data were gathered, analyzed, and recorded. Finally, the results and findings were presented in the context of each of the research question and hypotheses. The purpose of chapter 5 is to present a broader analysis of the data presented in chapter 4 in the context of three major discussion areas: (a) interpretation of the significant findings in the context of the research study questions and hypotheses, (b) implications of the findings in the area of educational leadership, and (c) recommendations for future research.

Research Study Questions and Hypotheses: Interpretation of the Findings

Chapter 4 briefly presented the outcome of each research question and hypothesis in the context of the presentation of the results. The purpose of the following section is to present a broader interpretation of the findings in the context of each statistically significant research question and hypothesis. There will also be a discussion of the significance of the findings to higher education employees, employers, and managers.

Table 20

Summary Table of Main Effect and Interaction Significance

Independent Variables	Employee Status (full-time vs. part- time)	Employee Position (faculty vs. staff)	Interaction of Status and Position
ASSET Subscales			
Dependent Variables: Perceived Stress (11)			
Work Relationships	.08	.58	.36
Work Life Balance	.06	.98	.52
Overload	.001*	.51	.94
Job Security	.007*	.32	.007*
Control	.17	.76	.19
Resources & Communication	.02*	.88	.98
Pay & Benefits	.02*	.51	.47
Commitment to employee	.94	.12	.74
Commitment to Organization	.80	.08	.81
Physical Health	.16	.07	.61

Table 20 (*Continued*)

Psychological			
Wellbeing	.05*	.91	.52
Dependent Variable:			
Job Satisfaction (1)			
<hr/> Aspects of the Job	.03*	.40	.52
<hr/>			

Research question and hypothesis #3. Research Question #3 stated, “Does a statistically significant difference exist between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?” The corresponding statement of null hypothesis #3 was H_{03} : No statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The Alternative Hypothesis #3 was H_{a3} : A statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

A statistically significant difference was found between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The null hypothesis was rejected.

Part-time employees indicated significantly higher levels of stress in terms of their job security while full-time employees indicated higher levels of stress due to work overload, poor resources and communication and lower pay and benefits. There was a suggestion in chapter 2 that job security can be approached from two primary perspectives as they relate to occupational stress. One perspective relates to whether one will have a job. The other relates to one's job becoming obsolete because of changes within the organization (Cartwright & Cooper, 2002; Tytherleigh et al., 2005).

The fluid nature of part-time positions for faculty or staff might explain the heightened significance in terms of stress of the job security dimension (see Tables 10 & 11). The data further suggest that full-time employees are clearly more stressed than their part-time counterparts in terms of overload (see Table 8), poor resources and communications (see Table 12), pay and benefits (see Table 14), and psychological well-being (see Table 16). These findings further support the multi-dimensional nature of the levels of stress expressed by the participants in the study and in the normative sample (Tytherleigh, et al., 2005).

Research question and hypothesis #4. Research Question #4 stated, "Does a statistically significant difference exist between employee status (full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges?" The corresponding statement of null hypothesis #4 was H_04 : No statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The Alternative

Hypothesis #4 was H_{a4} : A statistically significant difference exists between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges.

A statistically significant difference was found between employee status (i.e., full-time versus part-time as categories of employees in higher education institutions) in the United States with respect to their self-reported levels of job satisfaction at two upstate New York colleges. The null hypothesis was rejected.

The criteria for the measure of job satisfaction are indicated in the current research by a significant difference observed in the Aspect of the Job ASSET subscale. A finding of statistical significance for this subscale allowed for this specific null hypothesis to be rejected. Full-time employees indicated that they were less satisfied (more dissatisfied) with their jobs than part-time employees (see Table 18), though slightly more satisfied, but not significantly more satisfied, with their jobs overall compared to the normative higher education data. In particular, full-time staffs were less satisfied than part-time faculty. This might be attributed to the inherent nature of a part-time position where part-time employees have detached themselves from the organization and are not subjected to the stressors of full-time employment (M. Tytherleigh, personal communication, April 12, 2007). However, job satisfaction should not be viewed in isolation. Though a significant difference was only observed between employee status of full-time versus part-time, the other corresponding stressors identified (i.e., overload, resources and communication, job security and pay and benefits, and psychological well-being) indicate that human resource managers and higher education leaders should be

concerned about increased workload. These findings parallel the multi-dimensional nature of stress suggested by Tytherleigh et al. (2005):

A negative impact from ongoing changes in universities is now being reported in relation to academics' productivity, as well as their health, well-being, and levels of stress and tension. Increased numbers and diversity of students, new teaching modalities and unrealistic deadlines have left many staff feeling disconnected from their institutions and unwilling to exert extra effort on their behalf. (p. 44)

Research question and hypothesis #5. Research Question #5 stated, "Does a statistically significant interaction exist between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges?" The corresponding statement of null hypothesis #5 was H_{05} : No statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The alternative hypothesis #5 was H_{a5} : A statistically significant interaction exists between employee position (i.e., faculty versus staff) and employee status (i.e., full-time versus part-time), as categories of employees in higher education institutions in the United States with respect to their self-reported levels of workplace stress at two upstate New York colleges.

A statistically significant interaction was found between employee position and employee status as categories of employees in higher education institutions in the United

States with respect to their self-reported levels of workplace stress at two upstate New York colleges. The null hypothesis was rejected.

Though this research study only showed a statistically significant interaction in the ASSET subscale of job security, differences are worthy of discussion in other subscales measuring dimensions of stress. While part-time employees, and in particular part-time faculty members, feel less secure in their jobs (see Table 10), full-time staff also feels less secure than their full-time academic counterparts. Staff as a whole (full-time and part-time) indicated higher levels of stress in regards to inadequate resources and communication, pay and benefits, and overload.

Measures for employee position refer to differences, if any, between faculty and staff as an aggregate at both institution A and institution B. The measure for the dependent variable of levels of workplace stress is comprised of an analysis of 11 of 12 separate subscales, each of which measures some dimension of stress. Though less stressed overall as compared only to the higher education normative data collected in the United Kingdom, the data suggest that in the current research study, staffs are significantly more stressed than faculty in 3 of 4 subscales where significance was achieved (overload, resources and communication, and pay and benefits).

The finding of overload as a significant stressor for faculty and staff (i.e., employee position) might add clarity to inconsistent literature in the United States regarding this source of stress. Work overload in higher education institutions in the United Kingdom and Australia “are among the most frequently reported stressors” (Tytherleigh et al., 2005, p. 56). The findings of the current research study in the area of overload confirm the similarity found in other literature and might encourage human

resource managers and higher education leaders to devote particular attention to mitigating this stressor. Only in job security were faculty more stressed than staff. Though not significant, both faculty and staff indicated high levels of commitment to their institutions and perceived high levels of commitment from their organizations to them as employees. These data indicate that human resources managers and higher education leaders should focus energies to mitigate these stressors for full-time staff.

Implications of the Findings to Educational Leadership

Chapters 1 and 2 of the dissertation form the foundation for the importance of stress research in general and in particular the need for stress research in higher education. It is a leaders' role to mitigate stress in the workplace. Higher education leaders should seek to proactively use the results of occupational stress research and related studies to produce meaningful change for employees within their organizations (Tytherleigh et al., 2005). Establishing appropriate occupational stress interventions in higher education will not necessarily be done across most higher education organizations; rather "each [higher education institution] must take on responsibility for ensuring a healthy work environment" (p. 58). Ensuring a healthy work environment requires leadership at all levels of an organization. Higher education leaders should use their diverse skills to identify and predict occupational stressors, commit the necessary resources, and clearly show their long-term support for these efforts (Kalimo et al., 2003; Tytherleigh et al., 2005).

Implications for the Population

The results of the research study cannot be generalized to the full population of higher education full-time and part-time faculty and staff in the United States. This was a

limitation in terms of the stratified random sample and of the cross-sectional nature of the research. According to the U.S. Department of Education's National Center for Education Statistics, 3,194,169 full- and part-time employees were working at both public and private U.S. colleges and universities in the fall of 2003 (U.S. Department of Education, 2005). These employees were generally categorized as professional and non-professional staff and further subdivided within each general category to more accurately reflect their job responsibilities within the institution.

The characteristics exhibited by the stratified random sample in the present research study are similar to those exhibited by full-time and part-time faculty and staff members at institutions of higher education throughout the United States (U.S. Department of Education, 2005). The selection of members with similar characteristics to the sample described by the U.S. Department of Education permits future larger studies of a similar nature to be conducted, replicating the methodology and research procedures and instruments employed in the present research study (Su, 2006). The data collected and analyzed in the present study might be a model for future research with similar populations on the topic of occupational stress in higher education.

Full-time Versus Part-time and Leadership

The most significant outcome of the research study might be the differences yielded in employee status (i.e., full-time versus part-time). Previous studies discussed in the literature review did not examine the independent variable of employee status in the context of higher education occupational stress. The data in the current study suggest that both institutions that participated, the comprehensive 2-year community college and the 4-year institution, rely heavily on part-time employees, in particular part-time faculty

members. Overall, 54% of the faculty at both institutions is part-time while 59% is part-time faculty at institution B (comprehensive 4-year college).

The data further suggest significant differences in the six important areas of (a) overload, (b) job security, (c) resources and communication, (d) pay and benefits, (e) psychological well-being, and (f) job satisfaction. One could conclude from the data and trends observed from this research study that any effort to mitigate stress at either institution A or institution B should begin with part-time faculty members and focus on the six ASSET subscales listed above. The finding is significant and might provide human resource managers and higher education leaders with an immediately actionable inventory of stressors to consider and further explore with the part-time faculty population.

Additionally, 28% of the stratified random sample did not know whether employee assistance programs (EAPs) were available through their institution and four part-time faculty members offered comments that they did not believe EAP services were offered to part-time employees. Institution A does not presently offer an EAP program. Institution B offers an EAP program, and part-time employees are permitted to utilize the services. One could conclude, however, that better resources and communication to all populations, but in particular part-time faculty and staff, is another mitigating step that human resource managers and higher education leaders could take.

Recommendations for Future Research

Faragher et al. (2004) stated that the use of ASSET is the first stage of a possible 2-stage assessment process in which the second stage is a more in-depth analysis using the first stage's results as a foundation for further analysis. Ideally, stress evaluation

should be undertaken in a longitudinal study (Cartwright & Cooper, 2002; Olsen, 1993). The dynamics of organizations, in particular universities, are always changing. Those same dynamics are also always changing for the employees within those organizations. Faragher et al. (2004) described how the use of ASSET is the first stage of a possible two-stage organizational stress screening process, in which the second stage should be a more in-depth analysis using the first stage's results as the foundation for further study. The results of this study using ASSET have provided the first stage of the organizational stress screening process, the second stage of which now needs to be addressed (M. Tytherleigh, personal communication, June 21, 2007). For this reason, additional analysis was not conducted where statistical or marginal significance was observed.

Recommendations

The current research might provide the first stage of analysis for higher education institutions within the United States. The findings yield several recommendations. Occupational stress is multi-dimensional (Tytherleigh, et al., 2005). The data suggest that higher education human resource managers and leaders should seek to isolate crucial dimensions of stress and implement efforts to mitigate their sources and provide a balanced work environment in order to retain good employees. The data in the current study support this conclusion, which is further supported in current and germinal literature (Cooper & Cartwright, 2002, Olsen, 1993; Tytherleigh et al., 2005, 2007).

Higher education leaders and human resource managers might use the results of the present research to take immediate action within their higher education organization. Higher education leaders and human resource managers can make meaningful change within their organizations, either through the future administration of ASSET within their

organization to yield institution level data or through the use of the findings of the present research study and comparable studies.

Future Research

Additional research is needed in the field of occupational stress in higher education in the United States. At the beginning of the research, the lack of studies on the topic in the United States was identified and determined as a factor in the significance of the problem. Each of the 12 ASSET subscales measures some dimension of stress. By design, ASSET is the beginning of the process of organizational stress screening.

The ASSET instrument utilized in the study (see Appendix C) contains 105 questions, and each question has multiple data points of information that were not utilized for the current research. The purpose of the research was to examine the potential differences in the self-reported levels of stress and self-reported levels of job satisfaction in the context of full-time and part-time faculty and staff only. Research conducted in the United Kingdom using ASSET while this research was in progress in the United States suggested future research that is needed in the area of gender differences in higher education institutions (Tytherleigh et al., 2007). In Europe, Australia, and New Zealand, the ASSET instrument had been established to have good convergent validity, (Faragher et al., 2004, p. 198), high face validity, and strong reliability as evidenced through predominantly high Cronbach's alpha coefficients for the various ASSET factors (Faragher et al., 2004; Johnson & Cooper, 2003). Strong validity and high reliability coefficients are further supported by a growing pool of normative data with "which organizations [could] 'benchmark' their performance" (Faragher et al., 2004, p. 199). Furthermore, Faragher et al. attributed high response rates to the short length of the

survey instrument. The use of ASSET in the United States for this research might lead to its use in additional comparative studies. Future studies might contribute to the establishment of a worldwide standard to determine stress thresholds for use in higher education organizational stress screening.

Further research is needed that might yield the development of a higher education stress inventory predicated on the growing normative database of ASSET data that continues to build on foundational research in the United States and around the world. The current research might provide higher education institutions in the United States with a benchmark from which they could begin to compare themselves, though each institution is culturally different from the next. The cross-sectional nature of the ASSET instrument is limited compared to the preferred longitudinal approach to organizational stress, yet the rapidly evolving nature of higher education delivery systems (e.g., ground campuses, online education, other emerging technologies) requires further research and expansion of the ASSET supplemental questions to more effectively measure these emerging technologies and higher education delivery systems.

Summary

The lack of stress related scientific research in the United States and perhaps around the world might be due to a false belief that higher education employees, specifically faculty members, are not in a stressful environment and that work overload is not an issue of concern or worthy of scholarly research (Collins & Parry-Jones, 2000). The current study might have contributed to demonstrating that higher education employees not only experience significant levels of stress in at least the five dimensions identified in the study but also that there are significant differences in stress levels

between full-time and part-time faculty and staff members as well. Collins and Parry-Jones stated,

In the past and to some extent the present, academic life may have been perceived as involving considerable privileges, with conditions of employment and hours of work allowing opportunity for flexibility. The lecturer [faculty member] may be viewed as a fortunate person who does not “get their hands dirty,” plays with theory, reads, writes, enjoys long lunch hours, late starts, early finishes and long holidays. This stereotype of academic life, however, is likely to be false. For around twenty years universities have experienced substantial cuts in their resources, whilst student numbers have expanded. From the mid-1980’s to the mid-1990s the number of university students increased by 64 percent while the number of teaching staff only increased by 11 per cent. (p. 771)

Del Favero (2005) further suggested, “Academic and administrative cultures are two separate and, in many aspects, competing domains. Put differently, faculty and administrators are known to hold different implicit models of their work environment. Faculty value scholarship while administrators value organizational efficiency and accountability” (p. 71). The research study examined a stratified random sample of 227 higher education full-time and part-time faculty and staff members through the administration of a statistically sound survey instrument, ASSET, a shortened organizational stress screening tool.

The data show significant differences in the area of employee status (i.e., full-time versus part-time) in 6 of 12 dimensions of stress that are (a) overload, (b) resources and communication, (c) job security, (d) pay and benefits, (e) psychological well-being, and

(f) job satisfaction (aspects of the job in the ASSET instrument). The present research was the first study in the United States to use the ASSET shortened stress evaluation instrument for the purpose of collecting data about employee status and employee position in higher education institutions. Higher education leaders and human resource managers might use the findings to isolate the full-time and part-time groups and dimensions of stress in order to immediately engage in efforts to create a less stressed, more satisfying, and well-balanced higher education work environment.

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APPENDIX A: INTRODUCTORY LETTER TO RESEARCH STUDY
PARTICIPANTS

, New York

Phone - () -

Email -

January 8, 2007

James C. Brown

, New York

Stress in our lives can yield either positive or negative results. Good stress can drive better performance and greater efficiency at work and at home, while bad stress can cause job dissatisfaction and poor work performance. Measuring the sources and outcomes of stress in the workplace is important for college leaders so that they can work to mitigate bad stressors and positively impact your work environment.

In the coming days you may be asked to participate in a very important doctoral research study that could help your college identify the sources and outcomes of stress in the work place. By agreeing to serve as one of two higher education host sites in upstate New York for this research study, your college is committed to using the results of this research study in hopes of identifying any areas of concern and working to mitigate the sources of stress within the organization's control. You are receiving this letter in advance of the study because you are either a full time or part time faculty or staff member at the college.

The research study questionnaire you may receive is voluntary and will take you only approximately 15 minutes to complete. You will be provided with a self-addressed stamped return envelope to return your questionnaire. You can be assured that if you respond to this research study that your response will remain confidential and anonymous. There is no place on the questionnaire for your name or other data to personally link you to the questionnaire you return. The only identifying information in the study will be which institution you work for and your classification at the college (full-time or part-time faculty or staff member) so that data as a whole can be provided to the leadership of your college in order to allow for analysis of each college's specific aggregate data. While personal names are not associated with survey's returned, the small size of the sample of full-time and part-time faculty and staff members (< 500 between both schools) could allow your particular "strata" (full-time or part-time faculty or staff member) to stand out in the results. Again, there is no way to link a particular survey result with you as an individual.

Though some questions are of a personal nature dealing with your health and lifestyle, your name cannot be associated with your returned questionnaire and the results and the final report will only refer to the two colleges under study as institution A and institution B, located in upstate New York.

Final participants in this research study will be randomly selected, so you may not receive a questionnaire. This doctoral research study has received approval from the College Institutional Review Board, and the University of Phoenix Institutional Review Board ().

I would be pleased to answer any questions that you may have at this time regarding the research study. Please feel free to contact me at any time at () - or via email at @email.phoenix.edu. Thank you in advance for your support of this important research study. All the best!

Sincerely,

James C. Brown
Ed.D. Doctoral Student - University of Phoenix

APPENDIX B: INFORMED CONSENT LETTER ACCOMPANYING SURVEY

, New York

Phone - () -
 Email - @email.phoenix.edu

January 8, 2007

James C. Brown

, New York

Approximately three to four days ago you received a letter introducing you to my doctoral research. For your additional reference I have included another copy of that letter with this packet. I am a student at the University of Phoenix working on a doctor of education in educational leadership. I am conducting a research study entitled A Quantitative Analysis of Higher Education Occupational Stress Characteristics at Two Upstate New York Colleges. The purpose of the research study is to examine the differences between higher education occupational stressors in the workplace and levels of stress and the self-reported perceptions of job satisfaction among full-time and part-time faculty and staff members at two upstate New York colleges.

Your participation will only involve the completion of the enclosed survey. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself and can do so by simply not returning the questionnaire. The results of the research study may be published but your name will not be used and your results will be maintained in confidence.

In this research, there are no foreseeable risks to you except the small size of the sample of full-time and part-time faculty and staff members (< 500 between both schools) could allow your particular "strata" (full-time or part-time faculty or staff member) to stand out in the results. Again, there is no way to link a particular survey result with you as an individual.

Although there may be no direct benefit to you, the possible benefit of your participation is hoped that identified stressors for specific members of a stratum will provide valuable information to the college's educational leaders. This will hopefully allow for corrective, mitigating, and preventative measures to be implemented that may reduce occupational stress for those affected both within the sample and organization-wide.

more - more - more - more

By returning your survey you acknowledge that you understand the nature of the study, the potential risks to you as a participant, and the means by which your identity will be kept confidential. By returning your survey you also acknowledge that you are 18 years old or older and that you give your permission to voluntarily serve as a participant in the study described in this letter.

I would be pleased to answer any questions that you may have regarding the research study. Please feel free to contact me at any time at () - or via email at @email.phoenix.edu.

Once you have completed the survey please re-check all that you have answered all of the questions. Once you have checked all of your responses simply place your survey in the enclosed self-addressed stamped envelope and drop it in the mail. Thank you in advance for your support of this important research study.

All the best!

Sincerely,

James C. Brown
Ed.D. Doctoral Student - University of Phoenix

APPENDIX C: SURVEY INSTRUMENT - ASSET



AN ORGANIZATIONAL STRESS SCREENING TOOL



Higher Education Occupational Stress ASSET

An Organizational Stress Screening Tool

Background

This ASSET questionnaire has been designed to help organizations assess the risk of stress in their workplace. It measures potential exposure to stress in respect of a range of common workplace stressors and consequently can represent an organization's first step towards effectively managing stress in the workplace. ASSET provides a quick and reliable method of assessing and monitoring areas of potential risk and so helps to focus organizational attention and resource on these areas.

As a diagnostic tool, ASSET enables organizations to: *survey* the level of stress that exists in the organization; *examine* the extent to which groups are differentially affected; and *identify* what the sources of pressure are for different groups across the organization. The ASSET questionnaire collects important stress-related data by asking straightforward questions about the sources and effects of workplace stress. These questions are posed to the people who are the most qualified to answer them: the employees.

The questionnaire is divided into four sections. It starts by asking you for general biographical information. The next three sections ask you about your perceptions of pressure at work. The first of these concerns your job and also includes some questions relating to home and social related pressures. The next section is concerned with your attitude towards your organization and the final section is about your health. Each of these sections has been designed to measure your exposure to stress in respect of a wide range of common workplace stressors.

How to complete the questionnaire:

- Please answer **ALL** the questions.
- Please print text in capital letters.
- Please give your first and last name - try not to dwell too long on each question
- Work quickly and efficiently through the questionnaire - it will only take you about 10-15 minutes to complete
- Please only answer on how you have felt during the last three months unless a question tells you to do otherwise.
- When you have completed all questions, please place the survey in the self-addressed stamped envelope and return to the researcher, James C. Brown, by Monday, February 28, 2007.
- By checking this box you acknowledge that you understand the nature of the study, the potential risks and rewards to you as a participant, and the means by which your identity will be kept confidential. By checking this box you also acknowledge that you are 18 years old or older and that you give your permission to voluntarily serve as a participant in the study described in the cover letter enclosed in this packet.

Confidentiality and Anonymity

Please be assured that the information you provide will remain strictly confidential and your anonymity is assured



AN ORGANIZATIONAL STRESS PREVENTION TOOL



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BIOGRAPHICAL QUESTIONNAIRE

YOUR CURRENT JOB

Q1 How would you categorize your main job at the College? (If your main job is not shown, please specify)

- | | | |
|--|--|--|
| <input type="checkbox"/> Academic (faculty full-time) | <input type="checkbox"/> Academic (faculty part-time) | <input type="checkbox"/> Security/Safety – full-time |
| <input type="checkbox"/> Clerical staff – full-time | <input type="checkbox"/> Clerical staff – part-time | <input type="checkbox"/> Security/Safety – part-time |
| <input type="checkbox"/> Administrative – full-time | <input type="checkbox"/> Administrative – part-time | <input type="checkbox"/> Maintenance – full-time |
| <input type="checkbox"/> Contract employee – full-time | <input type="checkbox"/> Contract employee – part-time | <input type="checkbox"/> Maintenance – part-time |
| <input type="checkbox"/> Other, please specify | | |

Q2 For staff who manage/supervise people (e.g., Dean, Vice President, Director, Supervisor, etc.)

- How many staff are you responsible for? Up to 5 6-10 11-20 21-30 31 or more
- Are you a budget manager? Yes No

Q3 Do you have any long-term illness, health problem or disability which affects your daily activities or the work you can do?

- Yes No

Q4 How long have you worked at your current institution?

- Less than 1 year 1-2 years 3-4 years 5-6 years 7-8 years 9-10 years 11-15 years 16-20 years 21 or more years

Q5a In an average week, how many hours are you contracted to work?

- 1-10 hours 11-20 hours 21-30 hours 31-40 hours 41-50 hours 51 or more hours

Q5b In an average week, how many hours do you actually work?

- 1-10 hours 11-20 hours 21-30 hours 31-40 hours 41-50 hours 51 or more hours

YOU AND YOUR FAMILY

Q6 Sex:

- Male Female

Q7 Age:

- 18 - 21 years 22 - 30 years 31 - 40 years 41 - 50 years 51 - 60 years Over 60 years



AN ORGANIZATIONAL STRESS PREVENTION TOOL



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Q14b In the last 3 months, have you been drinking:

- More than usual? Same as usual? Less than usual?

DISABILITY

Q15 Do you have a disability?

- Yes No

Q15a If yes, does this relate to: physical health?

- Yes No

Q15b If yes, does this relate to: mental health?

- Yes No

SUPPLEMENTARY INFORMATION

Q16 Do you find time to relax and wind down?

- Always Usually When possible Not usually

Q17 Do you have any interests or hobbies?

- Yes No

Q18 Is there any provision for stress management in your institution?

- Yes No Don't know

Q19 Is there any provision for staff counselling in your institution (e.g. employee assistance programs, etc.)?

- Yes No Don't know

Q20 If available, have you ever used any of these services?

- Yes No Not applicable

Q21 If not available, would you use any of these services if they were available?

- Yes No Not applicable

Q22 How many other Higher Education Institutions have you worked in apart from this one?

- 0 1 2 3 or more

Q23 Do you use your full entitlement to annual leave (vacation, personal leave, etc.)?

- Never Always
 Sometime Not applicable

Q24 Please provide an estimate of how long it takes to travel to and from your place of work on an average day.

- Less than 15 minutes 15-30 minutes 31-45 minutes 46-60 minutes 61-90 minutes
 More than 90 minutes

Q25 Have you ever worked in any other public or private sector businesses before working in higher education?

- Yes
 No

If YES, please specify in the box below



PERCEPTIONS OF YOUR JOB

Cross one of the six categories from Strongly disagree to Strongly agree for each statement as it applies to you.

I am troubled that:

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Slightly Disagree</i>	<i>Slightly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
1 I work longer hours than I choose or want to	<input type="checkbox"/>					
2 I work unsociable hours e.g. weekends, shift work etc	<input type="checkbox"/>					
3 I spend too much time travelling in my job	<input type="checkbox"/>					
4 I have little control over many aspects of my job	<input type="checkbox"/>					
5 My work interferes with my home and personal life	<input type="checkbox"/>					
6 I may be doing the same job for the next 5 to 10 years	<input type="checkbox"/>					
7 My physical working conditions are unpleasant (e.g. noisy, dirty, poorly designed).	<input type="checkbox"/>					
8 My job involves the risk of actual physical violence	<input type="checkbox"/>					
9 My boss behaves in an intimidating and bullying way towards me	<input type="checkbox"/>					
10 My performance at work is closely monitored	<input type="checkbox"/>					
11 I do not receive the support from others (boss/colleagues) that I would like	<input type="checkbox"/>					
12 My job is insecure	<input type="checkbox"/>					
13 My job is not permanent	<input type="checkbox"/>					

I am troubled that.....

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Slightly Disagree</i>	<i>Slightly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
14 My pay & benefits are as good as other people doing the same or similar work	<input type="checkbox"/>					
15 The technology in my job has overloaded me	<input type="checkbox"/>					
16 My organisation is constantly changing for change's sake	<input type="checkbox"/>					
17 My work is dull and repetitive	<input type="checkbox"/>					
18 I feel isolated and working on my own without support from others	<input type="checkbox"/>					
19 I am not sure what is expected of me by my boss	<input type="checkbox"/>					
20 Other people are not pulling their weight	<input type="checkbox"/>					
21 I am set unrealistic deadlines	<input type="checkbox"/>					
22 I am given unmanageable workloads	<input type="checkbox"/>					
23 My boss is forever finding fault with what I do	<input type="checkbox"/>					
24 Others take the credit for what I have achieved	<input type="checkbox"/>					
25 I have to deal with difficult customers/clients	<input type="checkbox"/>					



AN ORGANIZATIONAL STRESS ASSESSMENT TOOL



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I am troubled that.....

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Slightly Disagree</i>	<i>Slightly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
26 My relationships with colleagues are poor	<input type="checkbox"/>					
27 I do not feel I am informed about what is going on in this organization	<input type="checkbox"/>					
28 I am never told if I am doing a good job	<input type="checkbox"/>					
29 I am not involved in decisions affecting my job	<input type="checkbox"/>					
30 I am not adequately trained to do many aspects of my job	<input type="checkbox"/>					
31 I do not have the proper equipment or resources to do my job	<input type="checkbox"/>					
32 I do not have enough time to do my job as well as I would like	<input type="checkbox"/>					
33 My job is likely to change in the future	<input type="checkbox"/>					
34 My job skills may become redundant in the near future	<input type="checkbox"/>					
35 My ideas or suggestions about my job are not taken into account	<input type="checkbox"/>					
36 I have little or no influence over my performance targets	<input type="checkbox"/>					
37 I do not enjoy my job	<input type="checkbox"/>					

ATTITUDES TOWARDS YOUR ORGANIZATION

Cross one of the six categories from Strongly disagree to Strongly agree for each statement as it applies to you.

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Slightly Disagree</i>	<i>Slightly agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
1 I feel valued and trusted by the organization	<input type="checkbox"/>					
2 If necessary I am prepared to put myself out for this organization e.g. working long hours and/or unsociable hours	<input type="checkbox"/>					
3 If asked, I am prepared to take on more responsibility or tasks not in my description	<input type="checkbox"/>					
4 I enjoy working for this organization to the extent that I am not actively seeking a job elsewhere	<input type="checkbox"/>					
5 I am proud of this organization	<input type="checkbox"/>					
6 Outside of my particular job, I have an interest in the work of the company and speak for this organization	<input type="checkbox"/>					
7 Overall I am happy with organization	<input type="checkbox"/>					
8 I feel that it is worthwhile to work hard for this organization	<input type="checkbox"/>					
9 I am committed to this organization	<input type="checkbox"/>					



AN ORGANISATIONAL STRESS ASSESSMENT TOOL



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YOUR HEALTH

Over the last 3 months, have you experienced any of the following symptoms or changes in behaviour?

	Never	Rarely	Sometimes	Often
1 Lack of appetite or over eating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Indigestion or heartburn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Insomnia - sleep loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Headaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Panic or anxiety attacks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Muscular tension / aches and pains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Feeling nauseous or being sick	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Constant irritability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Difficulty in making decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Loss of sense of humour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Feeling or becoming angry with others too easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Constant tiredness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Feeling unable to cope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Avoiding contact with other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Mood swings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Unable to listen to other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Having difficulty concentrating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YOUR HEALTH (CONTINUED)

- Q18 Have you had any significant changes in the last 6 months?
 Yes No
- Q19 Over the last 3 months, how would you rate your overall health?
 Good Alright Poor
- Q20 Over the last 3 months, roughly how productive have you felt in your job?
 100% productive 90-99% productive 80-89% productive 70-79% productive Less than 70% productive
- Q21 Over the last 6 months, have you encountered any major stressful events that have had an important effect on you?
 No
- Q22 Over the last 3 months, how many working days have you been off work through illness or injury?
 0 1 2-5 6 or more
- Q23 How many times have you been to your doctor over the last 3 months?
 0 1 2-5 6 or more

APPENDIX D: APPROVAL TO USE ASSET FOR THIS RESEARCH STUDY AND
INCLUDE SAMPLE INSTRUMENT IN DISSERTATION APPENDIX; FROM
ROBERTSON COOPER LIMITED

robertson cooper limited

Ben Moss, Product Development & Marketing Manager

Robertson Cooper Ltd., Williams House Manchester Science Park, Lloyd St. North, Manchester, UK
Tel. 0670 3333 591 email: ben.moss@robertsoncooper.com

22/06/2007

James C. Brown
New York
USA

Dear James

Thank you for your request for permission to use ASSET in the appendix of your doctoral research study at the University of Phoenix titled; *Full and Part Time Employee Stress and Job Satisfaction at Two Upstate New York Colleges.*

We hereby grant you permission to include your specific ASSET instrument in the appendix of your dissertation. Each page shall have the word SAMPLE clearly printed in the watermark. This grant of permission extends only to the appendix of your dissertation and does not extend to journal articles, books or other non-dissertation related publications without further permission of Robertson Cooper Limited.

Best wishes with your study.

Yours sincerely,



Ben Moss

Ben Moss, Product Development and Marketing Manager

APPENDIX E: SIGNED INFORMED CONSENT: PERMISSION TO USE PREMISES

UNIVERSITY OF PHOENIX

INFORMED CONSENT: PERMISSION TO USE PREMISES, NAME,
AND/OR SUBJECTS

(Facility, Organization, University, Institution, or Association)

- Institution A

Name of Facility, Organization, University, Institution, or Association

I hereby authorize James C. Brown, student of University of Phoenix, to use the premises, name and/or subjects requested to conduct a study entitled A Quantitative Analysis of Higher Education Occupational Stress Characteristics at Two Upstate New York Colleges. This doctoral dissertation research study proposes to utilize a mailed survey to a stratified random sample of full-time and part-time faculty and staff at . I grant Mr. Brown permission to use the full-time and part-time faculty and staff at as potential participants in the aforementioned research study. I understand that invited participants will be asked to complete a shortened stress evaluation instrument and return it to the researcher in a self-addressed stamped envelope. Respondents are anonymous and will only be identified as members of a strata, and institutions will be identified as institution A and institution B and will not be referred to by name. Institutions will only be identified by general characteristics (two-year, four-year) and by general geographic location within New York State (upstate). I understand that final results will be presented to me by general category and not by individual participant name. As president of I understand the importance of this research. Where feasible I will look to utilize the results of this research to implement change towards mitigating occupational stressors identified by study participants.

Signature

Date

President
Title

Community College, NY
Name of Facility

UNIVERSITY OF PHOENIX

INFORMED CONSENT: PERMISSION TO USE PREMISES, NAME,
AND/OR SUBJECTS

(Facility, Organization, University, Institution, or Association)

- Institution B

Name of Facility, Organization, University, Institution, or Association

I hereby authorize James C. Brown, student of University of Phoenix, to use the premises, name and/or subjects requested to conduct a study entitled A Quantitative Analysis of Higher Education Occupational Stress Characteristics at Two Upstate New York Colleges. This doctoral dissertation research study proposes to utilize a mailed survey to a stratified random sample of full-time and part-time faculty and staff at . I grant Mr. Brown permission to use the full-time and part-time faculty and staff at as potential participants in the aforementioned research study. I understand that invited participants will be asked to complete a shortened stress evaluation instrument and return it to the researcher in a self-addressed stamped envelope. Respondents are anonymous and will only be identified as members of a strata and institutions will be identified as institution A and institution B and will not be referred to by name. Institutions will only be identified by general characteristics (two-year, four-year) and by general geographic location within New York State (upstate). I understand that final results will be presented to me by general category and not by individual participant name. As president of I understand the importance of this research. Where feasible I will look to utilize the results of this research to implement change towards mitigating occupational stressors identified by study participants.

Signature

Date

President
TitleName of Facility NY

APPENDIX F: REMINDER POSTCARD MAILED TWO WEEKS AFTER MAIN
SURVEY TO ENTIRE STRATIFIED RANDOM SAMPLE



**Have you returned your
questionnaire yet to this
doctoral student?**

Name Here
Address Here
City, State, Zip Code

Approximately two weeks ago you received my doctoral research questionnaire, ASSEE: An Organizational Stress Screening Tool. The response to date has been good, but I still need your help to strengthen my data pool in order to finish my doctoral journey. If you've already completed the questionnaire and sent it in, thank you greatly. If you haven't had the chance to complete the questionnaire, please consider taking a few moments to do so and mail it back to me in the self-addressed stamped envelope by Monday, March 5. Please remember that I have no way of knowing if you've completed the questionnaire, as all returned questionnaires are anonymous and there is no way to individually match your return to you. Everyone in the random sampling is receiving this reminder post card. Should you have any questions, please feel free to call me at (XXX) XXX-XXXX or e-mail me at XXXYYY@email.XXXXXX.edu. Thank you again.

All the best

Name Here
Ed.D. Doctoral Student
University of Phoenix

APPENDIX G: INSTITUTIONAL REVIEW BOARD APPROVAL FROM THE
UNIVERSITY OF PHOENIX AND INSTITUTION B



UNIVERSITY OF PHOENIX
INSTITUTIONAL REVIEW BOARD

On behalf of Dr. Bill Pepicello, Chair of the Institutional Review Board, your doctoral research proposal has been reviewed and deemed "exempt."

Your progress report for this study is due one year from the date identified below.

**A QUANTITATIVE ANALYSIS OF HIGER EDUCATION OCCUPATIONAL
STRESS CHARACTERISTICS AT TWO UPSTATE NEW YORK COLLEGES**

By

James Brown

Dr. Bill Pepicello
Bill Pepicello
Provost of Academic Affairs
University of Phoenix

University of Phoenix

(January 23, 2007)

COLLEGE
Institutional Review Board

Approval Memorandum

TO:

Approval Date: 1/28/2007

Student: Brown, J.

Title: A Quantitative Analysis of Higher Education Occupational Stress
Characteristics at Two Upstate New York colleges

Approval Status: Exempt- other

Anticipated End Collection: 3/15/2007

Your proposal has been reviewed and carries the approval status indicated above. You must comply with any conditions noted below. Note that you may only begin data collection if you have been given approval status. Please contact (e-mail: .edu) when you have completed data collection, or if the anticipated end of data collection will be later than noted above. If there are any concerns or questions that participants have about their rights as research participants, please have them contact me (phone: x ; e-mail: .edu). Best wishes for successful completion of your project!

Acceptance Conditions:

Letters from colleges giving permission, IRB approval form from University of Phoenix, and cover letter to subjects are needed. 9/29/06 - Please submit IRB approval letter from the University of Phoenix before proceeding. 10/10/06 - Cover letter should include information that it has received IRB approval and add the IRB chair as a contact (. The cover letter should also include the information about the University of Phoenix approval and their contact person (IRB chair).

Chair IRB
2006-2007 Academic Year

ID: 251

APPENDIX H: TABLE OF MEANS AND ANOVA RESULTS OF NON
SIGNIFICANT ASSET SUBSCALE FINDINGS

Table 21

Table of Means – Work Relationships

Position	Faculty	Staff	Total
Status			
Full-time	17.07	18.86	18.36
Part-time	16.06	15.63	15.95
Total	16.53	18.46	17.65

Table 22

ANOVA Results – Work Relationships

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	3.06	.08
Position	1	.31	.58
Status*Position	1	.84	.36
Error	215		
Total	218		

The effect of status, $p = .08$, position, $p = .51$, and the interaction between status and position, $p = .94$, was not statistically significant for the ASSET subscale of work relationships. Though statistical significance was not observed, marginal significance was observed for employee status, $p = .08$. Though not interpreted, this effect almost reached the established criterion.

Table 23

Table of Means – Work-Life Balance

Position	Faculty	Staff	Total
Status			
Full-time	11.16	10.66	10.80
Part-time	9.29	9.75	9.40
Total	10.16	10.55	10.38

Table 24

ANOVA Results – Work-Life Balance

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	3.55	.06
Position	1	.001	.98
Status* Position	1	.42	.52
Error	220		
Total	223		

The effect of status, $p = .06$, position, $p = .98$, and the interaction between status and position, $p = .52$, was not statistically significant for the ASSET subscale of work-life balance. Though statistical significance was not observed, marginal significance was observed for employee status, $p = .06$. Though not interpreted, this effect almost reached the established criterion.

Table 25

Table of Means – Control

Position	Faculty	Staff	Total
Status			
Full-time	10.98	11.81	11.58
Part-time	10.92	9.56	10.58
Total	10.95	11.53	11.29

Table 26

ANOVA Results – Control

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	1.91	.17
Position	1	.10	.76
Status*Position	1	1.72	.19
Error	217		
Total	220		

The effect of status, $p = .17$, position, $p = .76$, and the interaction between status and position, $p = .19$, was not statistically significant for the ASSET subscale of control.

Table 27

Table of Means – Perceived Commitment to Employee

Position	Faculty	Staff	Total
Status			
Full-time	21.91	22.96	22.67
Part-time	21.69	23.31	22.09
Total	21.80	23.01	22.50

Table 28

ANOVA Results – Perceived Commitment to Employee

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	.006	.94
Position	1	2.49	.12
Status*Position	1	.11	.74
Error	218		
Total	221		

The effect of status, $p = .94$, position, $p = .12$, and the interaction between status and position, $p = .74$, was not statistically significant for the ASSET subscale of perceived commitment to employee.

Table 29

Table of Means – Commitment to Organization

Position	Faculty	Staff	Total
Status			
Full-time	17.59	18.98	18.59
Part-time	17.94	19.00	18.19
Total	17.78	18.98	18.48

Table 30

ANOVA Results – Commitment to Organization

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	.07	.80
Position	1	3.01	.08
Status*Position	1	.06	.81
Error	221		
Total	224		

The effect of status, $p = .80$, position, $p = .08$, and the interaction between status and position, $p = .81$, was not statistically significant for the ASSET subscale of commitment to organization. Though statistical significance was not observed, marginal significance was observed for employee position, $p = .08$. Though not interpreted, this effect almost reached the established criterion.

Table 31

Table of Means – Physical Health

Position	Faculty	Staff	Total
Status			
Full-time	12.68	13.54	13.29
Part-time	11.41	12.94	11.78
Total	12.00	13.46	12.83

Table 32

ANOVA Results – Physical Health

Source	<i>df</i>	<i>F</i>	<i>p</i>
Status	1	2.04	.16
Position	1	3.31	.07
Status*Position	1	.26	.61
Error	217		
Total	220		

The effect of status, $p = .16$, position, $p = .07$, and the interaction between status and position, $p = .61$, was not statistically significant for the ASSET subscale of physical health. Though statistical significance was not observed, marginal significance was observed for employee position, $p = .07$. Though not interpreted, this effect almost reached the established criterion.