5-2015

An Examination of Perceived Stress and Coping Strategies Among Research University Chief Financial Officers

Patrick Michael Gallagher
University of Arkansas, Fayetteville

An Examination of Perceived Stress and Coping Strategies Among Research University Chief Financial Officers

An Examination of Perceived Stress and Coping Strategies Among Research University Chief Financial Officers

A dissertation submitted in partial fulfillment of
the requirements for the degree of
Doctor of Education in Higher Education

by

Patrick M. Gallagher
University of Arkansas
Bachelor of Arts in Political Science 2000
University of Arkansas
Masters of Public Administration 2004

May 2015
University of Arkansas

This dissertation is approved for recommendation to the Graduate Council

_____
Dr. John Murry
Dissertation Chair

_____
Dr. Ketevan Mamiseishvili
Committee Member

_____
Dr. Christopher Rosen
Committee Member

Abstract

The purpose of this study was to measure and report the perceived stress among research postsecondary institution chief financial officers. A non-experimental descriptive approach was used in this investigation. Research questions were developed to describe and seek any differences in stress among the respondents. The population for this study was chief financial officers in research institutions based on the Carnegie Foundation for the Advancement of Teaching but excluded CFOs that had responsibility over multiple campuses, medical or professional schools and any vacant positions. The sample consisted of 90 respondents from public and private institutions. Data was collected by a self-reported survey which was a combined instrument using the Perceived Stress Scale, House & Rizzo's Tension Survey, and an amended Maslach Burnout Inventory. Demographic data was collected on the respondents and coping techniques were recorded using an open-ended self-reporting question.

Responses indicated that the respondents report moderate levels of stress and parallels previously conducted research. The respondents also claim coping techniques such as exercise, relaxation with friends and family, hobbies and personal activities, spirituality and religious activities to reduce stress which also is consistent with previous research. There was no significance found among the respondents based upon the demographic makeup.

Stress is an inevitable occurrence in life, especially for those who have great responsibilities, such as a university CFO. Occupational stress costs include loss of production due to absenteeism, increased medical insurance premiums and a myriad of health problems, just to name a few. For employers the best ways to help their employees cope with stress could include Employee Assistance Programs (EAPs), stress intervention programs, or mandated vacation to name a few solutions.

Acknowledgements

First and foremost I would like to acknowledge my chair and advisor Dr. John Murry. Without his patience and persistence with me this would not be possible. Through several personal setbacks, we have completed this process. I would also like to acknowledge my committee members Dr. Kate Mamiseishvili and Dr. Chris Rosen who gave feedback and guidance when needed, especially when navigating troublesome sections. I would also like to recognize Dr. Jim Hammons, Dr. Mike Miller and Dr. Jenny Miles who, through class, provided inspiration and encouragement to follow through in this journey. I also appreciate the responses provided by my research group, without which this study would not have been possible. I also would like to recognize my co-workers, colleagues and classmates across campus whom have given me constant encouragement and understand the difficulties of working full-time and handling doctoral work. I also would like to recognize my many friends who have listened to my complaining, given me respite when I needed it and understood when I was unavailable. You have meant more to me than you can realize. This hard work would not have been possible without any of you.

Dedication

This research is dedicated to my mom and dad, Rick and Connie, who have always regarded education and learning as the key to success and the tools for understanding the world and making my way through life. I am especially grateful for their patience through this long process and helping me through some of the hardest struggles that I have ever encountered. I hope the completion of this degree is in some way a small token of repayment for everything you have ever given me. I love you both more than you will ever know.

I also dedicate this work to my brother Scott and sister-in-law Anne, who have also provided much encouragement as well as dog-sitting when I needed to get out of town and away from the grind. Additionally, this is dedicated to my niece and nephew (and my unnamed soon to be niece/nephew), Foy and Noella, whom I hope one day understand the importance of education and are not afraid to chase their dreams, regardless of where they may take them.

Lastly, but with no less importance, I dedicate this work to Erica. Since the 3rd grade you have been my rock and confidant. You have been with me through the best and worst of times and have always given me a shoulder to cry on and a happy face to share in my joys. In no way would this have ever been possible without your constant belief in me. I hope others are lucky enough to have a friend, confidant and cheerleader like you.

Thank you.

Table of contents

Chapter I

Introduction

Stress is an inevitable part of our daily lives. According to the Rosch (n.a.) of the American Institute of Stress (AIS), the term "stress" was first coined by Dr. Hans Selye in the 1930s. Selye (1973) stated that, "stress is the non-specific response of the body to any demand for change (p. 692)." Research conducted by House, Wells, Landerman, McMichael, and Kaplan (1979) described the correlation between perceived stress among blue collar workers and the development of psychosomatic, respiratory and dermatological disorders. Their research found that there was clear correlation between perceived occupational stress, high blood pressure and coronary heart disease. The research confirmed prior studies which also found a correlation between perceived occupational stress and psychosomatic disorders.

The effects of stress are not limited to one area of our lives. Stress at home can carry over to the workplace and alternatively, stress at work can cause strain in our personal lives. According to a survey by the American Psychological Association (APA) (2008) over half of Americans reported an increase in their general stress levels from the previous survey (2007) with nearly 30% ranking their stress levels as extreme. The survey found that the economic crisis in America was generating the highest levels of stress. An overwhelming amount (81%) of respondents indicated that they coped well with their stress levels. The same 2008 survey suggested otherwise. More than 80% of the people surveyed recognized that stress could negatively affect their mental, social, and physical wellbeing. Stress has been linked to depression, cancer, heart attacks, obesity, insomnia, job loss, and absenteeism to name a few symptoms (APA, 2008). The same survey found that 67% of respondents claimed work as the major cause of stress in their lives. The highest rated stress relievers according to the survey

were listening to music (52%), exercise (47%), and reading (44%). Only 7% of the respondents reported that they sought help from a mental health professional (APA, 2008).

As evidenced by the literature, stress does not affect one segment of society more than another. Stress studies have been conducted on males, females, wealthy, poor, old, young, blue-collar, and white-collar workers. Among university and college populations, stress studies have been conducted on students, faculty, and administrators. Brougham, Zail, Mendoza, and Miller (2009) found that among college students, females were more apt to be stressed over finances and more likely to use self-punishment as a means to cope with stress, but as a group were not significantly different from males when perceiving stress in college. These findings were consistent with prior studies. Rafidah, Azizah, Norzaidi, Chong, and Noraini (2009) found a statistically significant relationship between students' perceived stress levels and semester completion where students exhibited and perceived more stress towards the end of a semester.

Among blue collar workers, Wells (1982) observed that jobs which require more advanced skill sets and thus higher risk and reward, exhibit higher levels of perceived stress. A study conducted among clerical workers, faculty members, and sales personnel found that stressors and stress related coping strategies varies among groups and is significantly different based on autonomy and scope of workload (Narayanan, Menon, & Spector, 1999).

Among executives, Cartwright (2000) stated that:

> According to U.K. executives surveyed, 68 percent considered that long hours they worked adversely affected their productivity, 79 percent considered that they adversely affected their relationship with their partners, and 86 percent of managers with children considered that they adversely affected their relationship with their children. (p. 19)

Nelson and Burke (2000) identified that female executives face more internal stress at work and additional stress at home with little support from their partners as opposed to their male counterparts. While these research studies show a correlation between stress and executives there

is little evidence of academic research of stress among chief financial officers, which lends credence as to why there is a need for this study.

Statement of Problem

Stress is a common occurrence, which affects people from all walks of life. Given the recent economic climate in the United States, fiscal related stress has not only influenced private individuals and corporations, but colleges and universities as well. Eric Kelderman in the May 1, 2009 issue of the *Chronicle of Higher Education* suggested that universities were facing a $350 Billion dollar shortfall in funding over the next several years. Many states have resorted to layoffs and furloughs for public employees. These tactics have also been used in state supported institutions of higher education as well as eliminating programs, degrees, and whole departments. Privately supported colleges and universities have not been immune from these financial woes either. Gifts and endowments have suffered because of the recent economic downturn, which has caused financial officers to become creative with funding or to increase tuition for students. Most financial officers have not experienced economic difficulties of this magnitude. According to the Center on Budget and Policy Priorities (2014) public funding is slowly beginning to return to higher education but is still 23% below pre-recession levels.

Privately held corporations also have felt pressures due to the economic climate in recent years. In an ongoing survey, Financial Executives International (FEI) and Baruch College's Zicklin School of Business (2012, para. 2) found the following:

> The quarterly "CFO Outlook Survey," which polls CFOs of public and private businesses in the U.S. and Europe (Italy and France) on their economic and business confidence and expectations, found that domestic economic growth topped the list of economic concerns across the board some 48 percent of CFOs in both the U.S. and Europe rated it their number one or number two economic worry, a similar sentiment to their view a year ago. Similar to 2010, revenue growth is the top business challenge that CFOs are facing across both regions for the first half of the year (34 percent of CFOs in the U.S.; 27 percent of CFOs in Europe), followed by expense control (15 percent in the U.S; 18 percent in

> Europe), demand (14 percent in the U.S; 16 percent in Europe) and competition (11 percent in the U.S.; 14 percent in Europe).
>
> Furthermore, CFO's surveyed by TD Bank (2011) reported the following:
>
> Sixty-nine percent of chief financial officers and other corporate finance managers at mid-sized businesses say that it's the intense challenge of managing cash flow that worries them the most, according to a survey conducted by TD Bank. Proper capital allocation and cash flow management will also be next year's top financial management priorities for 41% of respondents.

This present study sought to describe the perceived stress among four-year research university chief financial officers and coping mechanisms as self-reported by participants. Due to the rapidly changing nature of higher education, including budget shortfalls and rising expenditures, which creates an environment where stress may be significant. Therefore, workplace stress is a significant problem and should be examined as an issue facing colleges and universities in America particularly as it relates to increased stress levels among university CFO (Halfond & Stokes, 2013, Schifrin, 2013)

Purpose of the Study

The purpose of this study was to investigate, analyze, and report the perceived stress and coping strategies among university chief financial officers (CFOs) in four-year doctoral granting research institutions related to certain individual demographics and institutional characteristics. More specifically, this study sought to describe self-reported stress levels among university CFOs and the coping mechanisms used by the participants to alleviate stress.

Research Questions

This study sought to address the following research questions concerning stress and coping strategies of university chief financial officers:

1. What are the individual demographic and institutional characteristics of CFOs in four - year doctoral granting research universities?

2. What is the self-reported stress of CFOs in four-year doctoral granting research institutions as based on the situational statements contained in the survey instrument?
3. Are there any statistically significant differences in the self-reported stress of CFOs by individual demographics and institutional characteristics?
4. What self-reported coping strategies are employed by CFOs to alleviate perceived stress?

Assumptions

The following assumptions were accepted for this study:

1. It was assumed that the majority of participants in this study were middle aged, White males.
2. It was assumed that chief financial officers exhibit high levels of perceived stress due to the scope of their positions and their job duties and responsibilities.

Delimitations

The following self-imposed delimitation was established for this study. Participants included only permanent chief financial officers in both public and private four year doctorate-granting research universities classified by the Carnegie Foundation for the Advancement of Teaching (2010) as (a) research universities (very high research activity), (b) research universities (high research activity), and (c) doctoral research universities.

Significance of Study

This study hopefully will help shed light on what has often been considered one of the most stressful administrative positions in any college or university. With this information, university human resources departments and campus health personnel may be able to help not only CFOs, but other senior-level university administrators better cope with stress which is caused by many factors. It is anticipated that this study will add to the body of knowledge in the

field of perceived stress, particularly in the context of employment in higher education. The study will examine and explore the perceived stress and coping strategies among research university chief financial officers, which has not been extensively researched by the academic community.

Human resources administrators and campus health officials must contend with the effects of stress among their employees (Hengst, n.d). While the target population in this study is just one segment of the employee population on a college campus, techniques to measure stress and to counteract its effects may provide useful information to human resources departments, as they must serve all members of the university communities. This examination should build on previous studies, which have measured stress among faculty members and students on college campuses. Evidence from the literature has shown that stress causes organizations, including colleges, to lose billions of dollars each year in productivity due to the effects of stress on individuals (Juniper, 2012; McTernan, Dollard, & LaMontagne, 2013). This study can be used as a diagnostic tool to recognize stress and then help identify and suggest strategies to overcome stress for not only chief financial officers, but also all employees in senior-level positions in colleges and universities.

Conceptual Framework

The theory behind this examination is that perceived stress is a serious problem among employees in "high stress" occupations, especially in today's volatile financial climate (American Institute of Stress, n.d.). Another aspect of this theory is that senior-level leaders often fail to recognize their workplace stress can become a real health problem. High levels of stress are not limited to executive level financial positions. Occupational studies have been conducted

on high-stress jobs such as nursing and information technology, which tend to exhibit high levels of stress.

The foundation of this study was the Perceived Stress Scale (PSS), which measures the degree to which things are stressful and as noted by Cohen, Kamarck, and Mermelstein (1983, p. 387), "PSS items were designed to tap the degree to which respondents found their lives unpredictable, uncontrollable, and overloading. These issues have been repeatedly found to be central components to the experience of stress." The instrument also included the Maslach Burnout Inventory General Survey which measures emotional exhaustion, depersonalization, and personal accomplishment among professionals. The House and Rizzo Tension and Anxiety Scale was also used in conjunction with the other two scales. The Tension and Anxiety Scale is designed to measure role conflict and role ambiguity among employees.

Further, Cartwright (2000) reported that in the United Kingdom (U.K) 71% of managers reported working long hours was having an adverse effect on their overall health as well as more than half of executives surveyed stated that long hours causing physical problems. Additionally, Cooper (1984) reported that executives from developed countries suffer from feelings that they have no influence or power to make significant contributions to their position. Employees in higher education are not immune from these stressors either. Many factors including longer working hours, poor work-life balance, neglect of personal needs, workload, and lack of job support are oft cited stressors for higher education employees (Garg & Rani, 2014; Kinman & Wray, 2013; Shin & Jung, 2013,).

Royal and Grobe (2008) stated that academic administrators face stressors such as board relations, politics, workload, and time (p. 500). In this study of community college presidents,

the chief stressor was budget constraints and financial pressures. Further, the participants reported loss of sleep as a principle symptom of stress.

In terms of financial managers, including chief financial officers, Miller, Yeager, Hildreth and Rabin (2005) found that among CFOs in the public sector that there was a statistically significant relationship between stress, fiscal stress and politics. In a study based in Singapore, Ho (1995) reviewed the reported stress between Type-A and Type-B personalities and found that executives in the financial sector reported poor psychological health and higher levels of perceived stress, as opposed to the banking and insurance industries. It was further reported that most individuals use self-directed, passive stress-coping techniques such as "switching off." The second highest reported technique was exercise.

A study completed by Richardson (2006) examined perceived stress among African American females in executive positions. A major theme found by the author was that the participants' stress levels were greatly increased due to the lack of internal support (p. 67). Similar to Cooper (1984) participants expressed feelings of stress due to lack of control over their particular situation. Further, participants described coping strategies as passive in nature much the same as the Ho (1995) study. This present study also assumes that the participants will claim self de-stressing techniques rather than seek medical or professional advice to combat the effects of stress. Medical and mental health providers find that coping mechanisms usually employed by individuals actually exacerbate the effects of stress. This investigation also suspected that the participants who do admit to having stress will be less than honest with their de-stressing techniques, which may be embarrassing or in some cases illegal. This study should expand the knowledge base of perceived stress studies and provide a footprint for future studies among other high-level college administrators who have not been examined in previous studies.

Definitions

To provide a common understanding, the definitions of key terms used in this study are listed below.

Chief Financial Officer (CFO). This is the senior financial officer in a university. The title of CFO may vary from institution-to-institution such as vice-chancellor, vice-president, or vice-provost.

Distress. Great pain, anxiety, or sorry; acute physical or mental suffering; affliction; trouble (dictionary.com)

Doctoral/Research Universities (DRU). Determined by Carnegie Foundation rankings

Eustress. Stress that is deemed healthful or giving one the feeling of fulfillment (dictionary.com)

Maslach Burnout Inventory (MBI). This survey instrument attempts to describe burnout by scales that measure emotional exhaustion, depersonalization, and personal accomplishment (Maslach & Jackson, 1981).

Perceived Stress Scale (PSS). Survey instrument which measures the degree to which certain situations are stressful in one's life (Cohen, et al., 1983).

Research University (High Research Activity) (RU/H). Determined by Carnegie Foundation

Research University – Very High Research Activity (RU/VH). Determined by Carnegie Foundation

Stress. The non-specific response of the body to any demand made upon it (Selye, 1973)

Tension and Anxiety Scale – This instrument designed by Rizzo, House, & Lirtzman (1972) as a way to measure role conflict and ambiguity in complex organizations

Summary

To summarize, this chapter has provided background information on the topic of stress as well a short synopsis of the symptoms of stress and coping mechanisms of those who suffer stress. The main focus of this study was to investigate self-reported perceived stress among CFOs at four-year doctoral granting universities. Little if any research has been conducted on stress and coping techniques of CFOs in research universities and this study should add to the body of knowledge. Chapter I also included the significance of the study, statement of the problem, research questions, assumptions, delimitations, definitions, and the conceptual framework underlying this study.

Chapter II will focus on the relevant literature for the study. Chapter III will describe the methodology used for the study including the instrumentation and procedures for analyzing the data. Chapter IV will present the data from the study and an answer for each research question. Chapter V will summarize the study and give recommendations for potential future investigations as well as suggestions for professionals who may use the information in order to assist employees who suffer from the effects of stress.

Chapter II

Literature Review

The purpose of this study was to investigate the perceived stress among university chief financial officers in research institutions. This chapter reviews, synthesizes and examines relevant literature from scholarly journals, books, internet resources and trade sources which focus on perceived stress, stress, anxiety, burnout and coping strategies among various groups which reflect the participants included in this study. This chapter was not intended to be an exhaustive analysis, but to provide an overview of the literature that was relevant to this study.

Stress Defined

Generally, stress is perceived as a negative reaction to stimuli whether internal or external in nature. In the seminal work *Stress*, Hans Selye (1950) investigated what he called General-Adaptation-Syndrome. General-Adaptation-Syndrome is the response mechanism to stressors. This work was built upon Selye's 1936 article where he stated, "It seems to us that more or less pronounced forms of this three–stage reaction represent the usual response of the organism to stimuli such as temperature changes, drugs, muscular exercise, etc., to which habituation or inurement can occur" (p. 32). The General-Adaptation-Syndrome is more commonly known as "stress". Simply put, individuals react, whether negatively or positively, to stressors presented to them and adapt or cope with the reactions. Cartwright and Cooper (1997) defined stress as any force that puts a psychological or physical function beyond its range of stability.

Selye's definition serves as the beginning of point for research on stress in the general public and professional fields which relate to high stress occupations such as chief financial officers in research institutions. The literature reviewed in this section included stress and stressors as related to gender, age, race, and marital status. Reviewed material included journal

articles, professional websites, books and dissertations. The review of literature covered the causes of stress, reactions to stress, strategies to cope with and adapt to stress, and stress as it relates to certain individuals in stressful occupations.

Stressors

Stress can be caused by a number of factors. Most stress is triggered by external influences but may be caused by internal feelings as well. Many people associate stress with negative thoughts or feelings however, feelings or thoughts of elation and joy can be produced. Rather than describing stress in terms of positive or negative, Selye (1950) indicated that stress should be viewed as any change in the body elicited by stressors. Further, Selye stated, "systemic stress is used here to denote a condition in which – due to function or damage – extensive regions of the body deviate from their normal resting state" (p. 9). The American Psychological Association (APA) defined stressors as an internal or external event or stimulus that induces stress. *Eustress* is known as positive stress which is caused by feelings of accomplishment or fulfillment while *distress* is negative stress caused by pain, suffering or strife. Yates (1979) described external stressors as demands from family, friends or the job while internal stressors are demands put on ones' self by being materialistic, competitive or aggressive. Further, these stressors create a biochemical response to these demands which is also known as stress.

Most people believe that stress is caused by external forces, when in fact, stress may be caused multitude of agents. As a result many people would attribute their occupation as the most stressful aspect of their lives. In addition to job induced stress, the following will review general factors which contribute to stress.

Occupational Stress:

The demands of the job can be viewed as a major contributor of stress and was a central tenet of the research conducted in this present study. This may also be called occupational stress. The literature discussed how job induced stressors are major factors in absenteeism, illnesses and dissatisfaction among other effects caused by stress. This section reviews literature which focuses on the causes of work-related stress.

While individuals may experience similar work stressors, executive level employees often have different causes of stress than their employees. In a study examining the relationship between stressors, mental health and job satisfaction among executives in 10 industrialized nations, Cary Cooper (1984) found that in developed countries, executive stress was attributed to competition, lack of autonomy and the threat of job loss where in developing economies the stressors were workload, time constraints and taking work home as well as difficulties with interpersonal relationships. The study included nations from Western Europe, the Americas, Africa and Asia and surveyed 200 random executive level employees. The research explained that in the interest of both the executive and the company, job demands should be reduced for mutual benefit which might include bridging the gap between work and home or reducing the number of tasks expected of the executives. Time constraints, complex structures, diverse subordinates, value switching and increased financial demands also contribute to the occupational stress experienced by managers and executives (Levinson, 1982). Using the Occupational Stress Index (OSI), D'Souza, Urs, & Siddeqowda (2005) examined 135 white collar executives, managers and engineers within large industrial corporations in an Indian city. This study revealed that role conflict, role ambiguity and working conditions had a significant impact on occupational stress. Beehr and Glazer (2005) defined role conflict as two or more sets of

incompatible demands concerning work issues (as cited by Bacharach, Bamberger, & Conley, 1990; Beehr, 1995; Kahn, Et al., 1964; Katz & Kahn, 1978; & Kemey, 1991). Role ambiguity is defined as the lack of specificity and predictability concerning an employee's job or role function and responsibilities (as cited by Beehr, 1976; & Schuler, 1980). Working conditions are defined as, "Our physical surroundings – noise, lighting, smells and all the stimuli that bombard our senses – can affect mood and overall mental state, whether or not we find them consciously objectionable" (Cartwright & Cooper, 1997, p. 14).

Pool (2000) examined executive job tension created by role conflict and role ambiguity. Conflict is caused by differing messages or ideals from superiors while role ambiguity is caused by the lack of direction from those same superiors. The author found that whether negative or positive, the culture of an organization can impact the stress of an executive. Reviews of intervention programs by Michie (2002) and Treven (2005) also listed role conflict, role ambiguity, role overload, responsibilities for others and organizational issues as major sources of occupational stress. These issues are also known to be part of the organizational environment (Leiter & Maslach, 1988).

In a study of American and Canadian executives, Rogers (1975) identified organizational structure, leadership demands and work load as stressors among managers who oversaw small to large organizations with the majority coming from medium sized corporations. Another way of looking at these issues is to examine the culture of an organization. Kotter (2012) in *Forbes* described culture as group norms and behaviors and the values which keep those norms in place. Glicken and Janka (1982) also recognized these issues by showing that work over-stimulation and work under-stimulation caused by ambiguity can cause burnout due the fact that the executives are not working towards company goals. Work over-stimulation is explained as work

taking place in an unstable, chaotic environment while work under-stimulation is described as lack of a challenge (p. 68). Building upon research from McGrath (1976), Tung and Koch (1980) explored the causes of stress among school administrators (principals and superintendents). According to their research a key finding was that both role-based and boundary based stressors were major causes of work related stress. Farahbakhsh (2009) also recognized emotional exhaustion, depersonalization and lack of accomplishment as factors of burnout which contribute to occupational stress among top governmental officials.

Stress is not limited to executive level employees. Just as with the general population, all employees in education experience stress, although there may be different causes. Gillespie, Walsh, Winefield, Dua, and Stough (2001) reviewed stress among general and academic staff. This was a review of a longitudinal study including 178 participants from 15 Australian universities who were divided into 22 focus groups. In this study, academic employees reported higher levels of stress than the general university administrative staff as five major themes emerged from this study.

> The five categories of stress identified were: (1) lack of funding, resources and support services; (2) work overload; (3) poor management practice; (4) insufficient recognition and reward; and (5) job insecurity. Both academic and general staff identified each of these sources of stress. (p. 61)

Both groups expressed that there were professional and personal consequences due to stress, for example, each group of employees stated that they felt their work suffered due to lack of resources and poor management styles, in particular general staff reported that their work suffered due to absenteeism, leave and moving to part-time positions. Physical health issues such

as migraines, general muscle/body pains, sleep problems and hypertension, among other symptoms were reported by all the participants.

Using a combined questionnaire of several stress, anxiety and job satisfaction surveys, Mark and Smith (2012) compared the effects of occupational stress between 307 university employees and 120 people from a random sample of the general population. The university employees included administrators, faculty and general academic and administrative staff. The results confirmed prior research which indicates that university staff experience higher levels of anxiety and depression and that workplace conditions contributed to those symptoms.

Zaidi, Abdul Wajid, and Zaidi (2011) using the MBI-G, examined burnout among 399 faculty members (237 Male, 161 Female) in public institutions in Lahore, Pakistan. The primary focus was to determine whether or not age, gender, marital status, educational level, monthly income and experience contributed to burnout among the participants. The study concluded that faculty members who were female and married with less than 16 years of experience exhibited higher levels of depersonalization, while the employees who made between Rs 50,000 – Rs 150,000 annually ($795-$2,388 USD) were prone to emotional exhaustion. McCann and Holt (2009) also examined burnout among faculty members. This research used the MBI-ES and randomly surveyed 650 online instructors from four different American universities and compared the findings with a study of 'brick and mortar' faculty done by Hogan and McKnight (2007). Only 10% of the instructors responded to the questionnaire with usable data. There was found to be no significant relationship between burnout and the online faculty with regards to gender, educational level, experience or academic training. However, the results did suggest that online faculty experiences less burnout than their campus counterparts.

All stress is not caused by job related issues. Factors of stress also include age, race, gender and family concerns among others, all of which can carry over into a person's professional life and exacerbate the problem. The following sections examine some of those causes.

Age

The literature suggested that age can be a contributing factor to stress and there is various research on how age affects the impact of stress. Trouillet, Gana, Lourel, and Fort (2009) acknowledged the range of opinions in regards to age and stress. The researchers sought to clarify whether perceived stress was influenced by age by using a combination of six questionnaires. The researchers sampled 153 adults between the ages of 22 -88. Their hypotheses were that age has no effect on coping processes or that age does directly affect coping strategies. The researchers found that age is not a direct predictor of coping strategies but when modified with either problem focused or emotional focused, the coping strategies are linked to age. But other researchers have found that perceived stress can increase or decrease based on coping resources and internalizing stress as age increases based on those resource factors. If an older person perceives more stress they may have less coping resources and may internalize stress more often which leads to higher levels of stress.

In a study of older (60-84 years of age) white and African-American adults, Jang, Borenstein, Chiriboga, and Mortimer (2005) found that depressive symptoms increase with age in particular among the white and African-American females dependent upon factors of religiosity, education and physical health. The researchers found that:

> For White older adults, psychosocial and educational interventions to alter negative perceptions of aging may be useful to facilitate positive adaptation to the changes and

> challenges with aging. The particular benefit of religiosity among African-American older adults deserves attention and has to be utilized when social services are designed. (p. 318)

Alternatively, Patricia Drentea (2000) explored the effects of age and anxiety among a population of 1,000 adults in Ohio. She found that younger adults experience higher levels of anxiety especially when debt is factored into their lives. The researcher explained that middle aged to older participants were less likely to be affected by debt as they may have better coping mechanisms as well as fewer stressors and that young people experience stress with factors such as children, marriage, divorce, and job constraints.

Diehl and Hay (2010) found that there is no conclusive evidence to suggest that stress is influenced by age. While some researchers concluded that older adults are more capable of handling daily stressors, others concluded that younger adults are more able to handle daily stress. Diehl and Hay's study investigated daily stress among 239 adults from North Florida between the ages of 18-89 over a 30-day period. Participants kept a daily journal and answered questionnaires which were examined at the conclusion of the study. The researchers found that age played a minimal role in mitigating the effects of stress on a daily basis, but that self-concept and personal control were more important in combating daily stress.

Interpersonal Relationships

Interpersonal relationships are those interactions between two or more people and may serve as a source of stress or become a way to cope with stress. According to Kaufman and Fetters (1983) relationships are particularly important among executives as they may alleviate workplace issues or contribute to additional stress. Using open-ended interviews in an investigation of 208 accountants in the "Big Eight" national accounting firms in three major

metropolitan areas, Kaufman and Fetters (1983) found that advancement into an executive position was influenced by both the ability to create interpersonal relationships among colleagues and a personality which can adapt and react appropriately to stress and uncertainty. In particular, the researchers posited that collegiality among women and their male counterparts in managerial roles created significant stress and females were found to be at a disadvantage wanting to climb the corporate ladder. According to Kelloway, Sivananathan, Francis, and Barling (2005, p. 99) "poor interpersonal relationships are consistently identified as a source of stress." Further, the researchers argued that high-quality relationships between supervisors and subordinates significantly reduced the effects of stress on employees.

Zenger and Folkman (2009, p. 172) described interpersonal skills as the following:

- Helping colleagues solve a problem,
- Helping others complete a task,
- Giving others credit for any success,
- Expressing a desire to hear others' ideas,
- Not imposing their ideas on others,
- Being concerned with co-workers' personal needs,
- Using skills of co-workers,
- Working quietly, without fanfare, and
- Putting the objectives of the team before their own.

Narayanan, Menon, and Spector (1999) also found that interpersonal relationships could become a major source of stress within several industries including university professors. For the researchers, females in these occupations, especially high-level positions, such as professors and academic staff, were found to suffer stress caused by problems with interpersonal relationships. Cartwright and Cooper (1997) argued that communication, more specifically poor communication, was a major factor in interpersonal relationship stress among employees, even with senior level management positions.

Gender

It is important to note that each gender may face different life events than their counterparts and therefore react and cope differently than the opposite gender. A growing field of stress research is focused on the role that gender plays. This section reviews the relevant literature related to stress and gender. This literature investigates and explores stress and the effects and coping strategies and differences between males and females. Jick and Mitz (1985) reviewed the findings from 19 previous studies and found that males experienced more stress because of "male" factors such as role overload, maintaining an image as a successful, excessive pressure and career goal expectancy; while females experienced stress from balancing responsibilities of family and work. The study concluded that there were inconsistencies and gaps in the research and additional examination was needed.

According to Nelson and Burke (2000) women held 11.9% of corporate officer positions, among *Fortune 500* corporations, including chief executive officer, chief operating officer, senior executive vice president, and executive vice president. Women expressed male stereotypes (52%), exclusion from social networks (49%), lack of experience (47%), and inhospitable corporate culture (35%) as major causes of stress. On the other hand, males expressed lack of experience (82%), being in the "pipeline" long enough (64%), and stereotyping (25%) as major factors of stress. Stereotyping in this study was defined as the traditional roles in business for males and females. This study also mentioned that executive women also faced pressure due to family, specifically wanting children, obligations and lack of compatible organizational values.

In a survey of 135 senior female executives, who were included in a larger study, Davidson and Cooper (1983) reported that female managers seem to be affected more by work

overload, under-load and feeling under-appreciated. In a study conducted by Rogers, Li, and Ellis (1994) on female executives in the U.S. government, it was found that participants with the highest levels of perceived stress stemmed from workload, the actual job duties, and conflicting demands placed on them. Participants also cited work goals, realm of influence and self-actualization as other factors related to stress. Bergdahl and Bergdahl (2002) randomly surveyed 1,275 Swedish citizens using the Perceived Stress Questionnaire (PSQ), Beck Depression Inventory (BDI) and the State and Trait Anxiety Inventory (STAI) and found that women between the ages of 34-39 exhibited dangerous physical levels of perceived stress while those in the age group of 30-34 exhibited the greatest amount of stress which was attributed to family and career factors. Conversely, males did not exhibit elevated levels of stress as compared with their female counterparts, and in most instances, were actually lower. The female factors could be attributed to starting a family or going through a job transition but nevertheless was significant.

A study published in 1994 by Rogers, Li, and Ellis explored the effects of stress on 200 female executives within the federal government. The researchers sought to build on the growing literature of how stress causes physical reactions particularly in females. The researchers recognized the unique set of challenges that government employees face as opposed to their private sector counterparts which included layers of accountability, fewer resources to address issues and increased scrutiny on public programs. To measure the self-reported stress, the researchers used the Job Related Tension Index (JRTI). This instrument measures the perception of stress precipitators by the respondents. The answers were grouped into three distinct groups by varying degrees of stress. The group with the self-reported highest levels of stress was in the Job/Work Centered category. This group reported that factors such as workload, work quality, work demands, and family responsibilities as chief issues contributing to their stress while the

second group attributed perceived stress to achievement of work goals and influence over superiors, while the third group perceived less stress due to workload and achievement and were characterized as self-actualization centered.

Abel (1998) produced research on how humor mitigates the effects of perceived stress based on gender. The researcher recognized the physical effects that stress placed on the women's bodies and how humor often counteracts these effects. However, the researcher concluded that there is no consensus among the previous research on how humor may or may not buffer the effects of stress. The study used the Perceived Stress Scale (PSS), the Multidimensional Sense of Humor Scale and the Hopkins Symptom Checklist to measure the perceived stress among introductory psychology students at Western Carolina University. Abel did not find any significant differences among the participants with regards to the three tests but did find a higher significance of physical distress symptoms among women participants. Overall, the study found that humor did moderate the effects of stress especially in regards to participants with low sense of humor, but did not explain overall the effects of humor and coping with stress.

Using the Social Connectedness Scale (SCS), Appraised Status of Social Groups Scale (ASSG) and the Perceived Stress Scale (PSS), Lee, Keough, and Sexton (2002) examined the perceived stress among college males and females and how social connectedness and social appraisal may lessen the effects of stress. According to the study, women exhibited higher levels of perceived stress when they had a low social appraisal. Conversely, men experienced less perceived stress when having a higher social connectedness. While this study showed certain tendencies, the researchers acknowledged that further evidence was needed to confirm their findings.

Effects of Stress

Volumes of research have been published on the effects of stress. Most commonly, people associate stress with detrimental health problems such as heart disease and mental fatigue. Cartwright and Cooper (1997) cited Cannon's work in the 1930s as one of the first to examine the fight or flight process associated with stress which built on Osler's (1897) work which found stress caused disease. Cartwright and Cooper explained that lifestyle choices enhance or reduce the effects of stress but that the underlying cause of hypertension and heart disease are most certainly caused by stress (p. 8). The effects of stress can be both psychological and physical (Cartwright & Cooper, 1997). Negative effects of stress include heart disease, high blood pressure and anger while positive effects of stress include engagement, heightened awareness of situations and increased energy. To businesses, the effects of stress are measured in lost work days, loss of production and increased medical expenses. Stress symptoms appear to affect people regardless of their occupation, age or race. The literature shows a number of ways to identify the symptoms of stress and ways to counteract these afflictions. This section will review some of the most common effects of stress and the impact of those issues.

Occupational Effects

All businesses, including educational institutions suffer from the effects of stress and burnout. These effects can be seen in missed days, lost production and lost class time. Among the symptoms of stress is absenteeism. Yates (1979) reported that "excessive absenteeism among subordinates may be a symptom of being under too much pressure." A similar finding by Kelloway, Sivanathan, Francis, and Barling (2005) was that increased control and less autonomy lead to increased absenteeism (as cited in Barling, Kelloway, and Frone, 2005) as a way of voicing disenchantment with work. The Chartered Institute of Personnel and Development

(CIPD) annual Absence Management Survey of 2005 reported that UK public sector business lost 10.3 days per year due to stress related absenteeism among non-manual labor employees. This same report in 2014 reported that work days lost to absenteeism among public sector employees had dropped to 7.9 days per employee. Citing the British Heart Foundation, Cartwright and Cooper (1997) noted that businesses in the United Kingdom with 10,000 employees lost an average of 73,000 working days due heart disease (p. 2). Similar results were reported in a CCH Unscheduled Absence Survey (1998) that there was a 25% increase in absenteeism over the 1997 report. In the 1998 report, respondents claimed that 22% of employees did not report to work due to personal illness and 20% did not report due to personal needs. This report surveyed 401 human resources executives across all major industries, including universities and government, which collectively have over 800,000 employees. Family issues as well as personal sickness and stress were the most oft cited reasons for unexpectedly missing work. In 2000, Cartwright also reported that the British economy suffered a £7 billion dollar loss in production due to stress or £310 ($460 USD) per worker in the United Kingdom.

According to Treven (2005), mistakes made on the job actually cost more to companies than lost work days. The author reports estimated losses of over 100 Million workdays globally due to the after effects of stress and that 50%-75% of all illnesses are related to stress. Citing the European Agency for Health and Safety at Work, Treven stated that stress is the second most cited reason for problems at work and effects as many as 28% of the workforce.

In a study of 1,000 academic employees in universities in the United Kingdom, Kinman (2008) used the Life Questionnaire to measure SOC (coping in the face of environmental stressors). SOC (Sense of Coherence) is a feeling that things are predictable and will work out. The SOC model measures comprehensibility, manageability, and meaningfulness. The author

found that participants with higher levels of SOC predicted lower symptoms of work stressors and were able to cope with some job-related stressors better than those with lower SOC levels. A study conducted by Barnes, Agago, and Coombs (1998) sought to determine if there was a correlation between stress and faculty members who intended to leave academia. A survey was administered to 5,450 faculty members in 306 institutions spread across nine Carnegie classifications. Using a regression analysis the researchers found that there was a strong correlation between time constraints (stressor) and the intent to leave academia. This intent was slightly mitigated due to a personal sense of community within the college. This research also found that male faculty and non tenure track faculty were more likely to leave academia.

Mental Effects

In *Thriving on Stress* (1990) Jane Cranwell-Ward identified five categories of stress reactions by managers. These categories were emotional reactions, disruption of thought, physical illness, behavioral signs and positive reactions. She further explained that these reactions are not mutually exclusive and may manifest in multiple ways (p. 60). She identified that the typical ways of reacting to stress are irritability, anger, anxiety, depression, mood swings and withdrawal. Yates (1979) stated that anxiety is the reaction to anticipated danger. This is the anticipation that something *could* go wrong with events in life. McCann and Holt (2009) cited the definition of burnout (by Schaufeli & Enzmann, 1998) as emotional exhaustion related to distress, a feeling of reduced performance and ability. These researchers found that there were significant differences of burnout syndromes between online faculty and brick and mortar faculty.

Mark and Smith (2012) assessed the effects of occupational stress among 307 university and 120 general employees in the UK which used the Hospital Anxiety and Depression (HADS)

scale to measure mental stress in depression and anxiety and found that there were, "significant differences between university and general population samples, with university employees reporting more anxiety and depression (even up to clinical levels)" (p. 74-75).

Royal and Grobe (2008) surveyed 58 North Carolina community college presidents to determine if there was a link between stress and sleep disorders. Using an instrument comprised of the Stress in General Instrument as well as the Pittsburg Sleep Quality Index (PSQI) the authors found that there was a significant link between work related stressors and sleep disorders regardless of the individuals' demographic background. Beehr and Glazer (2005) also cited loss of sleep (physical strain) which is caused by anxiety (mental strain).

Dangerous occupations such as law enforcement officers also manifest heightened levels of stress. Waters and Ussery (2007) noted that police officers experience elevated levels of domestic abuse, divorce, Post Traumatic Stress Disorder (PTSD) and suicide which are all attributed to on the job stressors. Particularly, the authors found some police departments exhibit divorce rates between 50%-80% for officers who were married prior to joining the force.

Physical Effects

The American Psychological Association stated that stress can affect the musculoskeletal system, endocrine system, cardiovascular system, respiratory system, gastrointestinal systems and reproductive systems. The effects may include heart attacks, stomach aches, fatigue, irritability, hyperventilation, and increased cortisol levels.

Steptoe and Kivimaki (2012) examined multiple studies which reviewed the link between stress and coronary heart disease (CHD). Their study concluded that most research involves workplace stress and the long-term effects of that stress as well as the effects of acute coronary events. The researchers found that there is correlation between long-term stress and CHD but

that there is no particularly defined method to reduce those stressors with various lifestyle changes. Beehr and Glazer (2005) also noted that high blood pressure, hypertension, cancer, weight gain, diabetes, and headaches, among many other physical ailments, are caused by stress. Women in senior management roles were found to have symptoms of tiredness and smoking, drinking and eating more than they should as a result of stress (Davidson & Cooper, 1983).

Coping Mechanisms

As evidenced in the literature, there are numerous causes and effects of stress just as there are numerous ways to handle that stress. Coping strategies may be seen as both negative and positive and may be problem focused or emotion focused (Bond & Bunce, 2000; Folkman & Lazarus, 1988; Gruen, Folkman, & Lazarus, 1988). Positive coping approaches include listening to music, playing with a pet, praying, exercise, gardening, and meditation; whiles negative coping methods include driving fast, eating too much, smoking tobacco, drinking alcohol, and using recreational drugs. Each individual has their own way of dealing with stress although not all coping mechanisms are effective in combating or preventing stress. Universities or businesses may also utilize stress management programs that help alleviate the causes and effects of stress. Coping methods are not limited to just occupational stress or physical or mental stress. Stressors at home can cause symptoms at work or vice-a-versa which is why individuals may choose to use multiple strategies to lessen the effects of stress. Chapter IV will report findings on how the participants of this study coped with stress. This previous section examines past studies on the various ways to both prevent and treat stress.

In *Thriving on Stress* (1990) Jane Cranwell-Ward examined stress among managers. She acknowledged the growing field of stress literature and the need for further examination among managers in particular. The author developed a "holistic" (p. 101) three step approach to dealing,

or “thriving” on stress which is meant to “achieve a healthy balance between the mind, body and emotions” (p. 101). According to Cranwell-Ward the first step to combat stress is to work on emotional stress which has four steps. The author stated that in order to maintain emotional stress as a manager one must: (a) release emotional pressure, (b) rise above emotionally stressful situations, (c) gather external emotional support, and (d) control your emotions to reduce the waste of emotional energy. The second step involves sustaining physical well-being. This step has five strategies which are (a) follow a sensible diet, (b) develop an exercise program to increase stamina and fitness, (c) take enough rest and relaxation, (d) keep your body chemically better balanced, and (e) develop a program for deep relaxation. The third and last step should involve (a) adopting a positive stance to life, (b) achieve inner balance by adopting realistic expectations, and (c) develop an organized approach to life. By taking these steps to mitigate the effects of stress, Cranwell-Ward posited that, “you too could become a more effective manager” (p. 4). In related research, Spickerman (2005) emphasized self-efficacy for relieving stress. She related that people suffering from stress can alleviate those symptoms with simple techniques such as attending to basic needs or laughing, with the basic premise of recognizing stress and knowing what works best for your situation. Nagel and Brown (2003) provided teachers with ABCs of managing stress with include Acknowledging the stressors, Behavior modifications and Communication. The authors found that employing these techniques will reduce the physiological effects of stress while increasing job performance.

In an article about female executives, Nelson and Burke (2000) concluded that women used both positive and negative coping mechanisms. Positively, women tended to eat more healthily and have better attitudes, while at the same time women were more prone to smoking and emotion-focused coping, that is venting and avoidance, as negative methods of coping with

stress. The authors proposed that in order to mitigate the effects of stress among executive women that they identify and manage those stressors, take advantage of opportunities, recognize and mange work-home conflict and develop personal resilience. These strategies may include daily workout routines, meeting with trained professionals for care and maintain a personal support structure to alleviate the effects of stress.

In a similar study, Ng and Jeffery (2003) reviewed 12,110 employees among 26 worksites in manufacturing, health and education industries within the SUCCESS cessation program which was a randomized trial that evaluated different methods of increasing participants in cessation programs. The researchers found that perceived stress was associated with higher fat diets and lower levels of exercise and smokers reporting an increase in smoking as well as the confidence to refrain or stop smoking.

In a study of financial executives, Ho (1995) found that communications is an effective strategy for combating stress while eating, smoking, and "switching off" are ineffective at combating stress although most of those included in the study did employ maladaptive coping strategies. Royal and Grobe (2008) in a study of stress among North Carolina college presidents found that 66.7% of participants used exercise as a method of stress reduction while a small group employed eating, drinking wine, taking medication, talking and getting away as methods of dealing with stress. Khubchandani, Nagy, Watkins, Nagy and Balls (2009) surveyed employees of a southeastern United States university to assess their perceived stress as well as their coping behaviors. The participants were then placed into either a high-stress or low-stress group. The researchers found that 90% of respondents, in particular faculty and those employees with more than 4.9 years of work experience, expressed moderate to high levels of stress. A quarter of the respondents expressed difficulty in handling their work-related stress. Those

identified within the high-stress group were more likely to exercise less and eat larger amounts of food as well as more junk food (p. 310).

Miller, Yeager, Hildreth, and Rabin (2005) looked at how governmental financial managers dealt with ethical stress in their jobs. In a sample of 369 financial managers, who were primarily white, middle aged, males, the authors found that,

> Those with an opportunity to use their training, experience, insight, and creativity in their jobs said their professionalism had enabled them to cope with external ethical pressure. Moreover, individuals with the opportunity to use professional judgment in making decisions may cope with external ethical pressure more successfully.

Richardson and Rothstein (2008) performed a meta-analysis of 36 Stress Management Intervention (SMI) programs to determine their effectiveness. Stress Management Interventions are, "any activity or program initiated by an organization that focuses on reducing the presence of work-related stressors or on assisting individuals to minimize the negative outcomes of exposure to these stressors" (Ivancevich, Matteson, Freedman, & Phillips, 1990) as cited by Richardson and Rothstein. These programs are divided into three primary groups, (a) altering source of stress, (b) reduction of severity of stress, and (c) reduction programs such as EAPs (p. 70). The authors found that cognitive-behavioral interventions, which fall into the second category, are the most effective technique for combating stress, while relaxation and meditation were the most popular method of stress coping (p. 88). Relaxation, meditation and deep breathing are also cited by Donovan and Kleiner (1994) as ways to reduce mental and physical stress. Sleep intervention programs have also been found to reduce workplace stress which in turn reduced the amount of mental and physical fatigue which is attributed to workplace accidents and loss of production (Willert, Thulstrup, Hertz, & Bonde, 2010).

A popular way of dealing with stress and in particular, work stress, is to attend a work sponsored employee assistance program (EAP). These are typically programs which are designed to assist employees or their families with any crises or issues they may be having and may also be used for mediation between employees who are having issues in the workplace. A criticism of such programs is that they focus too much on the individual and not on the workplace as a whole which may be causing the problems (Hurrell, 2005; Karim, Mir, & Bingi, 2005).

Kirk and Brown (2003) researched Australian EAPs to determine if such programs are effective. The authors found that employees perceive these programs as helpful to their mental and physical well-being but produce little results for job satisfaction and overall job production. Other studies show how beneficial these EAPs can be for the overall costs to an employee and a company (Stein, 2002; Kirk & Brown, 2003). An article published in Behavioral Health Management (Dainas & Marks, 2000) reviewed the Abbot Laboratories study to determine the cost effectiveness of its EAP and found that while individuals who participated in the EAP may have higher mental health costs their overall healthcare cost to the company was significantly less than those who did not participate in the program and provided enough evidence for the business to expand its EAP offerings. Orbach (2001) described the value of an EAP as a risk-management tool in reducing substance abuse, depression and workplace violence which all have significant monetary and emotional/physical costs to a company and its employees. Karim, Mir and Bingi (2005) surveyed a sample of 700 Midwest businesses to assess whether or not managers trusted their organizations' stress management programs and its ability to reduce the stress levels in individuals. The majority (65%) of the businesses surveyed had over 500 employees as well as 85% of the participants had annual revenues of over $100 Million dollars. A 35 item questionnaire was mailed to the head of human resources who was then asked to

forward the request to the employee in charge of the organizations' EAPs. The researchers found that managers did find EAPs helpful in reducing individual stress while there was little evidence of organizational wide intervention programs being implemented. Hurrell (2005) also made the case that organizational level programs should be further scrutinized as there is little research into their effectiveness due to the broad nature of such programs.

Cartwright and Cooper (2005) questioned the effectiveness of such programs due to mixed results from various studies. This may stem from broadly focused programs which are designed to cover many employees rather than just a few. Cartwright and Cooper (2005) did find that such programs were effective and highly supportive but did not produce long-term effects as participants were likely to return to their previous habits. However, the authors found that programs which targeted individual behaviors were more successful in sustaining long-term stress reduction.

Chapter Summary

This chapter reviewed literature relevant to the current study involving the causes of stress, the effects of stress and various ways to cope with stress. The reviewed literature included books, peer-reviewed journal publications, internet sources, and industry periodical publications.

Stress is caused by both internal and external factors and can be either negative or positive in nature. The causes, effects, and coping subject areas included sections involving occupational, mental, and physical stress. Key literature findings were presented in each of these sections. Primary sources of stress within the workplace include working conditions, role ambiguity, role conflict, role overload, and lack of funding and resources to name a few. Personal stress, such as divorce or death, can also crossover into the work place and cause significant problems for employees. The effects of stress are also personal and occupational. To a

person, stress can cause multitudes of health issues including heart failure, sleeplessness, weight gain, and depression. For businesses, stress causes lost work time in the form of absenteeism, lost earnings caused by loss of production and increased costs of provided healthcare by the businesses. Coping with stress can also be personal or business centered. Individuals can counteract the effects of stress by engaging in positive or negative behavior including exercising, attending worship services, spending time with family and friends, drinking, taking risks, and taking illicit drugs although many negative coping strategies actually enhance the effects of stress. Businesses and universities can assist employees with coping by offering health and wellness programs, employee assistance programs (EAPs), and intervention programs.

This chapter was not designed to be an exhaustive review of the literature as there are countless books, articles, and studies dedicated to the topic of stress. The following chapters will review the methods and procedures of research employed by this current study, the findings of the current study and lastly, the conclusions, recommendations for practice and implications for future research.

Chapter III

Methods

The purpose of this study was to examine the perceived stress and coping strategies among chief financial officers (CFO) in research institutions. More specifically, this research used Cohen's Perceived Stress Scale (PSS), House and Rizzo's Tension and Anxiety Survey and a self reporting burnout test based on the Maslach Burnout Inventory (MBI) to explore perceived levels of stress in college and university CFOs and to determine how they attempt to relieve their stress.

Three research questions were posed to guide this study. The research questions are as follows:

1. What are the individual demographic and institutional characteristics of CFOs in four-year doctoral granting research universities?
2. What is the self-reported stress of CFOs in four-year doctoral granting research institutions as based on the situational statements contained in the survey instrument?
3. Are there any statistically significant differences in the self-reported stress of CFOs by individual demographics and institutional characteristics?
4. What self-reported coping strategies are used by CFOs to alleviate perceived stress?

Research Design

A non-experimental, descriptive quantitative research design was used for this study. The purpose was to describe the respondents' answers to the perceived stress questionnaire which was distributed to the sample of CFOs.

Trochim (2006) explained that non-experimental research design is a "one-shot survey design that consists of nothing but a single observation (para. 1)." This is also called a cross-sectional study as the questions seek information about the participants at one point in time. Aday and Cornelius (2006) described a cross sectional survey as a "slice of life at a particular point in time (p. 31)." Further, Trochim (2006) posited that descriptive research provides simple summaries about the sample and the measures. Descriptive statistics typically involve explaining distribution, which is the frequency with which the respondents' answers to a variable are measured, the central tendency, which describes the center values of the distribution, and dispersion which measures how the values are spread around the central tendencies.

Descriptive statistics were appropriate for this type of study as there was no attempt to show correlation between the descriptive variables and the participant responses. Descriptive statistics can be used as a baseline in subsequent studies to determine if there is a correlation between perceived stress levels and other characteristics of the CFO's in four-year research institutions. This type of study as described by Aday and Cornelius (2006) is an analytical cross-sectional survey.

Population

For purposes of this study, the target population was college and university chief financial officers in research institutions based on the Carnegie Foundation for the Advancement of Teaching's classification system. The target population was then delimited to private (for-profit and not-for-profit) and public institutions. Chief financial officers who held system-wide or medical school designations were also excluded from the study. The Carnegie Foundation for the Advancement of Teaching amasses information concerning all 4,634 member institutions, ranging from tribal colleges to research universities, including private, public, faith-based and

technical colleges. The Carnegie Foundation developed it's classification system in 1970, which has been revised several occasions, to describe and recognize the diversity among higher education institutions in the United States (carnegiefoundation.org, n.d). This population was selected in part due to their accredited status which is also measured by Integrated Postsecondary Education Data System (IPEDS) through the United States Department of Education Sciences and the National Center for Educational Statistics. The Carnegie Foundation does not classify institutions that are not accredited and therefore as such colleges were not included in this study.

Sample

The population for this study was comprised of administrators serving as the chief financial officer in public and private research universities as classified by the Carnegie Foundation for the Advancement of Teaching. In this study, the sample comprised 274 participants due to the exclusion of multi-campus CFOs, vacant positions, and those who declined to participate. For purposes of this study, research institutions were defined by using the 2010 Carnegie Foundation for the Advancement of Teaching definitions. Based on Carnegie definitions, there were 297 institutions which fall into the three research categories including Very-High Research University VH/RU (108), High Research Universities V/RU (99), and Doctoral Research Universities R/U (90). Although there were 297 universities included in this group, only 274 surveys were sent to potential respondents. This was due to CFOs who held responsibilities for multiple campuses on the list as well as vacancies or employees who held the position in a temporary role as vacancies were being filled.

Instrumentation

The survey instrumentation used was a compilation of questionnaires which measure three different factors of stress (a) perceived stress, (b) burnout, and (c) tension and anxiety. The

Perceived Stress Scale, developed by Cohen et al., 1983 a self-reported burnout questionnaire based the Maslach Burnout Inventory created by Christina Maslach in 1981 and the Tension and Anxiety Scale created by House, Rizzo and Lirtzman in 1970 were used for purposes of this study. The PSS was designed to measure the degree of stress caused by everyday life events while the MBI was designed to measure emotional exhaustion, depersonalization, and personal accomplishment among professionals who help those in stressful situations and lastly the Tension and Anxiety measures role conflict and role ambiguity among employees.

Cohen et al., 1983, published a study which researched perceived stress among three sets of participants who took part in a smoking cessation program. The participants in this study included two sets of college students and one set of random community members. This research produced results which validated the questionnaire as a predictor of perceived stress among the participants. Of interest, the PSS did not find a correlation between sex or age and perceived stress. The PSS is scored using a five point Likert scale with 0=Never and 4=Very Often with the scores reversed for coding. The Maslach Burnout Inventory-General Scale was designed to measure three facets of burnout including, (a) emotional exhaustion, (b) depersonalization, and (c) personal accomplishment. The original study was conducted on human service workers who were experienced frequent levels of burnout. The MBI-GS uses a 7 point Likert Scale with 0=Never and 6=Every Day. The MBI-GS can be further broken down into each of the three constructs but was not done so in the current study. Lastly, the Tension and Anxiety Scale was designed to measure role conflict and role ambiguity in complex organizations. The Tension and Anxiety Scale also uses a 7 point Likert Scale with 0=Very False to 6=Very True. For purposes of the current study, a 5 point Likert Scale was used with 0=Never to 5=Always so that each scale could be scored equally.

In addition to using questions from the three surveys, accessory questions were included with the questionnaire to ascertain demographic information such as age, race, marital status, dependency status, institution size, institution control and Carnegie Classification, as well as coping strategies. The demographic information was used to explore potential differences in perceived stress by different demographic characteristics. The validity of these scales have been proven through multiple studies including the first published study by Cohen et al., 1983 where point in time measurements could be verified through multiple sessions with participants. This instrument was shown to be a valid predictor of actual stress for the test sample with regards to certain demographic descriptors. According to the initial study, validity diminished as several tests were given to the same participants over a three month period, but could accurately predict stress when given to multiple groups, which exhibited similar traits, over a shorter period of time. Additionally, this questionnaire has been shown to be an accurate predictor of perceived stress among several different demographic groups regardless of occupation, age, race, etc. which should be no different than the population. Schaufeli, Bakker, Hoogduin, Schaap, and Kladler (2001) conducted a study which validated Maslach's Burnout Inventory. The researchers found that the MBI was valid among participants who were identified as either burned out or non-burned out. House, Rizzo, and Lirtzman (1970) describe the validity of the Tension and Anxiety questionnaire as identifiable between role and role ambiguity with regards to member satisfaction and propensity to leave the organization.

The survey used in the current study was a compilation of questions taken from the PSS, MBI-GS, and the Tension and Anxiety Scale. The first four questions of the survey were based on the PSS, while questions 5 through 11 were based on the Tension and Anxiety Scale and questions 12 through 26 were based on the MBI-GS. The language of certain questions was

edited for clarification and continuity due to feedback from the pilot test. The complete questionnaire is found in Appendix B. An open ended question was used to ask respondents about their coping strategies. Demographic questions (age, race, gender, marital status, and dependent status) and institutional characteristics (institutional control, institutional size, and Carnegie Classification) were also included with the survey. For scoring, a 5 point Likert Scale was used with 0=Never, 1=Almost Never, 3=Sometimes, 4=Fairly Often, 5=Often. Permission to use the three instruments was given by each of the rights holders through various websites as the study was conducted to further academic knowledge and was appropriate according to those permissions.

For purposes of this study, the survey instrument was tested for content validity by using a pilot test to review and suggest changes to the questions. According to Creswell (2008) content validity, "…is the extent to which the questions on the instrument…are representative of all possible questions that a researcher could ask" (p. 172).

Pilot Test

Prior to distributing the instrument, a pilot test was conducted among employees in administrative and financial positions in a research institution. The instrument was given to 10 employees who were not part of the target population but had the expertise to comment on the questions. The group was asked to review the questionnaire for errors, clarity, suggestions, and length of time to answer the questions. Feedback such as changing tense, order, and clarifying confusing questions was used to make corrections to the questionnaire. The pilot group also was asked to comment on the approximate time to complete the survey as a guide to inform participants the estimated time the time complete the survey. This pilot test also served as a way to verify content validity for the instrument.

Data Collection

The research protocol was submitted for IRB review and approval (see Appendix A). After receiving approval to conduct data collection the CFOs received an introductory e-mail (see Appendix C) explaining the purpose of the study. Prior to distributing the survey, the Institutional Review Board (IRB) granted an exemption to the study. All participants were guaranteed that responses would be reported in the aggregate and no identifying information would be used in reporting their open responses on coping mechanisms. It was further explained that participation in the study would not serve as a benefit or detriment to their occupation but would explain stress among their peers and methods to combat the effects of stress. The survey was distributed via email with a follow up email sent at the end of seven days then 14 days. The questionnaire (Appendix B) was compiled using Qualtrics online data collection software. An introductory email was distributed to the CFOS inviting them to participate in the study. Two follow up emails were sent to the participants to remind them to complete the survey at the end of one week then at the end of two weeks.

Data Analysis

A univariate analysis was used to summarize and describe the demographic variables among the respondents. The analysis included central tendency which measures the mean, median, and modes of the respondents. Descriptive statistics were generated to provide a better understanding of the participants by demographic categories and institutional characteristics and whether or not any certain demographics can be eliminated from further testing. *t*-Tests were conducted to determine any statistical differences between groups with only two categories, such as gender, race, institutional control and dependent status (Creswell, 2008). An ANOVA analysis, which is used with groups of three or more categories, such as age, marital status,

institutional size, and Carnegie Classification, was conducted to determine if the means between groups was equal and might be statistically significant (Creswell, 2008). The responses to the open-ended question regarding coping techniques were also analyzed to determine any commonalities among the respondents with regards to how they handle occupational stress.

Summary

This chapter described the research methodology, target population, instrumentation, and data collection procedures for this present concerning the perceived stress and coping techniques among research institution chief financial officers. A non-experimental quantitative design was used as the research foundation. The target population for this study was CFOs in public and private research institutions but did not include system or medical schools CFOs. The survey instrument designed for this study included a combination of questions using the Perceived Stress Scale, Maslach's Burnout Inventory, the Tension and Anxiety Scale as well as demographic and institutional characteristic questions. The instrument included one open ended question asking how they cope with stress. The following chapter presents the data and the findings of the research.

Chapter IV

Presentation of the Data and Results

Stress is a pervasive reality of our society and has become an increasing detriment to how people perform in their daily lives. Stress is experienced by people regardless of occupation, gender, race, age, or socio-economic status. Certain occupations are perceived as being more stressful than others because of duties, responsibilities, and accountability.

This chapter provides an overview of self-perceived stress of CFOs in four-year doctoral granting, research universities. A description of the CFO participants will be provided by their personal and institutional demographic characteristics. The chapter will then present the results of the data analysis of perceived sources of stress experienced by the participants. The results of *t*-tests and ANOVA analyses will be presented to indicate if there is any relationship between the demographic categories and self-reported perceived stress. The chapter will conclude with a presentation of the open-ended participant statements as to how they deal with stress and then a chapter summary.

Overview of the Study

The purpose of this study was to report the self-perceived stress of four-year, doctoral granting, research university CFOs. More specifically, this study sought to ascertain commonalities among the respondents and determine whether or not certain variables can predict high or low levels of perceived stress. This study used a combination of three different predictors of perceived stress: (a) Perceived Stress Scale, (b) a questionnaire based on Maslach's Burnout Inventory, and (c) the Tension and Anxiety Survey. A total of 297 colleges and universities matched the criteria as four-year, doctoral granting, research institutions based on the Carnegie Foundation for the Advancement of Teaching's classification system. From this target

population, 23 institutions were omitted prior to the administration of the survey due to vacancies, interim appointments, or lack of information about the current incumbent CFO. A sample population of 274 CFOs were sent the web-based survey and invited to participate in the study.

The study was designed as a non-experimental descriptive research model. The data for the study was collected using a questionnaire based on the Perceived Stress Scale, the Maslach Burnout Inventory and the Tension and Anxiety surveys. An open-ended question was included to allow the participants report how they cope with their perceived stress. Finally, the instrument included demographic and institutional characteristics questions which addressed institution size, institution control, Carnegie classification, marital status, age, dependent status, race, and gender. The questionnaire was distributed to the participants using Qualtrics which is an online research software tool. The survey data were downloaded into SPSS 21 to perform analysis of the data. This analysis was used to look for commonalities among the participants and to better answer the research questions posed in this study. There were 90 surveys returned (32.8% response rate) with 78 fully answered. Twelve questionnaires were missing a portion of or all demographic information. These surveys were included as the collected answers still gave insight into the perceived stress of the target population.

Descriptive Statistics Results

Research question 1 asked, "What are the personal and institutional demographics of CFOs in four-year, doctoral granting research institutions?" This question examined five personal and three institutional characteristics of CFO participants. Personal demographic information included gender, race, age, marital status, and dependent status, and institutional

control, institutional size, and Carnegie classification comprised the three institutional demographic categories.

Participants' personal demographic characteristics. Research question 1 posed, "What are the personal and institutional demographic characteristics of CFOs in four-year, doctoral granting research institutions?" This question focused on five personal characteristics of gender, race, age, marital status, and dependent status. These demographic characteristics are presented in the following sections. Table 1 represents the gender of the CFOs participating in the study.

Table 1

Gender of CFO Participants

Gender	Total (n)	%
Male	51	65.4
Female	27	34.6
Total	78	100

The majority of participants in this study were male. In fact, 51 (65.4%) reported they were male. On the other hand, only 27 participants (34.6%) indicated they were female.

Table 2 shows that the overwhelming majority of participants (97.4%) identified as White/Non-Hispanic. Hispanic (2.6%) was the only other race identified among the CFOs. Surprisingly, none of the participants reported being African-American.

Table 2

Race of CFO Participants

Race	Total (n)	%
White/Non Hispanic	76	97.4
Hispanic	2	2.6
Total	78	100

The typical CFO in the study was over the age of 50, while only 21.8% were 50 years of age and younger (See table 3). The vast majority of CFOs (71.8%) were between the ages of 51-64.

Table 3

Age of CFO Participants

Age	Total (n)	%
21-35	2	2.6
36-50	15	19.2
51-64	56	71.8
65+	5	6.4
Total	78	100

The marital statuses of the respondents are reported in Table 4. The majority of the CFOs (85.9%) identified themselves as married, while the remainder (12.8%) responded as single, divorced, or in a domestic partnership.

Table 4

Marital Status of CFOs

Marital Status	Total (n)	%
Married	67	87
Single	5	6.5
Domestic Partnership	4	5.2
Divorced/Separated	1	1.3
Total	77	100

Table 5 lists the CFOs response to their responsibility for dependents. The responses indicated that 45.5% of respondents had dependents while 54.5% reported no dependents.

Table 5

Dependent Status of CFOs

Dependents	Total (n)	%
Dependents	35	45.5
No Dependents	42	54.5
Total	77	100

Participants' Institutional Characteristics

Table 6 provides participants' responses to the type of institutional control of their university. Not surprisingly, the majority (65.4%) of CFOs were from public institutions. Correspondingly, approximately 35% of all CFOs reported working in private, not-for-profit research institutions.

Table 6

Institutional Control of CFOs

Control	Total (n)	%
Public	51	65.4
Private (Not for Profit)	27	34.6
Total	78	100

Institutional size based on student enrollment was more evenly distributed as reported by the CFOs. The institutional size characteristic was broken into four size categories ranging from less than 10,000 students to over 30,000 students. Approximately 42% of CFOs worked in institutions with student enrollments of 20,000 or more. Table 7 reports the enrollment size of the participants' institutions.

Table 7

CFOs Institutional Size

Size	Total (n)	%
< 10,000	19	24.4
10,001 – 19,999	26	33.3
20,000 – 29,999	18	23.1
>30,000	15	19.2
Total	78	100

Lastly, the participants were asked about their Carnegie Classification status. The target population of 297 CFOs included 108 (36.6%) from Very-High Research Universities, 99

(33.3%) from High Research Universities, and 90 (30.1%) from Research Universities (Carnegie Foundation for the Advancement of Teaching). Interestingly, the respondents' institutional demographics somewhat mirrored the classification breakdown for the target population. The largest percentage of institutions (44.1%) were classified as very-high research universities. See Table 8 for the Carnegie classification of participants in this study.

Table 8

CFO Carnegie Classification

Classification	Total (n)	%
Very High Research	34	44.1
High Research	24	31.2
Research/Doctoral	19	24.7
Total	77	100

What are the self-reported degrees of stress of CFOs in four-year doctoral granting research institutions as based on the individual instrument questions?

This research question examined the degree to which CFOs experienced high to low stress in specific situations. Table 9 reports the stress of CFOs according to the Perceived Stress Scale which measures the degree to which certain situations are stressful in one's life. Table 10 reflects the House and Rizzo Tension and Anxiety Scale which measures role conflict and role ambiguity in complex organizations. Finally, table 11 reports answers to the Maslach Burnout Inventory – General Survey questions which measures burnout based on emotional exhaustion, depersonalization, and personal accomplishment. Chief Financial Officers recording their self-perceived stress for question statements related to stress on a five point Likert scale (5 = often, 4

= fairly often, 3 = sometimes, 2 = almost never, and 1 = never). The grand mean for all three tables was M=2.819.

Table 9 includes the means for the respondent answers to the PSS related questions. Most CFOs (M = 4.54) felt confident to handle their own personal problems (see Question 2).The answers were reversed for scoring purposes. The overall mean for these questions was M=3.17.

Table 9

Participant Responses by PSS

Question	n	M	SD
1. In the last month, how often have you felt that you were unable to control the important things in your life?	84	2.18	.959
2. In the last month, how often have you felt confident about your ability to handle your personal problems?	82	4.54	.757
3. In the last month, how often have you felt that things were going your way?	83	3.96	.803
4. In the last month, how often have you felt difficulties were piling up so high that you	83	2.00	.911

could not
overcome them?

Note. **Survey questions 1-4 are reversed for purposes of scoring on the 5-point Likert Scale**

Table 10 reports the answers to questions based on the Tension and Anxiety scale. The Chief Financial Officers in this study acknowledged in Question 6 that the "… work under a great deal of tension" (M = 3.82), and as reported in Question 11 "I take my job home with me… and think about it while doing other things, " (M = 3.68). When the participants were asked if they felt their health would improve with a different job the mean response rate was 2.13 (see Question 8). The mean for all questions was M=2.824.

Table 10

Participant Responses by Tension
and Anxiety Scale

Question	n	M	SD
5. My job tends to directly affect my health.	82	2.67	1.019
6. I work under a great deal of tension.	82	3.82	.862
7. I have felt fidgety or nervous as a result of my job.	82	2.48	.946
8. In the last month, how often have you felt If I had a different job, my health would probably	82	2.13	1.108

improve?			
9. Problems associated with my job have kept me awake at night.	80	2.78	1.006
10. I have felt nervous before attending meetings in my institution.	81	2.21	.786
11. I often "take my job home with me" in the sense that I think about it when doing other things.	81	3.68	1.023

Lastly, table 11 reports the means for the burnout questions. Question 26 stated "Do you find that you do not have enough time to plan as much as you would like to?" The mean CFO response to this statement was 3.23. Only one other situational statement had a mean score of over 3, Question 12 (M = 3.05) "Do you ever feel run down and drained of physical or emotional energy?" The majority of survey statements suggested that CFOs in this study did not experience "high" stress. On a related question to if the CFOs felt they were in the wrong profession the mean response rate was 1.82 (see Question 21). Lastly, when asked if the CFOs felt they never had anyone to talk to the participant response rate was M = 2.14 (see Question 17). The overall mean for this table was M=2.464.

Table 11

Participant Responses by MBI

Question	n	M	SD

12. Do you ever feel run down and drained of physical or emotional energy?	80	3.05	.967
13. Do you ever find that you are prone to negative thinking about your job?	80	2.40	.880
14. Do you ever find that you are harder and less sympathetic with people than perhaps they deserve?	80	2.36	.716
15. Do you find yourself getting easily irritated by small problems, or by your co-workers and team?	80	2.45	.682
16. Do you ever feel misunderstood or unappreciated by your co-workers?	80	2.20	.770
17. Do you ever feel that you have no-one to talk to?	80	2.14	1.052
18. Do you ever feel that you are achieving less than you should?	80	2.49	.827

19. Do you ever feel under an unpleasant level of pressure to succeed?	80	2.19	.901
20. Do you ever feel that you are not getting what you want out of your job?	80	2.19	.828
21. Do you ever feel that you are in the wrong organization or the wrong profession?	79	1.82	.844
22. Do you feel you are becoming frustrated with parts of your job?	79	1.82	.844
23. Do you feel that organizational politics or bureaucracy frustrate your ability to do a good job?	77	2.91	.920
24. Do you feel that there is more work to do than you practically have the ability to do?	78	2.95	1.031
25. Do you feel that you do not have time to do many of the things that are	78	2.76	.840

important to doing a good quality job?			
26. Do you find that you do not have time to plan as much as you would like to?	78	3.23	.966

Are there any statistically significant differences in the self-reported stress of CFOs by individual demographics and institutional characteristics?

The third research question sought to find differences, if any, in aggregate, between the participants by individual and institutional characteristics. Survey questions in Appendix B were used to ascertain the differences. The questionnaire used a five point Likert scale which assigned values of 1 to "Never" and 5 as "Often". Survey questions 1-4 were reverse scored to be consistent with the other 22 questions. The first research question asked about the demographic makeup of CFOs in four-year doctoral granting research institutions. Using a descriptive frequency report which included the mean, median, mode and standard deviation, the responses were analyzed among the participants to determine similarity. The second research question was used to determine the aggregate mean values of participant responses to each individual question.

For research question three, analysis was performed on participant responses to the individual questions in the survey by individual demographic categories. Statistical *t*-tests, were used to determine any significance between the means of two groups, were run on demographic categories gender, race, dependent status, and institutional control. ANOVA was used to test the means between groups with three or more categories (institutional enrollment size, age, marital status, Carnegie Classification). Using these analyses, there were no statistically significant

differences found among the participants as determined by the individual demographic and institutional categories. For all statistical listings see appendices D through O.

What self-reported coping strategies are used by CFOs to alleviate perceived stress?

The final research question sought to ascertain self-reported coping strategies used by CFOs to relieve stress. After analyzing the individual responses, four main themes or categories emerged from the data for coping with perceived stress. These top-four categories were (a) exercise, (b) spending time with friends and family doing personal hobbies or activities, (c) partaking in eating and drinking, and (d) spiritual or religious activities. Responses were solicited through an opened ended question that stated, "Thinking of stressful situations, please list any coping mechanisms which you use to overcome stress (e.g., religious services, smoking, exercise, etc.). Sixty-Eight (68) participants responded to this question and the answers were analyzed by placing each response into a related category. The CFO respondents could list more than one activity as how they cope with stress.

The majority of respondents (52) or 76% listed exercise as a common practice for alleviating stress with responses such as , " exercise: tennis, skiing", "walking campus", and "massive quantities of exercise." Spending time with friends, family or in personal activities (gardening, reading, movies, etc.) was the next highest category with 42 or 61.7% of respondents reporting. Of interest, only 12 participants, or 17.6% listed spiritual activities as a part of their regular stress relief regimen. Lastly, 17 (25%) respondents listed indulging in alcohol ("cocktails" & "occasional glass of wine") or food as stress relievers and two listed humor as their way of coping with stress. The complete listing of responses to the open-ended coping question are found in the appendix P.

Summary

This chapter provided the analysis and presentation of the data necessary to answer the research questions posed in this study. The typical CFO in this study was a white, male, married, aged 50 or older, and employed in a Very-High Research University with a student enrollment between 10,000 and 20,000 students. The results found that there were no statistically significant differences between the participants' perceived stress by demographics and institutional characteristics.

As a group, the respondents did not report high levels of perceived stress. The data from this study does indicate that just as many other occupations, research institution CFOs do experience some levels of stress, burnout and tension and any stress has the ability to negatively impact the person and the organization. The final chapter will provide an overview of the study, discussion of the finding, conclusions, and recommendations for practitioners.

Chapter V

Conclusions and Recommendations

Introduction

The purpose of this study was to explore perceived stress among postsecondary institution chief financial officers. The target population for this study included 297 research institutions contained in the Carnegie Foundation for the Advancement of Teaching's classification categories. Two hundred seventy-four (274) CFOs received the surveys due to vacancies, multi-campus responsibilities or because some institutions were only professional schools. Of this target population, a total of ninety (90) surveys were returned with at least partial answers. Seventy-Eight (78) questionnaires were completed in totality. A non-experimental quantitative research design was used to examine the data. This study is important because all employees in higher education can experience the negative consequences of stress which can also impact their institutions (Barkhuizen & Rothmann, 2008; Tytherleigh, Webb, Cooper & Rickets, 2007). A March 28, 2012 article by businessnewsdaily.com reported the World Health Organization estimated that stress related illnesses caused American businesses nearly $300 Billion in losses per year. Stress has been linked to cause physical issues such as headaches, upset stomach and heart disease (Jex, 1998) as well as psychological issues including anxiety, insomnia and depression (Williamson & Vine, 1998).

This chapter includes an overview of the study, a discussion of the findings and conclusions drawn from the study and recommendations for future research. Also included in this chapter are the limitations to the study and recommendations to practitioners on dealing with the effects of stress.

Overview

This research was motivated by the fact that stress is an inevitable problem in our lives (McGowan, Gardner, & Fletcher, 2006; Soo & Ali, 2013). Personal stress can carry over into the workplace and work stress can affect our personal lives. College and university senior level administrators are no different than their counterparts in business and industry in terms of facing stress in their personal and work life. In fact, similar stressors such as changing revenue sources, rising expenses, budget shortfalls, personnel issues, and deferred maintenance on their facilities impact all executives (Flieger, 2013; Thomson, 2015). In many cases university CFOs have the added stressors of transparency and accountability owed to their various institutional constituencies (Hansen, 2015; Lederman, 2013). The purpose of this investigation was to report the individual and institutional characteristics of the participants, describe any relationship between perceived stress among the participants and their demographics, and report individual coping strategies among the CFOs.

Data were and analyzed in this study to address the following research questions:

1. What are the individual and institutional demographic characteristics of CFOs in four-year doctoral granting research universities?
2. What is the self-reported stress of CFOs in four-year doctoral granting research institutions as based on the situational statements contained in the survey instrument?
3. Are there any statistically significant differences in the self-reported stress of CFOs by individual demographics and institutional characteristics?
4. What self-reported coping strategies are used by CFOs to alleviate perceived stress?

There was no attempt to prove or disprove correlation between the stress levels and the individual demographics.

The theoretical framework guiding this study postulated that senior-level managers in business and industry and university administrators, such as CFOs, perceive stress, tension, anxiety, and burnout from daily challenges associated with the performance of their job duties and responsibilities (Cohen et al, 1983; Maslach & Jackson, 1981). External and internal pressures create the perception of stressful issues and situations among executive level employees, including university CFOs (McDowell-Larson, 2009). Recent financial woes may have exacerbated the effects of stress among research institution CFOs together with a rapidly changing financial landscape in higher education (Stone, 2012).

This study was conducted as a non-experimental quantitative research that focused on reporting descriptive findings among the participants, examining if there was a statistically significant difference between participant demographics and institutional characteristics and stress related challenges, and eliciting self-reported coping strategies among the CFOs. A survey consisting of 26 questions was constructed based on the Perceived Stress Scale (PSS), the House and Rizzo Tension Scale and the Maslach Burnout Inventory-General Survey. Additionally, the participants were asked to identify certain demographic characteristics, which included: age, race, gender, marital status, dependent status, and institutional characteristics such as control, institutional enrollment size, and Carnegie classification. The survey also asked respondents to identify ways in which they personally try to alleviate stress. The questionnaire was pilot tested prior to emailing to the target population to seek feedback on the study. The survey was then distributed via e-mail to the target population using Qualtrics research software to collect the data.

Once the data were collected the information was analyzed using SPSS 21. The software was used to compile individual demographic and institutional characteristics, and participant responses to the survey questions, and coping strategies used by the CFOs to combat stress. A univariate analysis was applied to summarize and describe the demographic responses. The software was also used to run *t*-tests and ANOVA analyses between the demographic and institutional information and questionnaire items related to stress. Lastly, the responses to the open-ended coping question were analyzed and coping themes were developed and reported qualitatively under Research Question 4.

Discussion of the Findings and Conclusions

Research Question 1 was used to determine the individual demographics and institutional characteristics among the participants. The average respondent in this study is a white male, middle aged, married, and working in a very-high research institution which has a student enrollment between 10,000 and 20,000 students. These characteristics affirm the assumption that the majority of respondents would be middle aged, white males. These characteristics are in line with business and industry according to a survey conducted by Ernst & Young (2010) as the study describes the "typical" CFO in industry as male, 42 years old and very well educated. In the same year (2010), the National Association of College and University Business Officers (NACUBO) published a study that described the "typical" university CFO as a 55-year-old white male. This same report found that among public and private universities, the number of women overall as CFOs was approximately 30% but only 21% in comprehensive universities and 42% in community colleges. The profile of the participants by NACUBO also found that only 10% identified as a racial or ethnic minority with a mere 5% African-American.

In the present study, 34.6% of the participants self-identified as female which is consistent with the overall national average according to the 2010 NACUBO report but higher than the reported percentage in comprehensive and other colleges and universities. This *may* mean that more females are ascending to the role of CFO in research institutions. In fact, recent publications have noted that females are ascending to senior- level positions all across higher education in recent years (Hawkins, 2013; Jarboe, 2013). The racial profile of the present study paints a dismal picture of minorities in the CFO position. Only 2.6% of the respondents identified themselves as a racial minority and none reported being African-American. Unfortunately, no self-identified African-American CFOs in research institutions may be alarming, but is consistent with the data presented by NACUBO. This appalling dearth of minorities and in particular African-Americans is consistent with business and industry. A survey of 668 Fortune 500 and S&P 500 companies (overlap excluded) revealed that only 27 participants were identified as minorities with 14 Asian-Americans and 13 from other ethnic groups, which included African Americans and Hispanics (Murphy, 2014). These trends may begin to shift though as the current demographic begins to age out of their current positions which could provide openings for more females and ethnic minorities.

Research Question 2 described the mean scores of the participants' stress in response to each of the 26 situational statements listed in the survey instrument. In this research question the responses to each of the 26 questions was aggregated and not reported by personal demographic and institutional characteristics. However, the questions were broken out by the individual surveys which comprised the final questionnaire. The items associated with the PSS had an overall factor of M=3.17, however the items were reverse scored meaning the respondents did not have high levels of perceived stress. In fact, the CFOs in the current study indicated that they

almost never feel as though they are unable to control the important things in their life (M=2.18) and that they had so many difficulties piling up they were unable to overcome them (M=2.00).

The responses for the Tension and Anxiety Scale had an overall M=2.82 indicating lower levels of tension and anxiety although in Question 11 "I take my job home with me… and think about it while doing other things, " (M = 3.68) and Question 6, "I work under a great deal of tension, " (M=3.82). This appears consistent with nearly any job, especially those in senior level positions.

Lastly, the responses for the MBI-GS had an overall M=2.46. The participants in this survey only moderately responded to feeling drained of emotion or physical energy (M=3.05) and the feeling of not having enough time to plan as they would like (M=3.23). All other scores were below M=3.0 and may be because burnout tends to be measured better in a longitudinal fashion as opposed to a point in time (Maslach & Leiter, 1997).

Looking at questions, it appears that the participants, collectively, did not report a high level of stress. In fact, the grand mean between all three instruments was less than 3.0 (M=2.819) If anything, as a group the CFOs in this present study self-reported only moderate stress. The respondents reported (M=3.82 on a 5-point Likert Scale with 5 = "Often" and 1 = "Never" that they work under a great deal of tension and often take their job home with them in the sense that they think about it while doing other things (M=3.68). According to Schieman, Milkie, and Glavin (2009) working under tension and taking the job home with you is a common cause of stress that can have considerable impact on one's personal life. This type of stress can also cause a great deal of anxiety according to Robert Half (2011). Interestingly, one CFO participant specifically mentioned in the open-ended response that his/her job did not define them, rather he/she define their job and does not let it interfere with their outside life. From the responses

associated with Research Question 2, the CFOs in the present study appeared to negotiate the stress associated with their positions of responsibility.

The levels of self-reported stress, burnout, tension and anxiety according to demographic and institutional characteristics of the research institution CFOs were investigated in Research Question 3. Age was not a factor with perceived stress and may be mitigated by older age and experience in the field (Ng & Feldman, 2008; Schieman, Milkie, & Glavin, 2009). It would seem that it takes many years of experience to master the duties and responsibilities that accompany the position of CFO.

Gender, race, and institutional control were found to have no significant differences on the levels of perceived stress, tension, anxiety, and burnout. These findings may have been influenced by the lack of diversity among the respondents. In a study researching the differences in gender, age, educational levels and marital statuses, Galanakis, Stalikas, Kallia, Karagianni, and Karela (2009) found that females were more prone to stress due to having multiple roles such as mother, wife, and employee. Additionally, the same study found that differences existed in stress levels according to age groups but were contradictory to previous studies. As noted in Research Question 1, as the current CFOs begin to retire less experienced employees take their place, it will be interesting to see what types of stress impact these new CFOs.

Finally, Research Question 4 was used to describe and summarize the coping strategies used by the responding CFOs. The majority of the respondents claimed that they participated in exercise to alleviate stress symptoms which has been proven as a stress reducer (Erikson et al., 2002; Rizzolo, Zipp, Stiskal, & Simpkins, 2009) while a small group used religious services to mitigate those same symptoms. Other coping strategies included socialization with non-work friends, having an alcoholic beverage, participating in outdoor activities, and spending time with

family as ways to handle stress. While some coping mechanisms such as exercise and meditation are seen as positive strategies, others such as substance abuse may be enhancing the effects of stress (Chen & Cunradi, 2008). Based on the literature and participant responses, participation in exercise and socialization with friends and family were the most common means of handling stress. The effectiveness of various coping strategies undoubtedly vary by individual CFOs.

There is little doubt that stress, anxiety and burnout are significant issues in people's lives whether they are perceived or real. An article in the February 1981 edition of Management Review cites that burnout among executives is an increasing issue which is being studied and more common in the workplace. This burnout is caused by the expectations of the job coupled with frustrations of not being effective in performance. Executives are less inclined to admit to stress issues or employ company sponsored stress reduction programs due to either embarrassment or not wanting to be associated with people who do use the programs (Glicken & Janka, 1982). Universities in this case, should take a more proactive approach to tackling the issues of stress and burnout among its employees. Levinson (1982) found that supervisors and human resources should be attentive to their employees and look for signs of burnout such as working long hours, increased demands with little action taken on making decisions which leads to feelings of inadequacy and lethargy among others. Additionally, Levinson found that when corporations only offered de-stressing programs such as meditation or relaxation techniques that the problems were only temporarily alleviated. The author suggested requiring employees take time away from the office, limiting hours on the job and emphasizing their importance to the organization as ways to reduce stress and burnout.

Although Levinson's research is more than 30 years old it is still relevant to today's discussion. None of the respondents mentioned coping techniques which included institution

sponsored programs, medication or seeking professional help for issues concerning stress although all respondents reported some level of stress, anxiety and burnout. The majority of the participants mentioned using yoga/exercise or spending time with family and friends as their major source of stress relief. These techniques are among the best at combating the effects of stress but may not provide long term relief if the stressors are not reduced or eliminated.

Previous research (Ng & Feldman, 2008) suggests that the effects of stress can be mitigated by age and experience. While the participants in the current study show that they sometimes experience perceived stress there is no evidence of consistently elevated or high levels of stress. This may well correspond with the fact that the majority of participants were middle-aged and experienced chief financial officers.

Limitations

Several limitations arose during the study. First, only 33% of research university CFOs participated in this study. This target population for this study only included 297 institutions. Although the response percentages closely mirrored percentages of institutions in each of the Carnegie research categories, it is possible that non-respondents might respond in a different manner. In addition, since research institutions make only 6% of all college and universities in the United States, the findings cannot be generalized to all college and university CFOs.

Second, this survey instrument was distributed using an e-mail design which may have affected the response rate, as busy, senior-level administrators may have ignored, discarded or forgotten the survey due to other pressing responsibilities. According to Truell (2003) internet response rates have produced mixed results according and show no discernible differences from other survey methods. Nevertheless, a 28% response rate is still useful in describing the

perceived stress among the participants but may not be representative of the entire target population.

Third, the majority of respondents were identified as male (65%), white (97%), middle aged (72%) and working at a public (65%) mid-sized institution (33%) which limited the analysis of determining any statistically significant differences based on age, gender, race and institutional size with regards to perceived stress, anxiety and burnout.

Fourth, there was no attempt to prove causation between the demographic information of participants and perceived stress, anxiety and burnout. This research was designed as a non-experimental descriptive study solely to report what respondents perceive as stressful situations and did not measure any physiological or psychological changes based on perceived stress. The study also did not analyze any particular individual that may suffer from highly elevated or extreme stress.

Fifth, the complexity and length of the survey instrument may have also limited the response rate. The instrument did not try to measure a single aspect of stress, but rather examined perceived stress, burnout, and anxiety which combined the use three different instruments. This survey consisted of 26 total questions, not including the demographic and institutional items and open-ended responses. Maronick (2009) noted that, "overall time to complete the survey is most likely to reduce participation" (p. 24).

Recommendations for Future Research

Limited research exists on the stress experienced by CFOs in colleges and universities. To gain a better understanding of stress faced by CFOs in four-year colleges and universities, the following recommendations for future research are provided:

1. In order to project perceived stress among chief financial officers in institutions, this research should be expanded to all four-year degree granting institutions. Examining stress in two-year colleges should also be undertaken.
2. Research should examine how non-occupational stress affects the performance of CFOs and other senior level leaders.
3. A qualitative study could be used to examine a carefully selected group of CFOs in different types of research institutions.
4. A study could be designed to focus on determining specific stressors, their sources, and their frequency among CFOs.
5. A study could be designed to measure causation and whether occupational stressors cause perceived stress, anxiety or burnout.
6. An investigation of university CFOs, university executives, and other staff who take advantage of EAPs or other occupational stress interventions may be helpful to determine the usefulness of those programs.

Recommendations for Improved Practice

Based on the findings in this present study and in previous research, several recommendations for alleviating occupational stress can be recommended. Although the focus of this study was research university chief financial officers, other senior level administrators and employees in higher education should be concerned with occupational stress. The effects of stress can impact the institution, the individual, family and friends and those that work closest with the employee. In particular, human resources managers should be informed on the effects and signs of stress may wish to consider the following recommendations for practice:

1. Human resources should work closely with benefit offices, campus health departments and insurance providers to develop employee help procedures, policies and programs to assist high-level employees in dealing with stressful situations.
2. Resources to encourage senior-level administrators for taking part in an employee assistance program (EAP) should be developed. These might include giving discounts to campus or area fitness clubs or even given insurance discounts for taking yearly physicals, meeting exercise goals or weight loss.
3. Assurance that EAPs are confidential and provide off-campus facilities for those programs might increase participation in stress reduction programs.
4. Managers at all levels of a college or university should encourage employees (even senior-level administrators) to take earned vacation and step away from their responsibilities periodically.
5. A general recommendation would be that managers and supervisors should have training in how to spot the effects of stress and how to assist their employees dealing or mitigating those effects.

Summary

This chapter has provided an overview of the study, including the purpose of the study, research questions, research design, and data collection process. In addition to the overview, Chapter V has presented a discussion of the findings, conclusions and recommendations for future study and improved practice.

The nature and landscape of finance are changing and evolving in higher education. CFOs in postsecondary education are facing decreased private and public support, reduced endowments, additional pressure from stakeholders, including lawmakers, taxpayers, and

granting agencies, together with heightened expectations to produce more graduates and research. These external pressures along with life issues that all employees face will continue to cause stress and anxiety that CFOs in senior-level administrative positions must face and manage (Halfond & Stokes, 2013; Schifrin, 2013).

It is the hoped that this study has contributed to the limited literature on occupational stress and coping techniques of chief financial officers in America's elite institutions of higher education. This study has confirmed previous research that employees, including high-level administrators, experience the effects of occupational stress and that they must apply useful stress reducing tactics. Additional research is needed focusing on senior-level college and university administrators concerning stress, its effects and developing effective coping mechanisms. Hopefully, this research will further the interest of future researchers to engage in further investigation of workplace stress in postsecondary education. In summarizing the impact of stress, Herbert (1965, p. 241) states,

> The mind can go either direction under stress—toward positive or toward negative: on or off. Think of it as a spectrum whose extremes are unconsciousness at the negative end and hyperconsciousness at the positive end. The way the mind will lean under stress is strongly influenced by training.

References

Abel, M. H. (1998). Interaction of humor and gender in moderating relationships between stress and outcomes. *The Journal of Psychology, 132*(3), 267-276.

Aday, L., & Cornelius, L. J. (2006). *Designing and conducting health surveys: A comprehensive guide* (3rd Ed.). NJ: Wiley.

American Institute of Stress. (n.d.). Workplace stress. Retrieved from http://www.stress.org/workplace-stress/

American Psychological Association. (2008). *Stress in America.* Retrieved from https://www.apa.org/news/press/releases/2008/10/stress-in-america.pdf

American Psychological Association (n.d.). *Stress effects on the body*. Retrieved from http://www.apa.org/helpcenter/stress-body.aspx

Anonymous. (1981). Burnout: Beyond executive stress. *Management Review, 70*(2), 4-5.

Bacharach, S. B., Bamberger, P., & Conley, S. (1990). Work processes, role conflict, and role overload: The case of nurses and engineers in the public sector. *Work and Occupations, 17,* 199-228.

Barkhuizen, N., & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions. *South African Journal of Psychology, 38*(2), 321-336.

Barling, J., Kelloway, E. K., & Frone, M. (Eds.). (2005). *Handbook of work stress*. Thousand Oaks, CA: Sage Publications.

Barnes, L. B. L., Agago, M. O., & Coombs, W. T. (1998). Effects of job-related stress on faculty intention to leave academia. *Research in Higher Education, 39*(4), 457-469.

Beehr, T. A. (1976). Perceived situational moderators of the relationship between subjective role ambiguity and role strain. *Journal of Applied Psychology, 61,* 35-40.

Beehr, T. A. (1995). *Psychological stress in the workplace*. London: Routledge.

Beehr, T. A., & Glazer, S. (2005). Organizational role stress. In J. Barling, E. K. Kelloway, & M. Frone,(Eds.). *Handbook of work stress* (pp. 7-34). Thousand Oaks, CA: Sage Publications.

Bergdahl, J., & Bergdahl, M. (2002). Perceived stress in adults: Prevalence and association of depression, anxiety and medication in a Swedish population. *Stress and Health, 18*. 235-241.

Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Psychology, 5*(1), 156-163.

Brougham, R. R., Zail, C. M., Mendoza, C. M., & Miller, J. R. (2009). Stress, sex differences, and coping strategies among college students. *Current Psychology, 28*(2), 85-97.

Cartwright, S., & Cooper, C. (1997). *Managing workplace stress*. Thousand Oaks, CA: Sage Publications.

Cartwright, S., & Cooper, C. (2005). Individually targeted interventions. In J. Barling, E. Kelloway, & M. Frone (Eds.), *Handbook of work stress.* (pp. 607-622). Thousand Oaks, CA: SAGE Publications, Inc.

Cartwright, S. (2000). Taking the pulse of executive health. *The Academy of Management Executive,14*(2). 16-24.

CCH, Inc. (1998, September 23). *CCH unscheduled absence survey*. Retrieved from http://www.cch.com/press/news/1998/199809233.asp

Chartered Institute of Personnel and Development. (2005). *Absence management: A survey of policy and practice*. Retrieved from http://www.cipd.co.uk/NR/rdonlyres/386495B0-8D7B-491B-AD3E-F968DCF38CE7/0/absmgmnt0705.pdf

Chartered Institute of Personnel and Development. (2014). *Absence management 2014*. Retrieved from http://www.cipd.co.uk/research/absence-management-survey.aspx

Chen, M. J., & Cunradi, C. (2008). Job stress, burnout, and substance abuse among urban transit operators: The potential mediating role of coping behavior. *Work and Stress, 22*(4), 327-340.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385-396.

Cooper, C. L. (1984). Executive stress: A ten-country comparison. *Human Resource Management, 23*(4). 395-407.

Cooper, C. L., & Marshall, J. (1980). *White collar and corporate stress.* Chichester: John Wiley & Sons.

Common Coping Responses for Stress - Topic Overview. (2013, May 3). Retrieved August 14, 2014, from http://www.webmd.com/balance/stress-management/tc/common-coping-responses-for-stress-topic-overview

Cranwell-Ward, J. (1990). *Thriving on stress: Self-development for managers.* London: Routledge.

Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approach*. (3rd. Ed.). New Jersey: Prentice Hall.

D'Souza, L., Urs, G. B., & Siddeqowda, Y. S. (2005). A comparative study of occupational stress among executives, managers, and engineers. *Pakistan Journal of Psychological Research, 20*(1-2), 15-23.

Dainas, C., & Marks, D. (2000). Evidence of an EAP cost offset. *Behavioral Health Management, 20*(4), 34-41.

Davidson, M., & Cooper, C. (1983). *Stress & the woman manager.* Oxford: Martin Robertson & Company, Ltd.

Diehl, M., & Hay, E. L. (2010). Risk and resilience factors in coping with daily stress in adulthood: The role of age, self-concept in coherence and personal contact. *Developmental Psychology, 46*(5), 1132-1146.

Donovan, S. B., & Kleiner, B. H. (1994). Effective stress management. *Managerial Auditing Journal, 9*(6), 31-41.

Drentrea, P. (2000). Age, debt and anxiety. *Journal of Health and Social Behavior, 41*(4), 437-450.

Eriksen, H. R., Ihlebaek, C., Mikkelsen, A., Gronningsaeter, H., Sandal, H. M., & Ursin, H. (2002). Improving subjective health at the worksite: A randomized controlled trial of stress management training, physical exercise, and an integrated health programme. *Occupational Medicine, 52*(7), 383-391.

Ernst & Young. (2010). *The DNA of the CFO: A study of what makes a chief financial officer*. Retrieved from http://www.ey.com/Publication/vwLUAssets/The-DNA-of-the-CFO-2010/$FILE/The-DNA-of-the-CFO-2010.pdf

Farahbakhsh, S. (2009). A study of job burnout, sources, and coping strategies in top managers of governmental organizations in province of Lorestan, Iran. *Australian Journal of Basic and Applied Sciences, 3(*4), 4032-4039.

Financial Executives International. (2012). FEI and Baruch survey: CFOs enter 2012 with economic concerns, business challenges. Manufacturing Close-Up. Jacksonville, FL: Author.

Fliegler, C. M. (2013). Campus CFOs speak out on their expanding roles. *University Business.* Retrieved from http://www.universitybusiness.com/article/campus-cfos-speak-out-their-expanding-roles

Floerke, K. l. (1988). *Occupational stress factors as perceived by public school superintendents in Arkansas*. (Doctoral Dissertation). University of Arkansas.

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology, 54*(3), 466-475.

Galanakis, M., Stalikas, A., Kallia, H., Karagianni, C. & Karela, C. (2009). Gender differences in experiencing occupational stress: The role of age, education and marital status. *Stress and Health, (25)*, 397-404.

Garg, D., & Rani, K. (2014). An analytical study of occupational stress in education sector. *International Journal of Research, 1*(9), 640-648.

Gerrig, R. J., & Zimbardo, P. G. (2002). *Psychology and life* (16th ed.). Retrieved from http://www.apa.org/research/action/glossary.aspx?tab=18

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work and Stress, 15*(1), 53-72.

Glicken, M. D., & Janka, K. (1982). Executives under fire: The burnout syndrome. *California Management Review, 24*(3), 67-72.

Gruen, R. J., Folkman, S., & Lazarus, R. S. (1988). Centrality and individual differences in the meaning of daily hassles. *Journal of Personality, 56*(4), 743-762.

Halfond, J. A., & Stokes, P. (2013, September, 3). New England colleges under stress: Presidential voices from the regions smaller colleges. *The New England Journal of Higher Education*. Retrieved from http://www.nebhe.org/thejournal/new-england-colleges-under-stress: Presidential-voices-from-the-regions-smaller-colleges/

Hansen, H. (2015, February 19). Lawmakers push accountability. *Minnesota Daily.* Retrieved from http://www.mndaily.com/news/metro-state/2015/02/18/lawmakers-push-college-accountability

Hawkins, B. D. (2013, March 19). Women making greater strides towards executive office. *Diverse Issues in Higher Education*. Retrieved from http://diverseeducation.com/article/52053/

Hengst, A. (n.d.). Reducing workplace stress. *HR World*. Retrieved from http://www.hrworld.com/features/reduce-workplace-stress/

Herbert, F. (1965). *Dune*. Philadelphia: Chilton Books.

Ho, J. (1995). The Singapore executive: Stress, personality, and wellbeing. *The Journal of Management Development, 14*(4). 47-55.

Hobfoll, S. E., Hall, B. J., & Canetti, D. (2012). Political violence, psychological distress, and perceived health: A longitudinal investigation in the Palestinian authority. *Psychological Trauma: Theory, Research, Practice, and Policy*, *4*(1), 9-21.

Hogan, R. L., & McKnight, M. A. (2007). Exploring burnout among university online instructors: An initial investigation. *The Internet and Higher Education, 10*(2), 24-32.

Horton, H. (2011). Dealing with self-distress. *Occupational Stress, 63*(6), 20-22.

House, J. S., Wells, J., McMichael, A. J., Kaplan, B. H., & Landerman, L. R. (1979). Occupational stress and health among factory workers. *Journal of Health and Social Behavior, 20*(2). 139-160.

Hurrell, J. (2005). Organizational stress intervention. In J. Barling, E. Kelloway, & M. Frone (Eds.), *Handbook of work stress.* (pp. 623-647). Thousand Oaks, CA: SAGE Publications, Inc.

Ivancevich, J. M., Matteson, M. T., Freedman, S. M., & Phillips, J. S. (1990). Worksite stress management interventions. *American Psychologist, 45*, 252-261.

Jang, Y., Borenstein, A., Chiriboga, D. A., & Mortimer, J. A. (2005). Depressive symptoms among African American and White older adults. *Journal of Gerontology: Psychological Sciences, 60B*(6), 313-319.

Jarboe, N. (2013). *Women count: Leaders in higher education 2013*. Llandaf: Women Count.

Jex, S. M. (1998). *Stress and job performance: Theory, research and implications for managerialpractice.* Thousand Oaks: Sage Publications, Inc.

Jick, T., & Mitz, L. (1985). Sex differences in work stress. *Academy of Management, 10*(3). 408-420.

Juniper, B. (2012). Price of presenteeism. *Occupational Health, 64*(5), 26.

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity.* New York: Wiley.

Karim, A., Mir, A., & Bingi, P. (2005). Perceived usefulness of stress management strategies and their implementation: An empirical investigation. *Journal of Applied Management and Entrepreneurship, 10*(3), 21-34.

Katz, D., & Kahn, R. (1978). *The social psychology of organizations*. New York: Wiley.

Kaufman, D., & Fetters, M. L. (1983). The executive suite: Are women perceived as ready for the managerial climb? *Journal of Business Ethics, 2*(3), 203-212.

Kelderman, E. (2009). Public colleges consider privatization as a cure for the common recession. *The Chronicle of Higher Education, 55*(34), A16-A17.

Kelloway, E. K., Sivanathan, N., Francis, L. & Barling, J. (2005). Poor leadership. In J. Barling, E. K. Kelloway, & M. Frone. (Eds.). *Handbook of work stress* (pp. 7-34). Thousand Oaks, CA: Sage Publications.

Kerney, E. R., (1991). Affective disposition, role stress, and job withdrawal. In P. L. Perrrewe (Ed.), *Handbook on job stress* [Special issue]. *Journal of Behavior and Personality*, *6*, 331-347.

Khubchandani, J., Nagy, M., Watkins, C. M., Nagy, S., & Balls, J. E. (2009). A preliminary survey of university employee's perceptions of work related stress: Association with diet and exercise on campus. *American Journal of Health Studies, 24*(2), 306-313.

Kinman, G. (2008). Work stressors, health and sense of coherence in UK academic employees. *Educational Psychology, 28*(7), 823-835.

Kinman, G. , & Wray, S. (2013). Higher stress: A survey of stress and well-being among staff in higher education. Retrieved from http://www.ucu.org.uk/media/pdf/4/5/HE_stress_report_July_2013.pdf

Kirk, A.K., & Brown, D.F. (2003). Employee assistance programs: A review of the management of stress and wellbeing through workplace counselling and consulting. *Australian Psychologist, 38*(2), 138-143.

Kotter, J., (2012). The key to changing organizational culture. *Forbes*. Retrieved from http://www.forbes.com/sites/johnkotter/2012/09/27/the-key-to-changing-organizational-culture/

Lederman, D. (2013). Public university accountability 2.0. Retrieved from https://www.insidehighered.com/news/2013/05/06/public-university-accountability-system-expands-ways-report-student-learning

Lee, R. M., Keough, K. A., & Sexton, J. D. (2002, Summer). Social connectedness, social appraisal, and perceived stress in college women and men. *Journal of Counseling and Development, 8*, 355-361.

Levinson, H. (1982). When executives burnout. *The McKinsey Quarterly, Spring* (1), 62-73.

Mark, G., & Smith, A. P. (2012). Effects of occupational stress, job characteristics, coping, and attributional style on the mental health and job satisfaction of university employees. *Anxiety, Stress & Coping: An International Journal, 25*(1), 63-78.

Maronick, T. J. (2009). The role of the internet in survey research: Guidelines for researchers and experts. *Journal of Global Business and Technology, 5*(1), 18-31

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behaviour, 2*(2), 99-113.

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it.* San Francisco: Josey-Bass.

McCann, J., & Holt, R. (2009). An exploration of burnout among online university professors. *Journal of Distance Education, 23*(3), 97-110.

McDowell-Larson, S. (2009). Six ways to beat executive job stress. *Forbes.* Retrieved from http://www.forbes.com/2009/09/30/executive-job-stress-leadership-ceonetwork-ccl.html

McGowan, J., Gardner, D., & Fletcher, R. (2006). Positive and negative affective outcomes of occupational stress. *New Zealand Journal of Psychology, 35*(2), 92-98.

McGrath, J. E. (1976). Stress and behavior in organizations. In *Handbook of Industrial and Organizational Psychology* (Ed.) M. D. Dunnette, (pp. 1351-1395), Chicago: Rand McNally.

McTernan, W. P., Dollard, M. F., & LaMontagne, A. D. (2013). Depression in the workplace: An economic cost analysis of depression-related productivity loss attributable to job strain and bullying. *Work and Stress, 27*(4), 321-338.

Mena, R. (1995). *Arizona community college presidents: A study of perceived stress*. (Doctoral Dissertation). Northern Arizona University.

Michie, S. (2002). Causes and management of stress at work. *Occupational and Environmental Medicine, 59*, 67-72.

Miller, G., Yeager, S., Hildreth, W. B., & Rabin, J. (2005). How financial managers deal with ethical stress. *Public Administration Review, 65*(3), 301-312.

Mitchell, M., Palacios, V., & Leachman, M. (2014, May 1). States are still funding higher education below pre-recession levels. Retrieved from http://www.cbpp.org/research/states-are-still-funding-higher-education-below-pre-recession-levels?fa=view&id=4135

Murphy, M. (2014, June 17). More minority CFOs, but still a small pool. *CFO Journal*. Retrieved from http://blogs.wsj.com/cfo/2014/06/17/more-minority-cfos-but-still-a-small-pool/

NACUBO. (2010). Know your CFO. *HR Horizons, 5*(4). Retrieved from http://hrhorizons.nacubo.org/newsletter/past-issues/volume-5-issue-4-/know-your-cfo.html

Nagel, L., & Brown, S. (2003). The ABCs of managing teacher stress. *The Clearing House, 76*(5), 255-258.

Narayanan, L., Menon, S., & Spector, P. (1999). Stress in the workplace: A comparison of gender and occupations. *Journal of Organizational Behavior, 20*(1), 63-73.

Nelson, D., & Burke, R. (2000). Women executives: Health, stress, and success. *The Academy of Management Executive, 14*(2), 107-121.

Ng, D. M., & Jeffery, R. W. (2003). Relationships between perceived stress and health behaviors in a sample of working adults. *Health Psychology. 22*(6), 638-642.

Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *The Journal of Applied Psychology, 93*(2), 392-423.

Orbach, N. F. (2001). EAPs as a risk management tool. *Behavioral Health Management, 21*(4), 44-47.

Pool, S. W. (2000). Organizational culture and its relationship between job tension in measuring outcomes among business executives. *The Journal of Management Development, 19*(1), 32-48.

Rafidah, K., Azizah, A., Norzaidi, M., Chong, S., Salwani, M., & Noraini, I. (2009). Sress and academic performance: Empirical evidence from university students. *Academy Of Educational Leadership Journal*, *13*(1), 37-51.

Richardson, W. U. (2006). *An examination of perceived stress in the lives of African American female executives* (Doctoral Dissertation). Argosy University.

Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology, 13*(1). 69-93.

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*(2), 150-163.

Rizzolo, D., Zipp, G., Stiskal, D., & Simpkins, S. (2009). Stress management strategies for students: The immediate effects of yoga, humor, and reading on stress. *Journal of College Teaching and Learning, 6*(8), 79-88.

Robert Half. (2011). *What are the top challenges facing today's financial executives*. Menlo Park: Robert Half.

Rogers, R.E. (1975). Executive stress. *Human Resource Management, 14*(3), 21-24.

Rogers, R. E., Li, E. Y., & Ellis, R. (1994). Perceptions of organizational stress among female in the U.S. government: An exploratory study. *Public Personnel Management, 23*(4), 593-609.

Rosch, P. J. (n.a.). Reminiscences of Hans Selye and the birth of "stress." Retrieved from http://www.stress.org/about/hans-selye-birth-of-stress/

Royal, P., & Grobe, W. (2008). Job-related stress and sleep disorders among North Carolina college presidents. *Community College Journal of Research and Practice, 32,* 496-511.

Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion for research and practice: A critical analysis of theory, assessment, research and interventions*. London: Taylor & Francis.

Schaufeli, W. B., Bakker, A. B., Hoogduin, K., Schaap, C., & Klader, A. (2001). On the clinical validity of the Maslach burnout inventory and the burnout measure. *Psychology and Health, 16*, 565-582.

Schieman, S., Milkie, M. A., & Glavin, P. (2009, December). When work interferes with life: Work- nonwork interference and the influence of work-related demands. *American Sociological Review, 74*, 966-988.

Schifrin, M. (2013). Is your college going broke? The most and least financially fit schools in America. *Forbes.* Retrieved from http://www.forbes.com/sites/schifrin/2013/07/24/is-your-college-going-broke/

Schuler, R. S. (1980). Definition and conceptualization of stress in organizations. *Organizational Behavior and Human Performance, 25*, 184-215.

Selye, H. (1936). A syndrome produced by diverse nocuous agents. *Nature 138,* 32.

Selye, H. (1950). *Stress*. Montreal, Canada: ACTA, Inc.

Selye, H. (1956). *The stress of life* (4th ed.). New York, NY: McGraw-Hill Book Company, Inc.

Selye, H. (1973). The evolution of the stress concept. *American Scientist, 61*(6), 692-699.

Selye, H. (1974). *Stress without distress.* Philadelphia & New York: J.B. Lippincott Company.

Selye, H. (1980). *Selye's guide to stress research.* New York: Van Nostrand Reinhold Company.

Shin, J. C. & Jung, J. (2014). Academics job satisfaction and job stress across countries in the changing academic environments. *The International Journal of Higher Education Research, 67*, 603-620.

Sinclair, A. (2013). *Absence management* 2013. Retrieved from http://www.cipd.co.uk/binaries/absence-management_2013.pdf

Sinclair, A. (2014). *Absence management 2014*. Retrieved from http://www.cipd.co.uk/binaries/absence-management_2014.pdf

Soo, J. H. S., & Ali, H. (2013, December). The role of co-worker support on the relationship between leadership and stress. Paper presented at 10th International Conference of the Global Academy of Business & Economic Research, Dubai.

Spickerman, F. (2005). Managing stress from the inside out. *Family Practice Management, 12*(5), 102.

Stein, S. (2002). Work/Life and EAP integration. *Behavioral Health Management,22* (5), 32-41.

Steptoe, A., & Kivimaki, M. (2012). Stress and cardiovascular disease. *Nature Reviews Cardiology, 9*, 360-370.

Stone, J. (2012). State funding for public higher education: Explaining the great retreat. *Munich Personal RePEc Archive.* Retrieved from http://mpra.ub.uni-muenchen.de/39732/

Stress, Definition of Stress, Stressor, What is Stress? Eustress? (n.d.). Retrieved from http://www.stress.org/topic-definition-stress.htm

TD Bank. (2011). CFOs say cash flow is top concern and financial priority for 2011: TD Bank survey: Asset-based financial services industry. The Secured Lender, 67(1), 12-13.

Thomson, J. (2015). Top of the class: The evolution of campus CFOs. Forbes. Retrieved from http://www.forbes.com/sites/jeffthomson/2015/01/06/top-of-the-class-the-evolution-of-campus-cfos/

Treven, S. (2005). Strategies and programs for managing stress in work settings. Management, 10(2), 45-59.

Trochim, W. M. K. (2006). Types of design. Retrieved from http://www.socialresearchmethods.net/kb/destypes.php

Trouillet, R., Gana, K., Lourel, M., & Fort, I. (2009). Predictive value of age for coping: The role of self-efficacy, social support satisfaction and perceived stress. Aging and Mental Health, 13(3), 357-366.

Truell, A. D. (2003). Use of internet tools for survey research. *Information Technology, Learning and Performance Journal,23*(1), 31-37.

Tung, R. L., & Koch, J. L. (1980). School administrators: Sources of stress and ways of coping with it. In C. L. Cooper & J. Marshall (Eds.), *White Collar and Professional Stress* (pp. 63-91). New York: John Wiley & Sons.

Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Ricketts, C. (2007). Occupational stress in UK higher education institutions: A comparative study of all staff categories. *Higher Education Research and Development, 24*(1), 41-61.

Waters, J. A., & Ussery, W. (2007). Police stress: History, contributing factors, symptoms, and interventions. *Policing: An International Journal of Police Strategies & Management, 30*(2), 169-188.

Wells, J. A., (1982). Objective job conditions, social support, and perceived stress among blue collar workers. *Journal of Organizational Behavior, 3*(2), 79-94.

Willert, M. V., Thulstrup, A. M., Hertz, J., & Bonde, J. P. (2010). Sleep and cognitive failures improved by a three month stress management intervention. *International Journal of Stress Management, 17*(3), 193-213.

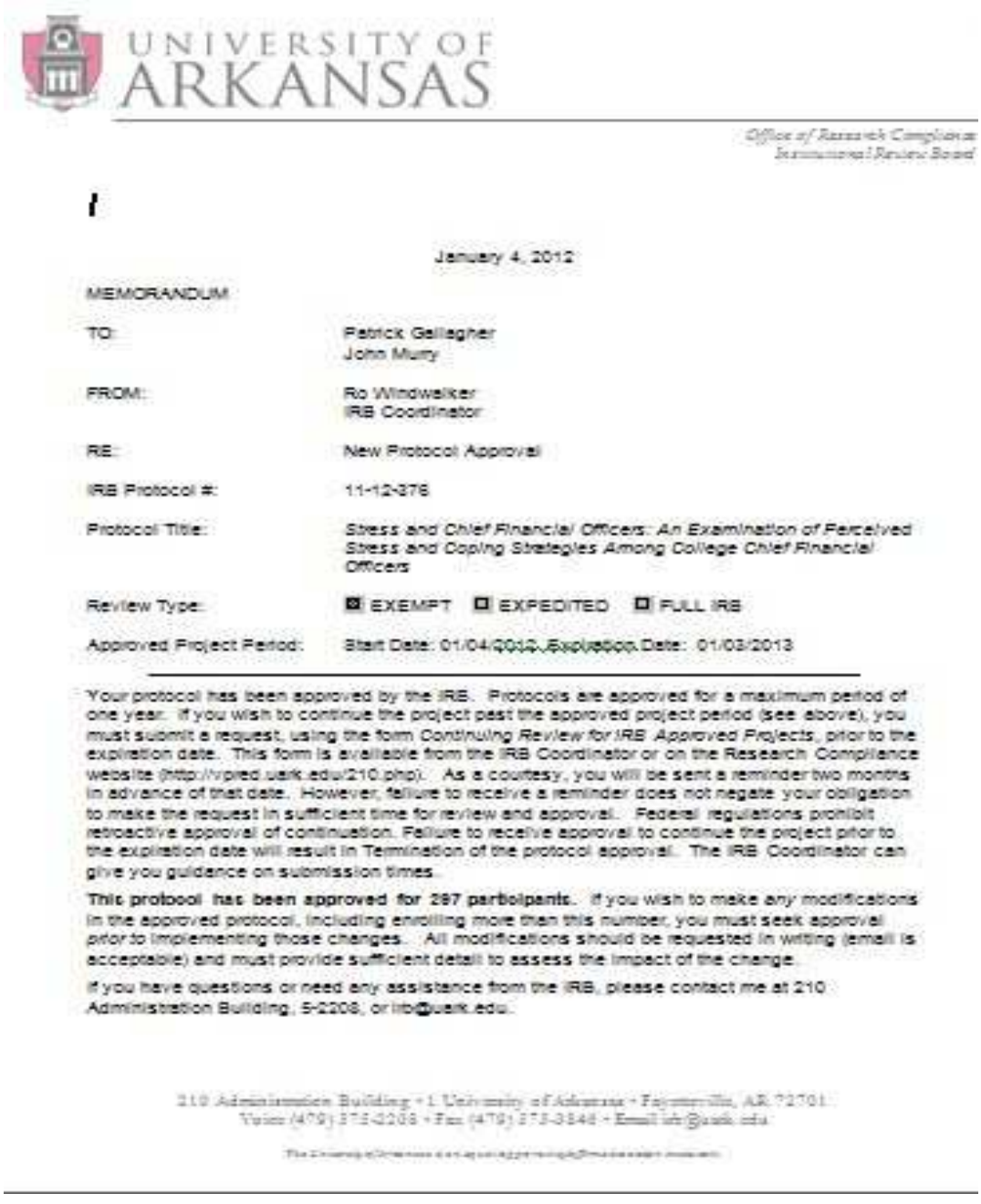
Williamson, J., & Vine, P. (1998). Run down, stressed out. *The British Journal of Administrative Management, 8*, 14-16.

Yates, J., (1979). *Managing stress*. New York, NY: AMACON.

Zaidi, N. R, Abdul Wajid, R. & Zaidi, F. B. (2011). Relationship between demographic characteristics and burnout among public sector university teachers of Lahore. *Interdisciplinary Journal of Contemporary Research in Business, 3*(4), 829-843.

Zenger, J., & Folkman, J. (2009). *The extraordinary leader: Turning good managers into great leaders* (2nd ed.). New York, NY: McGraw-Hill Companies.

Appendix A



UNIVERSITY OF ARKANSAS

Office of Research Compliance
Institutional Review Board

January 4, 2012

MEMORANDUM

TO: Patrick Gallagher
John Murry

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 11-12-376

Protocol Title: *Stress and Chief Financial Officers: An Examination of Perceived Stress and Coping Strategies Among College Chief Financial Officers*

Review Type: ☒ EXEMPT ☐ EXPEDITED ☐ FULL IRB

Approved Project Period: Start Date: 01/04/2012 Expiration Date: 01/03/2013

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (http://vpred.uark.edu/210.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 287 participants. If you wish to make any modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior* to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

210 Administration Building • 1 University of Arkansas • Fayetteville, AR 72701
Voice (479) 575-2208 • Fax (479) 575-3846 • Email irb@uark.edu

Appendix B

Questionnaire

1. In the last month, how often have you felt that you were unable to control the important things in your life?
2. In the last month, how often have you felt confident about your ability to handle your personal problems?
3. In the last month, how often have you felt that things were going your way?
4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
5. My job tends to directly affect my health.
6. I work under a great deal of tension.
7. I have felt fidgety or nervous as a result of my job.
8. In the last month, how often have you felt that if you had a different job, my health would probably improve?
9. Problems associated with my job have kept me awake at night.
10. I have felt nervous before attending meetings at my institution.
11. I often "take my job home with me" in the sense that I think about it when doing other things.
12. Do you feel run down and drained of physical or emotional energy?
13. Do you find that you are prone to negative thinking about your job?
14. Do you find that you are harder and less sympathetic with people than perhaps they deserve?
15. Do you find yourself getting easily irritated by small problems, or by your co-workers and team?
16. Do you feel misunderstood or unappreciated by your co-workers?
17. Do you feel that you have no one to talk to?
18. Do you ever feel that you are achieving less than you should?
19. Do you feel under an unpleasant level of pressure to succeed?
20. Do you feel that you are not getting what you want out of your job?
21. Do you feel that you are in the wrong organization or the wrong profession?
22. Are you becoming frustrated with parts of your job?
23. Do you feel that organizational politics or bureaucracy frustrate your ability to do a good job?
24. Do feel there is more work to do than you have the practical ability to do?
25. Do you feel that you do not have the time to do the things that are important to doing a good job?
26. Do you find that you do not have time to plan as much as you would like to?
27. Thinking of stressful situations, please list any coping mechanisms which you use to overcome stress (e.g. Religious services, smoking, prescription medications, narcotics, exercise, etc.)

Appendix C

Participant Email

Introductory email:

Dear Participant:

In a few days you will be invited to participate in a survey being conducted for a doctoral dissertation by Patrick M. Gallagher, student, University of Arkansas – Fayetteville. The researcher is seeking to identify and report perceived stress levels and coping strategies among university Chief Financial Officers. Your participation is voluntary and can be completed online within 10-15 minutes. There is not a penalty to you for non-participation and no known risks are associated with this instrument. Your participation is greatly appreciated.

Patrick M. Gallagher
Doctoral Candidate
Higher Education Administration
University of Arkansas
pgallagh@uark.edu

First Email:

Dear participant:

You are invited to participate in a doctoral dissertation conducted by Patrick M. Gallagher, a student at the University of Arkansas. The researcher hopes to describe stress and coping strategies among university chief financial officers among research institutions. You have been invited to participate in this study as you have been identified as your institution's chief financial officer. The results of this study will benefit you in your role as chief financial officer and will benefit executive level officers in research institutions. You are asked to complete a survey which should take no more than 10-15 minutes of your time and can be completed online. There are no known risks to the participant in completing this information and no identifiable information will be collected which could link you to your completed survey. If you do not wish to participate please do not complete the survey, with no penalty to yourself. You must be 18 years of age or older to participate. Completion and submission of the survey indicates your consent to the above conditions. Should you have questions about the research project you may contact Iroshi (Ro) Windwalker, CIP at 479.575.2208, irb@uark.edu or Dr. John Murry (research advisor) at jmurry@uark.edu.

The link for the survey: _____

Follow up email:

Dear Participant:

If you have completed the survey concerning stress and coping strategies among university Chief Financial Officers I appreciate your time and input. If you have not completed the survey I ask you to take just 10-15 minutes of your time to answer the questions. Thank you for your participation.

Link to Survey: _____

Patrick M. Gallagher
Doctoral Candidate
Higher Education Administration
University of Arkansas – Fayetteville
pgallagh@uark.edu

Appendix D

Marital Status Means

Marital Status

Question	Married	Single	Divorced	Separated	Domestic Partnership	Average
1	2.24	2.00	2.00	1.00	2.33	2.21
2	3.56	3.60	5.00	0.00	2.50	3.51
3	3.94	4.20	5.00	4.00	3.67	3.96
4	1.96	1.60	2.00	1.00	2.00	1.92
5	2.66	2.00	3.00	4.00	3.00	2.65
6	3.87	3.20	3.00	3.00	4.00	3.81
7	2.49	1.80	3.00	2.00	3.33	2.48
8	2.15	1.40	2.00	2.00	2.67	2.12
9	2.77	2.20	3.00	3.00	4.00	2.79
10	2.24	1.40	3.00	2.00	2.67	2.21
11	3.70	3.20	4.00	4.00	4.00	3.69
12	3.07	2.80	3.00	3.00	3.33	3.06
13	2.39	2.40	2.00	3.00	3.00	2.42
14	2.36	2.40	2.00	2.00	2.67	2.36
15	2.46	2.20	2.00	3.00	2.67	2.45
16	2.21	2.20	2.00	2.00	2.00	2.19
17	2.22	1.40	3.00	2.00	1.67	2.16
18	2.49	2.40	3.00	2.00	2.67	2.49
19	2.19	1.80	3.00	1.00	3.00	2.19
20	2.19	2.20	2.00	2.00	3.00	2.22
21	1.82	1.80	2.00	2.00	2.00	1.83
22	2.69	2.60	2.00	3.00	3.00	2.69
23	2.91	2.40	3.00	3.00	4.00	2.92
24	2.93	2.80	3.00	3.00	4.00	2.96
25	2.78	2.40	2.00	3.00	3.33	2.77
26	3.31	2.60	3.00	3.00	2.67	3.23

Appendix E

Dependent Means

Dependents

Question	Dependents	No Dependents	Average
1	2.47	2.00	2.21
2	2.91	4.03	3.51
3	3.89	4.02	3.96
4	2.11	1.76	1.92
5	2.71	2.60	2.65
6	3.74	3.86	3.81
7	2.69	2.31	2.48
8	2.26	2.00	2.12
9	2.77	2.80	2.79
10	2.34	2.10	2.21
11	3.66	3.71	3.69
12	3.14	3.00	3.06
13	2.57	2.29	2.42
14	2.54	2.21	2.36
15	2.51	2.40	2.45
16	2.31	2.10	2.19
17	2.43	1.93	2.16
18	2.46	2.52	2.49
19	2.26	2.14	2.19
20	2.26	2.19	2.22
21	2.03	1.67	1.83
22	2.71	2.67	2.69
23	2.91	2.93	2.92
24	2.97	2.95	2.96
25	2.71	2.81	2.77
26	3.17	3.29	3.23

Appendix F

Institutional Control Means

Institutional Control

Question	Private (Not for Profit)	Public	Average
1	2.26	2.18	2.21
2	3.28	3.59	3.49
3	3.96	3.96	3.96
4	2.04	1.84	1.91
5	2.48	2.73	2.64
6	3.52	3.96	3.81
7	2.56	2.41	2.46
8	2.04	2.14	2.10
9	2.62	2.86	2.78
10	2.26	2.16	2.19
11	3.41	3.82	3.68
12	2.74	3.22	3.05
13	2.41	2.41	2.41
14	2.15	2.47	2.36
15	2.30	2.53	2.45
16	2.11	2.22	2.18
17	2.44	1.98	2.14
18	2.41	2.53	2.49
19	1.96	2.29	2.18
20	2.15	2.24	2.21
21	1.89	1.78	1.82
22	2.59	2.73	2.68
23	2.69	3.02	2.91
24	2.85	3.00	2.95
25	2.48	2.90	2.76
26	2.89	3.41	3.23

Appendix G

Institutional Size Means

Institutional Size

Question	<10,000	10,000 - 19,999	20,000 - 29,999	>30,000	Average
1	2.63	2.04	2.00	2.21	2.21
2	2.89	2.92	4.17	4.33	3.49
3	4.00	3.92	3.83	4.13	3.96
4	2.37	1.54	2.00	1.87	1.91
5	2.68	2.62	2.50	2.80	2.64
6	3.89	3.65	3.67	4.13	3.81
7	2.84	2.19	2.44	2.47	2.46
8	2.37	2.00	2.11	1.93	2.10
9	2.58	2.68	2.89	3.07	2.78
10	2.42	2.19	1.94	2.20	2.19
11	3.32	3.73	3.67	4.07	3.68
12	2.84	2.92	3.22	3.33	3.05
13	2.42	2.31	2.50	2.47	2.41
14	2.00	2.27	2.50	2.80	2.36
15	2.32	2.27	2.50	2.87	2.45
16	2.11	2.15	2.28	2.20	2.18
17	2.58	2.08	2.22	1.60	2.14
18	2.47	2.38	2.67	2.47	2.49
19	2.37	1.85	2.11	2.60	2.18
20	2.26	2.08	2.39	2.13	2.21
21	2.05	1.65	1.89	1.73	1.82
22	2.63	2.38	2.89	3.00	2.68
23	2.58	3.04	2.89	3.13	2.91
24	3.11	2.69	2.83	3.33	2.95
25	2.74	2.58	2.83	3.00	2.76
26	3.21	2.96	3.28	3.67	3.23

Appendix H

Carnegie Classification Means

Carnegie Classification

Question	Very High Research	High Research	Research	Average
1	2.15	2.08	2.53	2.22
2	4.03	2.83	3.33	3.49
3	4.06	3.96	3.95	4.00
4	1.94	1.75	2.11	1.92
5	2.56	2.92	2.47	2.65
6	3.94	3.79	3.58	3.81
7	2.41	2.29	2.84	2.48
8	2.18	2.04	2.05	2.10
9	2.88	2.67	2.74	2.78
10	2.12	2.42	2.11	2.21
11	3.79	3.75	3.47	3.70
12	3.21	3.00	2.89	3.06
13	2.53	2.29	2.42	2.43
14	2.47	2.38	2.21	2.38
15	2.47	2.46	2.47	2.47
16	2.15	2.17	2.32	2.19
17	2.09	2.04	2.42	2.16
18	2.56	2.33	2.63	2.51
19	2.26	2.00	2.32	2.19
20	2.18	2.08	2.42	2.21
21	1.79	1.79	1.95	1.83
22	2.85	2.46	2.68	2.69
23	3.09	2.83	2.68	2.91
24	2.97	2.96	3.00	2.97
25	2.79	2.58	2.95	2.77
26	3.50	2.92	3.21	3.25

Appendix I

ANOVA Age

Question	Age Group	*N*	*M*	*SD*	*SE*	95% CI for Mean	
						LL	UL
1	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	15	2.33	.816	.211	1.88	2.79
	51-64	55	2.25	.966	.130	1.99	2.52
	65+	5	1.20	.447	.200	.64	1.76
	Total	77	2.21	.937	.107	2.00	2.42
2	21-35	2	4.00	1.414	1.000	-8.71	16.71
	36-50	15	3.27	2.314	.597	1.99	4.55
	51-64	54	3.48	2.247	.306	2.87	4.09
	65+	5	4.00	2.236	1.000	1.22	6.78
	Total	76	3.49	2.212	.254	2.98	3.99
3	21-35	2	4.00	1.414	1.000	-8.71	16.71
	36-50	15	3.73	.704	.182	3.34	4.12
	51-64	56	4.00	.831	.111	3.78	4.22
	65+	5	4.20	.447	.200	3.64	4.76
	Total	78	3.96	.797	.090	3.78	4.14
4	21-35	2	2.00	.000	.000	2.00	2.00
	36-50	15	2.40	.986	.254	1.85	2.95
	51-64	56	1.80	.818	.109	1.58	2.02
	65+	5	1.60	.548	.245	.92	2.28
	Total	78	1.91	.856	.097	1.72	2.10
5	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	15	2.67	.976	.252	2.13	3.21
	51-64	56	2.73	1.018	.136	2.46	3.00
	65+	5	1.60	.548	.245	.92	2.28
	Total	78	2.64	1.006	.114	2.41	2.87
6	21-35	2	4.00	1.414	1.000	-8.71	16.71
	36-50	15	3.53	.915	.236	3.03	4.04
	51-64	56	3.82	.834	.111	3.60	4.04
	65+	5	4.40	.894	.400	3.29	5.51
	Total	78	3.81	.869	.098	3.61	4.00
7	21-35	2	3.00	.000	.000	3.00	3.00
	36-50	15	2.73	.884	.228	2.24	3.22
	51-64	56	2.43	.970	.130	2.17	2.69
	65+	5	1.80	.837	.374	.76	2.84

	Total	78	2.46	.949	.107	2.25	2.68
8	21-35	2	2.00	1.414	1.000	-10.71	14.71
	36-50	15	2.20	1.373	.355	1.44	2.96
	51-64	56	2.16	1.005	.134	1.89	2.43
	65+	5	1.20	.447	.200	.64	1.76
	Total	78	2.10	1.076	.122	1.86	2.35
9	21-35	2	4.00	1.414	1.000	-8.71	16.71
	36-50	15	2.87	1.125	.291	2.24	3.49
	51-64	55	2.80	.931	.126	2.55	3.05
	65+	5	1.80	.837	.374	.76	2.84
	Total	77	2.78	1.008	.115	2.55	3.01
10	21-35	2	1.00	.000	.000	1.00	1.00
	36-50	15	2.07	.594	.153	1.74	2.40
	51-64	56	2.34	.793	.106	2.13	2.55
	65+	5	1.40	.548	.245	.72	2.08
	Total	78	2.19	.790	.090	2.01	2.37
11	21-35	2	4.50	.707	.500	-1.85	10.85
	36-50	15	3.87	.990	.256	3.32	4.42
	51-64	56	3.64	.999	.133	3.38	3.91
	65+	5	3.20	1.304	.583	1.58	4.82
	Total	78	3.68	1.013	.115	3.45	3.91
12	21-35	2	4.50	.707	.500	-1.85	10.85
	36-50	15	3.20	.941	.243	2.68	3.72
	51-64	56	3.00	.953	.127	2.74	3.26
	65+	5	2.60	1.140	.510	1.18	4.02
	Total	78	3.05	.979	.111	2.83	3.27
13	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	15	2.33	.900	.232	1.84	2.83
	51-64	56	2.50	.894	.120	2.26	2.74
	65+	5	1.60	.548	.245	.92	2.28
	Total	78	2.41	.889	.101	2.21	2.61
14	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	15	2.60	.632	.163	2.25	2.95
	51-64	56	2.34	.745	.100	2.14	2.54
	65+	5	1.80	.447	.200	1.24	2.36
	Total	78	2.36	.720	.082	2.20	2.52
15	21-35	2	4.00	1.414	1.000	-8.71	16.71

	36-50	15	2.53	.516	.133	2.25	2.82
	51-64	56	2.45	.630	.084	2.28	2.62
	65+	5	1.60	.548	.245	.92	2.28
	Total	78	2.45	.696	.079	2.29	2.61
16	21-35	2	3.00	.000	.000	3.00	3.00
	36-50	15	2.20	.676	.175	1.83	2.57
	51-64	56	2.18	.789	.105	1.97	2.39
	65+	5	1.80	.837	.374	.76	2.84
	Total	78	2.18	.769	.087	2.01	2.35
17	21-35	2	2.00	1.414	1.000	-10.71	14.71
	36-50	15	2.53	1.356	.350	1.78	3.28
	51-64	56	2.07	.931	.124	1.82	2.32
	65+	5	1.80	1.304	.583	.18	3.42
	Total	78	2.14	1.053	.119	1.90	2.38
18	21-35	2	2.00	1.414	1.000	-10.71	14.71
	36-50	15	2.87	.834	.215	2.40	3.33
	51-64	56	2.46	.808	.108	2.25	2.68
	65+	5	1.80	.447	.200	1.24	2.36
	Total	78	2.49	.833	.094	2.30	2.68
19	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	15	2.53	1.125	.291	1.91	3.16
	51-64	56	2.09	.837	.112	1.87	2.31
	65+	5	2.00	1.000	.447	.76	3.24
	Total	78	2.18	.908	.103	1.97	2.38
20	21-35	2	3.00	1.414	1.000	-9.71	15.71
	36-50	15	2.53	.640	.165	2.18	2.89
	51-64	56	2.14	.841	.112	1.92	2.37
	65+	5	1.60	.548	.245	.92	2.28
	Total	78	2.21	.827	.094	2.02	2.39
21	21-35	2	2.00	.000	.000	2.00	2.00
	36-50	15	2.07	.704	.182	1.68	2.46
	51-64	56	1.79	.909	.121	1.54	2.03
	65+	5	1.40	.548	.245	.72	2.08
	Total	78	1.82	.849	.096	1.63	2.01
22	21-35	2	3.50	.707	.500	-2.85	9.85
	36-50	15	2.93	1.033	.267	2.36	3.51
	51-64	56	2.64	.862	.115	2.41	2.87
	65+	5	2.00	.707	.316	1.12	2.88
	Total	78	2.68	.904	.102	2.48	2.88

23	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	14	3.07	.997	.267	2.50	3.65
	51-64	56	2.91	.859	.115	2.68	3.14
	65+	5	2.60	1.517	.678	.72	4.48
	Total	77	2.91	.920	.105	2.70	3.12
24	21-35	2	4.00	1.414	1.000	-8.71	16.71
	36-50	15	3.40	1.056	.273	2.82	3.98
	51-64	56	2.88	.955	.128	2.62	3.13
	65+	5	2.00	1.000	.447	.76	3.24
	Total	78	2.95	1.031	.117	2.72	3.18
25	21-35	2	2.50	.707	.500	-3.85	8.85
	36-50	15	3.07	1.033	.267	2.49	3.64
	51-64	56	2.75	.769	.103	2.54	2.96
	65+	5	2.00	.707	.316	1.12	2.88
	Total	78	2.76	.840	.095	2.57	2.95
26	21-35	2	4.50	.707	.500	-1.85	10.85
	36-50	15	3.20	1.014	.262	2.64	3.76
	51-64	56	3.23	.894	.119	2.99	3.47
	65+	5	2.80	1.483	.663	.96	4.64
	Total	78	3.23	.966	.109	3.01	3.45

ANOVA

Question		*SS*	*df*	*MS*	*F*	Sig.
1	Between Groups	5.606	3	1.869	2.234	.091
	Within Groups	61.070	73	.837		
	Total	66.675	76			
2	Between Groups	2.572	3	.857	.169	.917
	Within Groups	364.415	72	5.061		
	Total	366.987	75			
3	Between Groups	1.151	3	.384	.595	.620
	Within Groups	47.733	74	.645		
	Total	48.885	77			
4	Between Groups	4.733	3	1.578	2.261	.088
	Within Groups	51.639	74	.698		
	Total	56.372	77			
5	Between Groups	5.933	3	1.978	2.032	.117
	Within Groups	72.015	74	.973		

	Total	77.949	77			
6	Between Groups	2.968	3	.989	1.327	.272
	Within Groups	55.148	74	.745		
	Total	58.115	77			
7	Between Groups	3.937	3	1.312	1.484	.226
	Within Groups	65.448	74	.884		
	Total	69.385	77			
8	Between Groups	4.426	3	1.475	1.288	.285
	Within Groups	84.754	74	1.145		
	Total	89.179	77			
9	Between Groups	7.913	3	2.638	2.777	.047
	Within Groups	69.333	73	.950		
	Total	77.247	76			
10	Between Groups	7.428	3	2.476	4.504	.006
	Within Groups	40.687	74	.550		
	Total	48.115	77			
11	Between Groups	3.097	3	1.032	1.007	.395
	Within Groups	75.890	74	1.026		
	Total	78.987	77			
12	Between Groups	5.695	3	1.898	2.063	.112
	Within Groups	68.100	74	.920		
	Total	73.795	77			
13	Between Groups	3.838	3	1.279	1.660	.183
	Within Groups	57.033	74	.771		
	Total	60.872	77			
14	Between Groups	2.495	3	.832	1.643	.187
	Within Groups	37.454	74	.506		
	Total	39.949	77			
15	Between Groups	8.522	3	2.841	7.306	.000
	Within Groups	28.773	74	.389		
	Total	37.295	77			
16	Between Groups	2.073	3	.691	1.178	.324
	Within Groups	43.414	74	.587		
	Total	45.487	77			

17	Between Groups	3.201	3	1.067	.960	.416
	Within Groups	82.248	74	1.111		
	Total	85.449	77			
18	Between Groups	5.025	3	1.675	2.558	.062
	Within Groups	48.462	74	.655		
	Total	53.487	77			
19	Between Groups	2.700	3	.900	1.096	.356
	Within Groups	60.787	74	.821		
	Total	63.487	77			
20	Between Groups	4.927	3	1.642	2.543	.063
	Within Groups	47.790	74	.646		
	Total	52.718	77			
21	Between Groups	1.925	3	.642	.887	.452
	Within Groups	53.562	74	.724		
	Total	55.487	77			
22	Between Groups	4.697	3	1.566	1.987	.123
	Within Groups	58.290	74	.788		
	Total	62.987	77			
23	Between Groups	1.181	3	.394	.455	.715
	Within Groups	63.182	73	.866		
	Total	64.364	76			
24	Between Groups	10.070	3	3.357	3.463	.020
	Within Groups	71.725	74	.969		
	Total	81.795	77			
25	Between Groups	4.438	3	1.479	2.193	.096
	Within Groups	49.933	74	.675		
	Total	54.372	77			
26	Between Groups	4.164	3	1.388	1.518	.217
	Within Groups	67.682	74	.915		
	Total	71.846	77			

Appendix J

ANOVA Carnegie Classification

Question	Carnegie Classification	*N*	*M*	*SD*	*SE*	95% CI for Mean	
						LL	UL
1	Very High Research	33	2.15	.906	.158	1.83	2.47
	High Research	24	2.08	.929	.190	1.69	2.48
	Research	19	2.53	.964	.221	2.06	2.99
	Total	76	2.22	.932	.107	2.01	2.44
2	Very High Research	34	4.03	1.962	.336	3.35	4.71
	High Research	24	2.83	2.479	.506	1.79	3.88
	Research	18	3.33	2.142	.505	2.27	4.40
	Total	76	3.49	2.212	.254	2.98	3.99
3	Very High Research	34	4.06	.736	.126	3.80	4.32
	High Research	24	3.96	.751	.153	3.64	4.28
	Research	19	3.95	.705	.162	3.61	4.29
	Total	77	4.00	.725	.083	3.84	4.16
4	Very High Research	34	1.94	.851	.146	1.64	2.24
	High Research	24	1.75	.737	.150	1.44	2.06
	Research	19	2.11	.994	.228	1.63	2.58
	Total	77	1.92	.855	.097	1.73	2.12
5	Very High Research	34	2.56	.960	.165	2.22	2.89
	High Research	24	2.92	1.139	.232	2.44	3.40
	Research	19	2.47	.905	.208	2.04	2.91
	Total	77	2.65	1.010	.115	2.42	2.88
6	Very High Research	34	3.94	.814	.140	3.66	4.23
	High Research	24	3.79	.977	.199	3.38	4.20
	Research	19	3.58	.838	.192	3.18	3.98
	Total	77	3.81	.874	.100	3.61	4.00
7	Very High Research	34	2.41	1.048	.180	2.05	2.78
	High Research	24	2.29	.908	.185	1.91	2.68
	Research	19	2.84	.688	.158	2.51	3.17
	Total	77	2.48	.940	.107	2.27	2.69
8	Very High Research	34	2.18	1.141	.196	1.78	2.57
	High Research	24	2.04	.955	.195	1.64	2.44
	Research	19	2.05	1.177	.270	1.49	2.62
	Total	77	2.10	1.083	.123	1.86	2.35

9	Very High Research	33	2.88	1.219	.212	2.45	3.31
	High Research	24	2.67	.963	.197	2.26	3.07
	Research	19	2.74	.653	.150	2.42	3.05
	Total	76	2.78	1.015	.116	2.54	3.01
10	Very High Research	34	2.12	.769	.132	1.85	2.39
	High Research	24	2.42	.830	.169	2.07	2.77
	Research	19	2.11	.737	.169	1.75	2.46
	Total	77	2.21	.784	.089	2.03	2.39
11	Very High Research	34	3.79	1.095	.188	3.41	4.18
	High Research	24	3.75	.944	.193	3.35	4.15
	Research	19	3.47	.905	.208	3.04	3.91
	Total	77	3.70	1.001	.114	3.47	3.93
12	Very High Research	34	3.21	1.067	.183	2.83	3.58
	High Research	24	3.00	.885	.181	2.63	3.37
	Research	19	2.89	.937	.215	2.44	3.35
	Total	77	3.06	.978	.111	2.84	3.29
13	Very High Research	34	2.53	1.051	.180	2.16	2.90
	High Research	24	2.29	.806	.165	1.95	2.63
	Research	19	2.42	.607	.139	2.13	2.71
	Total	77	2.43	.880	.100	2.23	2.63
14	Very High Research	34	2.47	.825	.142	2.18	2.76
	High Research	24	2.38	.711	.145	2.07	2.68
	Research	19	2.21	.419	.096	2.01	2.41
	Total	77	2.38	.708	.081	2.22	2.54
15	Very High Research	34	2.47	.748	.128	2.21	2.73
	High Research	24	2.46	.721	.147	2.15	2.76
	Research	19	2.47	.513	.118	2.23	2.72
	Total	77	2.47	.680	.078	2.31	2.62
16	Very High Research	34	2.15	.821	.141	1.86	2.43
	High Research	24	2.17	.637	.130	1.90	2.44
	Research	19	2.32	.820	.188	1.92	2.71
	Total	77	2.19	.762	.087	2.02	2.37
17	Very High Research	34	2.09	1.138	.195	1.69	2.49
	High Research	24	2.04	.955	.195	1.64	2.44
	Research	19	2.42	1.017	.233	1.93	2.91
	Total	77	2.16	1.052	.120	1.92	2.39
18	Very High Research	34	2.56	.786	.135	2.28	2.83

	High Research	24	2.33	.761	.155	2.01	2.65
	Research	19	2.63	.955	.219	2.17	3.09
	Total	77	2.51	.821	.094	2.32	2.69
19	Very High Research	34	2.26	.994	.171	1.92	2.61
	High Research	24	2.00	.834	.170	1.65	2.35
	Research	19	2.32	.820	.188	1.92	2.71
	Total	77	2.19	.904	.103	1.99	2.40
20	Very High Research	34	2.18	.758	.130	1.91	2.44
	High Research	24	2.08	.830	.169	1.73	2.43
	Research	19	2.42	.961	.221	1.96	2.88
	Total	77	2.21	.833	.095	2.02	2.40
21	Very High Research	34	1.79	.845	.145	1.50	2.09
	High Research	24	1.79	.977	.199	1.38	2.20
	Research	19	1.95	.705	.162	1.61	2.29
	Total	77	1.83	.849	.097	1.64	2.02
22	Very High Research	34	2.85	.958	.164	2.52	3.19
	High Research	24	2.46	.833	.170	2.11	2.81
	Research	19	2.68	.885	.203	2.26	3.11
	Total	77	2.69	.907	.103	2.48	2.89
23	Very High Research	34	3.09	.996	.171	2.74	3.44
	High Research	23	2.83	.937	.195	2.42	3.23
	Research	19	2.68	.749	.172	2.32	3.05
	Total	76	2.91	.926	.106	2.70	3.12
24	Very High Research	34	2.97	.969	.166	2.63	3.31
	High Research	24	2.96	.999	.204	2.54	3.38
	Research	19	3.00	1.155	.265	2.44	3.56
	Total	77	2.97	1.013	.115	2.74	3.20
25	Very High Research	34	2.79	.729	.125	2.54	3.05
	High Research	24	2.58	.830	.169	2.23	2.93
	Research	19	2.95	1.026	.235	2.45	3.44
	Total	77	2.77	.841	.096	2.58	2.96
26	Very High Research	34	3.50	.826	.142	3.21	3.79
	High Research	24	2.92	1.018	.208	2.49	3.35
	Research	19	3.21	1.032	.237	2.71	3.71
	Total	77	3.25	.962	.110	3.03	3.47

ANOVA

Question		*SS*	*df*	*MS*	*F*	Sig.
1	Between Groups	2.385	2	1.192	1.386	.257
	Within Groups	62.813	73	.860		
	Total	65.197	75			
2	Between Groups	20.683	2	10.341	2.180	.120
	Within Groups	346.304	73	4.744		
	Total	366.987	75			
3	Between Groups	.212	2	.106	.197	.822
	Within Groups	39.788	74	.538		
	Total	40.000	76			
4	Between Groups	1.361	2	.680	.929	.399
	Within Groups	54.172	74	.732		
	Total	55.532	76			
5	Between Groups	2.580	2	1.290	1.274	.286
	Within Groups	74.953	74	1.013		
	Total	77.532	76			
6	Between Groups	1.606	2	.803	1.052	.354
	Within Groups	56.472	74	.763		
	Total	58.078	76			
7	Between Groups	3.501	2	1.750	2.033	.138
	Within Groups	63.720	74	.861		
	Total	67.221	76			
8	Between Groups	.322	2	.161	.134	.875
	Within Groups	88.847	74	1.201		
	Total	89.169	76			
9	Between Groups	.665	2	.332	.317	.729
	Within Groups	76.533	73	1.048		
	Total	77.197	75			
10	Between Groups	1.523	2	.762	1.248	.293
	Within Groups	45.152	74	.610		
	Total	46.675	76			
11	Between Groups	1.334	2	.667	.660	.520
	Within Groups	74.796	74	1.011		
	Total	76.130	76			
12	Between Groups	1.327	2	.664	.688	.506

	Within Groups	71.348	74	.964		
	Total	72.675	76			
13	Between Groups	.797	2	.398	.508	.604
	Within Groups	58.061	74	.785		
	Total	58.857	76			
14	Between Groups	.824	2	.412	.819	.445
	Within Groups	37.253	74	.503		
	Total	38.078	76			
15	Between Groups	.003	2	.002	.003	.997
	Within Groups	35.166	74	.475		
	Total	35.169	76			
16	Between Groups	.375	2	.187	.317	.729
	Within Groups	43.703	74	.591		
	Total	44.078	76			
17	Between Groups	1.805	2	.902	.811	.448
	Within Groups	82.325	74	1.113		
	Total	84.130	76			
18	Between Groups	1.110	2	.555	.819	.445
	Within Groups	50.137	74	.678		
	Total	51.247	76			
19	Between Groups	1.355	2	.678	.826	.442
	Within Groups	60.723	74	.821		
	Total	62.078	76			
20	Between Groups	1.269	2	.635	.914	.406
	Within Groups	51.406	74	.695		
	Total	52.675	76			
21	Between Groups	.341	2	.170	.231	.794
	Within Groups	54.465	74	.736		
	Total	54.805	76			
22	Between Groups	2.191	2	1.096	1.344	.267
	Within Groups	60.328	74	.815		
	Total	62.519	76			
23	Between Groups	2.210	2	1.105	1.298	.279
	Within Groups	62.145	73	.851		
	Total	64.355	75			

24	Between Groups	.019	2	.010	.009	.991
	Within Groups	77.929	74	1.053		
	Total	77.948	76			
25	Between Groups	1.453	2	.726	1.027	.363
	Within Groups	52.340	74	.707		
	Total	53.792	76			
26	Between Groups	4.820	2	2.410	2.723	.072
	Within Groups	65.491	74	.885		
	Total	70.312	76			

Appendix K

ANOVA Institutional Control

Question	Institutional Control	*N*	*M*	*SD*	*SE*	95% CI for Mean	
						LL	UL
1	Private (Not for Profit)	27	2.26	.944	.182	1.89	2.63
	Public	50	2.18	.941	.133	1.91	2.45
	Total	77	2.21	.937	.107	2.00	2.42
2	Private (Not for Profit)	25	3.28	2.283	.457	2.34	4.22
	Public	51	3.59	2.193	.307	2.97	4.20
	Total	76	3.49	2.212	.254	2.98	3.99
3	Private (Not for Profit)	27	3.96	.940	.181	3.59	4.33
	Public	51	3.96	.720	.101	3.76	4.16
	Total	78	3.96	.797	.090	3.78	4.14
4	Private (Not for Profit)	27	2.04	1.018	.196	1.63	2.44
	Public	51	1.84	.758	.106	1.63	2.06
	Total	78	1.91	.856	.097	1.72	2.10
5	Private (Not for Profit)	27	2.48	1.014	.195	2.08	2.88
	Public	51	2.73	1.002	.140	2.44	3.01
	Total	78	2.64	1.006	.114	2.41	2.87
6	Private (Not for Profit)	27	3.52	.849	.163	3.18	3.85
	Public	51	3.96	.848	.119	3.72	4.20
	Total	78	3.81	.869	.098	3.61	4.00
7	Private (Not for Profit)	27	2.56	1.121	.216	2.11	3.00
	Public	51	2.41	.853	.119	2.17	2.65
	Total	78	2.46	.949	.107	2.25	2.68
8	Private (Not for Profit)	27	2.04	1.160	.223	1.58	2.50
	Public	51	2.14	1.040	.146	1.84	2.43
	Total	78	2.10	1.076	.122	1.86	2.35
9	Private (Not for Profit)	26	2.62	1.023	.201	2.20	3.03
	Public	51	2.86	1.000	.140	2.58	3.14
	Total	77	2.78	1.008	.115	2.55	3.01
10	Private (Not for Profit)	27	2.26	.764	.147	1.96	2.56
	Public	51	2.16	.809	.113	1.93	2.38
	Total	78	2.19	.790	.090	2.01	2.37

11	Private (Not for Profit)	27	3.41	1.152	.222	2.95	3.86
	Public	51	3.82	.910	.127	3.57	4.08
	Total	78	3.68	1.013	.115	3.45	3.91
12	Private (Not for Profit)	27	2.74	1.023	.197	2.34	3.15
	Public	51	3.22	.923	.129	2.96	3.48
	Total	78	3.05	.979	.111	2.83	3.27
13	Private (Not for Profit)	27	2.41	.971	.187	2.02	2.79
	Public	51	2.41	.853	.119	2.17	2.65
	Total	78	2.41	.889	.101	2.21	2.61
14	Private (Not for Profit)	27	2.15	.718	.138	1.86	2.43
	Public	51	2.47	.703	.098	2.27	2.67
	Total	78	2.36	.720	.082	2.20	2.52
15	Private (Not for Profit)	27	2.30	.669	.129	2.03	2.56
	Public	51	2.53	.703	.098	2.33	2.73
	Total	78	2.45	.696	.079	2.29	2.61
16	Private (Not for Profit)	27	2.11	.847	.163	1.78	2.45
	Public	51	2.22	.730	.102	2.01	2.42
	Total	78	2.18	.769	.087	2.01	2.35
17	Private (Not for Profit)	27	2.44	1.188	.229	1.97	2.91
	Public	51	1.98	.948	.133	1.71	2.25
	Total	78	2.14	1.053	.119	1.90	2.38
18	Private (Not for Profit)	27	2.41	.844	.162	2.07	2.74
	Public	51	2.53	.833	.117	2.30	2.76
	Total	78	2.49	.833	.094	2.30	2.68
19	Private (Not for Profit)	27	1.96	.898	.173	1.61	2.32
	Public	51	2.29	.901	.126	2.04	2.55
	Total	78	2.18	.908	.103	1.97	2.38
20	Private (Not for Profit)	27	2.15	.818	.157	1.82	2.47
	Public	51	2.24	.839	.117	2.00	2.47
	Total	78	2.21	.827	.094	2.02	2.39
21	Private (Not for Profit)	27	1.89	.892	.172	1.54	2.24
	Public	51	1.78	.832	.117	1.55	2.02
	Total	78	1.82	.849	.096	1.63	2.01
22	Private (Not for Profit)	27	2.59	1.083	.209	2.16	3.02
	Public	51	2.73	.802	.112	2.50	2.95

	Total	78	2.68	.904	.102	2.48	2.88
23	Private (Not for Profit)	26	2.69	1.011	.198	2.28	3.10
	Public	51	3.02	.860	.120	2.78	3.26
	Total	77	2.91	.920	.105	2.70	3.12
24	Private (Not for Profit)	27	2.85	1.027	.198	2.45	3.26
	Public	51	3.00	1.039	.146	2.71	3.29
	Total	78	2.95	1.031	.117	2.72	3.18
25	Private (Not for Profit)	27	2.48	.849	.163	2.15	2.82
	Public	51	2.90	.806	.113	2.68	3.13
	Total	78	2.76	.840	.095	2.57	2.95
26	Private (Not for Profit)	27	2.89	.974	.187	2.50	3.27
	Public	51	3.41	.920	.129	3.15	3.67
	Total	78	3.23	.966	.109	3.01	3.45

ANOVA

Question		*SS*	*df*	*MS*	*F*	Sig.
1	Between Groups	.110	1	.110	.124	.726
	Within Groups	66.565	75	.888		
	Total	66.675	76			
2	Between Groups	1.594	1	1.594	.323	.572
	Within Groups	365.393	74	4.938		
	Total	366.987	75			
3	Between Groups	.000	1	.000	.000	.991
	Within Groups	48.885	76	.643		
	Total	48.885	77			
4	Between Groups	.664	1	.664	.906	.344
	Within Groups	55.708	76	.733		
	Total	56.372	77			
5	Between Groups	1.051	1	1.051	1.039	.311
	Within Groups	76.898	76	1.012		
	Total	77.949	77			
6	Between Groups	3.453	1	3.453	4.801	.032
	Within Groups	54.662	76	.719		
	Total	58.115	77			
7	Between Groups	.365	1	.365	.402	.528
	Within Groups	69.020	76	.908		
	Total	69.385	77			
8	Between Groups	.177	1	.177	.151	.698
	Within Groups	89.002	76	1.171		
	Total	89.179	77			
9	Between Groups	1.054	1	1.054	1.037	.312
	Within Groups	76.193	75	1.016		
	Total	77.247	76			
10	Between Groups	.185	1	.185	.294	.590
	Within Groups	47.930	76	.631		
	Total	48.115	77			
11	Between Groups	3.057	1	3.057	3.060	.084
	Within Groups	75.930	76	.999		

	Total	78.987	77			
12	Between Groups	3.982	1	3.982	4.335	.041
	Within Groups	69.813	76	.919		
	Total	73.795	77			
13	Between Groups	.000	1	.000	.000	.984
	Within Groups	60.871	76	.801		
	Total	60.872	77			
14	Between Groups	1.835	1	1.835	3.660	.060
	Within Groups	38.113	76	.501		
	Total	39.949	77			
15	Between Groups	.959	1	.959	2.007	.161
	Within Groups	36.336	76	.478		
	Total	37.295	77			
16	Between Groups	.193	1	.193	.324	.571
	Within Groups	45.294	76	.596		
	Total	45.487	77			
17	Between Groups	3.802	1	3.802	3.539	.064
	Within Groups	81.647	76	1.074		
	Total	85.449	77			
18	Between Groups	.263	1	.263	.375	.542
	Within Groups	53.224	76	.700		
	Total	53.487	77			
19	Between Groups	1.936	1	1.936	2.390	.126
	Within Groups	61.551	76	.810		
	Total	63.487	77			
20	Between Groups	.134	1	.134	.194	.661
	Within Groups	52.584	76	.692		
	Total	52.718	77			
21	Between Groups	.193	1	.193	.265	.608
	Within Groups	55.294	76	.728		
	Total	55.487	77			
22	Between Groups	.312	1	.312	.378	.540
	Within Groups	62.675	76	.825		
	Total	62.987	77			

23	Between Groups	1.845	1	1.845	2.213	.141
	Within Groups	62.519	75	.834		
	Total	64.364	76			
24	Between Groups	.387	1	.387	.362	.549
	Within Groups	81.407	76	1.071		
	Total	81.795	77			
25	Between Groups	3.121	1	3.121	4.629	.035
	Within Groups	51.251	76	.674		
	Total	54.372	77			
26	Between Groups	4.827	1	4.827	5.473	.022
	Within Groups	67.020	76	.882		
	Total	71.846	77			

Appendix L

ANOVA Marital Status

Question	Marital Status	*N*	*M*	*SD*	*SE*	95% CI for Mean	
						LL	UL
1	Married	66	2.24	.962	.118	2.01	2.48
	Single	5	2.00	1.000	.447	.76	3.24
	Divorced	1	2.00	.	.	.	.
	Separated	1	1.00	.	.	.	.
	Domestic Partnership	3	2.33	.577	.333	.90	3.77
	Total	76	2.21	.943	.108	2.00	2.43
2	Married	66	3.56	2.206	.272	3.02	4.10
	Single	5	3.60	2.191	.980	.88	6.32
	Divorced	1	5.00	.	.	.	.
	Separated	1	.00	.	.	.	.
	Domestic Partnership	2	2.50	3.536	2.500	-29.27	34.27
	Total	75	3.51	2.220	.256	3.00	4.02
3	Married	67	3.94	.814	.099	3.74	4.14
	Single	5	4.20	.837	.374	3.16	5.24
	Divorced	1	5.00	.	.	.	.
	Separated	1	4.00	.	.	.	.
	Domestic Partnership	3	3.67	.577	.333	2.23	5.10
	Total	77	3.96	.802	.091	3.78	4.14
4	Married	67	1.96	.878	.107	1.74	2.17
	Single	5	1.60	.548	.245	.92	2.28
	Divorced	1	2.00	.	.	.	.
	Separated	1	1.00	.	.	.	.
	Domestic Partnership	3	2.00	1.000	.577	-.48	4.48
	Total	77	1.92	.855	.097	1.73	2.12
5	Married	67	2.66	1.023	.125	2.41	2.91
	Single	5	2.00	.707	.316	1.12	2.88
	Divorced	1	3.00	.	.	.	.
	Separated	1	4.00	.	.	.	.
	Domestic Partnership	3	3.00	1.000	.577	.52	5.48
	Total	77	2.65	1.010	.115	2.42	2.88
6	Married	67	3.87	.851	.104	3.66	4.07
	Single	5	3.20	1.095	.490	1.84	4.56
	Divorced	1	3.00	.	.	.	.
	Separated	1	3.00	.	.	.	.

	Domestic Partnership	3	4.00	1.000	.577	1.52	6.48
	Total	77	3.81	.874	.100	3.61	4.00
7	Married	67	2.49	.943	.115	2.26	2.72
	Single	5	1.80	.837	.374	.76	2.84
	Divorced	1	3.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	3.33	.577	.333	1.90	4.77
	Total	77	2.48	.940	.107	2.27	2.69
8	Married	67	2.15	1.077	.132	1.89	2.41
	Single	5	1.40	.894	.400	.29	2.51
	Divorced	1	2.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	2.67	1.528	.882	-1.13	6.46
	Total	77	2.12	1.076	.123	1.87	2.36
9	Married	66	2.77	1.020	.126	2.52	3.02
	Single	5	2.20	.447	.200	1.64	2.76
	Divorced	1	3.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	4.00	1.000	.577	1.52	6.48
	Total	76	2.79	1.011	.116	2.56	3.02
10	Married	67	2.24	.780	.095	2.05	2.43
	Single	5	1.40	.548	.245	.72	2.08
	Divorced	1	3.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	2.67	.577	.333	1.23	4.10
	Total	77	2.21	.784	.089	2.03	2.39
11	Married	67	3.70	1.045	.128	3.45	3.96
	Single	5	3.20	.837	.374	2.16	4.24
	Divorced	1	4.00	.	.	.	.
	Separated	1	4.00	.	.	.	.
	Domestic Partnership	3	4.00	1.000	.577	1.52	6.48
	Total	77	3.69	1.016	.116	3.46	3.92
12	Married	67	3.07	.990	.121	2.83	3.32
	Single	5	2.80	.837	.374	1.76	3.84
	Divorced	1	3.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	3.33	1.528	.882	-.46	7.13
	Total	77	3.06	.978	.111	2.84	3.29
13	Married	67	2.39	.937	.114	2.16	2.62

	Single	5	2.40	.548	.245	1.72	3.08
	Divorced	1	2.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	3.00	.000	.000	3.00	3.00
	Total	77	2.42	.894	.102	2.21	2.62
14	Married	67	2.36	.732	.089	2.18	2.54
	Single	5	2.40	.894	.400	1.29	3.51
	Divorced	1	2.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	2.67	.577	.333	1.23	4.10
	Total	77	2.36	.724	.082	2.20	2.53
15	Married	67	2.46	.703	.086	2.29	2.63
	Single	5	2.20	.837	.374	1.16	3.24
	Divorced	1	2.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	2.67	.577	.333	1.23	4.10
	Total	77	2.45	.699	.080	2.30	2.61
16	Married	67	2.21	.808	.099	2.01	2.41
	Single	5	2.20	.447	.200	1.64	2.76
	Divorced	1	2.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	2.00	.000	.000	2.00	2.00
	Total	77	2.19	.762	.087	2.02	2.37
17	Married	67	2.22	1.071	.131	1.96	2.49
	Single	5	1.40	.894	.400	.29	2.51
	Divorced	1	3.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	1.67	.577	.333	.23	3.10
	Total	77	2.16	1.052	.120	1.92	2.39
18	Married	67	2.49	.877	.107	2.28	2.71
	Single	5	2.40	.548	.245	1.72	3.08
	Divorced	1	3.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	2.67	.577	.333	1.23	4.10
	Total	77	2.49	.837	.095	2.30	2.68
19	Married	67	2.19	.857	.105	1.98	2.40
	Single	5	1.80	.837	.374	.76	2.84
	Divorced	1	3.00	.	.	.	.
	Separated	1	1.00	.	.	.	.
	Domestic Partnership	3	3.00	1.732	1.000	-1.30	7.30

	Total	77	2.19	.904	.103	1.99	2.40
20	Married	67	2.19	.821	.100	1.99	2.39
	Single	5	2.20	1.095	.490	.84	3.56
	Divorced	1	2.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	3.00	.000	.000	3.00	3.00
	Total	77	2.22	.821	.094	2.03	2.41
21	Married	67	1.82	.903	.110	1.60	2.04
	Single	5	1.80	.447	.200	1.24	2.36
	Divorced	1	2.00	.	.	.	.
	Separated	1	2.00	.	.	.	.
	Domestic Partnership	3	2.00	.000	.000	2.00	2.00
	Total	77	1.83	.849	.097	1.64	2.02
22	Married	67	2.69	.925	.113	2.46	2.91
	Single	5	2.60	.894	.400	1.49	3.71
	Divorced	1	2.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	3.00	1.000	.577	.52	5.48
	Total	77	2.69	.907	.103	2.48	2.89
23	Married	66	2.91	.907	.112	2.69	3.13
	Single	5	2.40	.894	.400	1.29	3.51
	Divorced	1	3.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	4.00	1.000	.577	1.52	6.48
	Total	76	2.92	.920	.106	2.71	3.13
24	Married	67	2.93	1.063	.130	2.67	3.18
	Single	5	2.80	.447	.200	2.24	3.36
	Divorced	1	3.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	4.00	1.000	.577	1.52	6.48
	Total	77	2.96	1.032	.118	2.73	3.20
25	Married	67	2.78	.867	.106	2.56	2.99
	Single	5	2.40	.548	.245	1.72	3.08
	Divorced	1	2.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	3.33	.577	.333	1.90	4.77
	Total	77	2.77	.841	.096	2.58	2.96

26	Married	67	3.31	.972	.119	3.08	3.55
	Single	5	2.60	.894	.400	1.49	3.71
	Divorced	1	3.00	.	.	.	.
	Separated	1	3.00	.	.	.	.
	Domestic Partnership	3	2.67	1.155	.667	-.20	5.54
	Total	77	3.23	.972	.111	3.01	3.45

ANOVA

Question		*SS*	*df*	*MS*	*F*	Sig.
1	Between Groups	1.844	4	.461	.505	.732
	Within Groups	64.788	71	.913		
	Total	66.632	75			
2	Between Groups	16.789	4	4.197	.844	.502
	Within Groups	347.958	70	4.971		
	Total	364.747	74			
3	Between Groups	1.655	4	.414	.631	.642
	Within Groups	47.228	72	.656		
	Total	48.883	76			
4	Between Groups	1.467	4	.367	.488	.744
	Within Groups	54.066	72	.751		
	Total	55.532	76			
5	Between Groups	4.428	4	1.107	1.090	.368
	Within Groups	73.104	72	1.015		
	Total	77.532	76			
6	Between Groups	3.487	4	.872	1.150	.340
	Within Groups	54.591	72	.758		
	Total	58.078	76			
7	Between Groups	5.008	4	1.252	1.449	.227
	Within Groups	62.213	72	.864		
	Total	67.221	76			
8	Between Groups	3.574	4	.893	.762	.553
	Within Groups	84.374	72	1.172		
	Total	87.948	76			
9	Between Groups	6.241	4	1.560	1.574	.191
	Within Groups	70.391	71	.991		
	Total	76.632	75			

10	Between Groups	4.630	4	1.157	1.982	.106
	Within Groups	42.046	72	.584		
	Total	46.675	76			
11	Between Groups	1.690	4	.422	.396	.811
	Within Groups	76.830	72	1.067		
	Total	78.519	76			
12	Between Groups	.582	4	.145	.145	.965
	Within Groups	72.094	72	1.001		
	Total	72.675	76			
13	Between Groups	1.591	4	.398	.484	.747
	Within Groups	59.110	72	.821		
	Total	60.701	76			
14	Between Groups	.549	4	.137	.251	.908
	Within Groups	39.270	72	.545		
	Total	39.818	76			
15	Between Groups	.968	4	.242	.482	.749
	Within Groups	36.123	72	.502		
	Total	37.091	76			
16	Between Groups	.203	4	.051	.083	.987
	Within Groups	43.875	72	.609		
	Total	44.078	76			
17	Between Groups	4.621	4	1.155	1.046	.390
	Within Groups	79.508	72	1.104		
	Total	84.130	76			
18	Between Groups	.634	4	.158	.217	.928
	Within Groups	52.613	72	.731		
	Total	53.247	76			
19	Between Groups	4.800	4	1.200	1.509	.209
	Within Groups	57.278	72	.796		
	Total	62.078	76			
20	Between Groups	1.969	4	.492	.719	.582
	Within Groups	49.278	72	.684		
	Total	51.247	76			
21	Between Groups	.154	4	.039	.051	.995

	Within Groups	54.651	72	.759		
	Total	54.805	76			
22	Between Groups	.902	4	.225	.263	.901
	Within Groups	61.618	72	.856		
	Total	62.519	76			
23	Between Groups	4.872	4	1.218	1.474	.219
	Within Groups	58.655	71	.826		
	Total	63.526	75			
24	Between Groups	3.456	4	.864	.804	.527
	Within Groups	77.427	72	1.075		
	Total	80.883	76			
25	Between Groups	2.284	4	.571	.798	.530
	Within Groups	51.508	72	.715		
	Total	53.792	76			
26	Between Groups	3.508	4	.877	.925	.455
	Within Groups	68.285	72	.948		
	Total	71.792	76			

Appendix M

ANOVA Institutional Size

Question	Institutional Size	*N*	*M*	*SD*	*SE*	95% CI for Mean	
						LL	UL
1	< 10,000	19	2.63	.831	.191	2.23	3.03
	10,000 – 19,999	26	2.04	.958	.188	1.65	2.43
	20,000 – 29,999	18	2.00	.840	.198	1.58	2.42
	>30,000	14	2.21	1.051	.281	1.61	2.82
	Total	77	2.21	.937	.107	2.00	2.42
2	< 10,000	18	2.89	2.349	.554	1.72	4.06
	10,000 – 19,999	25	2.92	2.465	.493	1.90	3.94
	20,000 – 29,999	18	4.17	1.724	.406	3.31	5.02
	>30,000	15	4.33	1.759	.454	3.36	5.31
	Total	76	3.49	2.212	.254	2.98	3.99
3	< 10,000	19	4.00	.745	.171	3.64	4.36
	10,000 – 19,999	26	3.92	.977	.192	3.53	4.32
	20,000 – 29,999	18	3.83	.618	.146	3.53	4.14
	>30,000	15	4.13	.743	.192	3.72	4.54
	Total	78	3.96	.797	.090	3.78	4.14
4	< 10,000	19	2.37	.955	.219	1.91	2.83
	10,000 – 19,999	26	1.54	.706	.138	1.25	1.82
	20,000 – 29,999	18	2.00	.767	.181	1.62	2.38
	>30,000	15	1.87	.834	.215	1.40	2.33
	Total	78	1.91	.856	.097	1.72	2.10
5	< 10,000	19	2.68	.820	.188	2.29	3.08
	10,000 – 19,999	26	2.62	1.061	.208	2.19	3.04
	20,000 – 29,999	18	2.50	.924	.218	2.04	2.96
	>30,000	15	2.80	1.265	.327	2.10	3.50
	Total	78	2.64	1.006	.114	2.41	2.87
6	< 10,000	19	3.89	.809	.186	3.50	4.28
	10,000 – 19,999	26	3.65	.977	.192	3.26	4.05
	20,000 – 29,999	18	3.67	.767	.181	3.29	4.05
	>30,000	15	4.13	.834	.215	3.67	4.60
	Total	78	3.81	.869	.098	3.61	4.00
7	< 10,000	19	2.84	1.015	.233	2.35	3.33
	10,000 – 19,999	26	2.19	.981	.192	1.80	2.59
	20,000 – 29,999	18	2.44	.705	.166	2.09	2.79
	>30,000	15	2.47	.990	.256	1.92	3.02

	Total	78	2.46	.949	.107	2.25	2.68
8	< 10,000	19	2.37	1.212	.278	1.78	2.95
	10,000 – 19,999	26	2.00	.894	.175	1.64	2.36
	20,000 – 29,999	18	2.11	1.132	.267	1.55	2.67
	>30,000	15	1.93	1.163	.300	1.29	2.58
	Total	78	2.10	1.076	.122	1.86	2.35
9	< 10,000	19	2.58	.692	.159	2.25	2.91
	10,000 – 19,999	25	2.68	1.030	.206	2.26	3.10
	20,000 – 29,999	18	2.89	1.132	.267	2.33	3.45
	>30,000	15	3.07	1.163	.300	2.42	3.71
	Total	77	2.78	1.008	.115	2.55	3.01
10	< 10,000	19	2.42	.902	.207	1.99	2.86
	10,000 – 19,999	26	2.19	.849	.167	1.85	2.54
	20,000 – 29,999	18	1.94	.639	.151	1.63	2.26
	>30,000	15	2.20	.676	.175	1.83	2.57
	Total	78	2.19	.790	.090	2.01	2.37
11	< 10,000	19	3.32	1.003	.230	2.83	3.80
	10,000 – 19,999	26	3.73	1.079	.212	3.29	4.17
	20,000 – 29,999	18	3.67	.907	.214	3.22	4.12
	>30,000	15	4.07	.961	.248	3.53	4.60
	Total	78	3.68	1.013	.115	3.45	3.91
12	< 10,000	19	2.84	.958	.220	2.38	3.30
	10,000 – 19,999	26	2.92	1.017	.199	2.51	3.33
	20,000 – 29,999	18	3.22	.808	.191	2.82	3.62
	>30,000	15	3.33	1.113	.287	2.72	3.95
	Total	78	3.05	.979	.111	2.83	3.27
13	< 10,000	19	2.42	.692	.159	2.09	2.75
	10,000 – 19,999	26	2.31	.928	.182	1.93	2.68
	20,000 – 29,999	18	2.50	1.098	.259	1.95	3.05
	>30,000	15	2.47	.834	.215	2.00	2.93
	Total	78	2.41	.889	.101	2.21	2.61
14	< 10,000	19	2.00	.471	.108	1.77	2.23
	10,000 – 19,999	26	2.27	.724	.142	1.98	2.56
	20,000 – 29,999	18	2.50	.707	.167	2.15	2.85
	>30,000	15	2.80	.775	.200	2.37	3.23

	Total	78	2.36	.720	.082	2.20	2.52
15	< 10,000	19	2.32	.582	.134	2.04	2.60
	10,000 – 19,999	26	2.27	.667	.131	2.00	2.54
	20,000 – 29,999	18	2.50	.618	.146	2.19	2.81
	>30,000	15	2.87	.834	.215	2.40	3.33
	Total	78	2.45	.696	.079	2.29	2.61
16	< 10,000	19	2.11	.567	.130	1.83	2.38
	10,000 – 19,999	26	2.15	.925	.181	1.78	2.53
	20,000 – 29,999	18	2.28	.826	.195	1.87	2.69
	>30,000	15	2.20	.676	.175	1.83	2.57
	Total	78	2.18	.769	.087	2.01	2.35
17	< 10,000	19	2.58	1.121	.257	2.04	3.12
	10,000 – 19,999	26	2.08	.977	.192	1.68	2.47
	20,000 – 29,999	18	2.22	1.003	.236	1.72	2.72
	>30,000	15	1.60	.986	.254	1.05	2.15
	Total	78	2.14	1.053	.119	1.90	2.38
18	< 10,000	19	2.47	.772	.177	2.10	2.85
	10,000 – 19,999	26	2.38	.752	.148	2.08	2.69
	20,000 – 29,999	18	2.67	.907	.214	2.22	3.12
	>30,000	15	2.47	.990	.256	1.92	3.02
	Total	78	2.49	.833	.094	2.30	2.68
19	< 10,000	19	2.37	.895	.205	1.94	2.80
	10,000 – 19,999	26	1.85	.834	.164	1.51	2.18
	20,000 – 29,999	18	2.11	.758	.179	1.73	2.49
	>30,000	15	2.60	1.056	.273	2.02	3.18
	Total	78	2.18	.908	.103	1.97	2.38
20	< 10,000	19	2.26	.872	.200	1.84	2.68
	10,000 – 19,999	26	2.08	.845	.166	1.74	2.42
	20,000 – 29,999	18	2.39	.916	.216	1.93	2.84
	>30,000	15	2.13	.640	.165	1.78	2.49
	Total	78	2.21	.827	.094	2.02	2.39
21	< 10,000	19	2.05	.848	.195	1.64	2.46
	10,000 – 19,999	26	1.65	1.056	.207	1.23	2.08
	20,000 – 29,999	18	1.89	.676	.159	1.55	2.23
	>30,000	15	1.73	.594	.153	1.40	2.06

	Total	78	1.82	.849	.096	1.63	2.01
22	< 10,000	19	2.63	.831	.191	2.23	3.03
	10,000 – 19,999	26	2.38	.983	.193	1.99	2.78
	20,000 – 29,999	18	2.89	.832	.196	2.47	3.30
	>30,000	15	3.00	.845	.218	2.53	3.47
	Total	78	2.68	.904	.102	2.48	2.88
23	< 10,000	19	2.58	.769	.176	2.21	2.95
	10,000 – 19,999	25	3.04	.889	.178	2.67	3.41
	20,000 – 29,999	18	2.89	.832	.196	2.47	3.30
	>30,000	15	3.13	1.187	.307	2.48	3.79
	Total	77	2.91	.920	.105	2.70	3.12
24	< 10,000	19	3.11	.994	.228	2.63	3.58
	10,000 – 19,999	26	2.69	1.050	.206	2.27	3.12
	20,000 – 29,999	18	2.83	.985	.232	2.34	3.32
	>30,000	15	3.33	1.047	.270	2.75	3.91
	Total	78	2.95	1.031	.117	2.72	3.18
25	< 10,000	19	2.74	.933	.214	2.29	3.19
	10,000 – 19,999	26	2.58	.857	.168	2.23	2.92
	20,000 – 29,999	18	2.83	.786	.185	2.44	3.22
	>30,000	15	3.00	.756	.195	2.58	3.42
	Total	78	2.76	.840	.095	2.57	2.95
26	< 10,000	19	3.21	1.134	.260	2.66	3.76
	10,000 – 19,999	26	2.96	.871	.171	2.61	3.31
	20,000 – 29,999	18	3.28	.752	.177	2.90	3.65
	>30,000	15	3.67	1.047	.270	3.09	4.25
	Total	78	3.23	.966	.109	3.01	3.45

ANOVA

Question		*SS*	*df*	*MS*	*F*	Sig.
1	Between Groups	4.936	3	1.645	1.945	.130
	Within Groups	61.740	73	.846		
	Total	66.675	76			
2	Between Groups	33.536	3	11.179	2.414	.074
	Within Groups	333.451	72	4.631		
	Total	366.987	75			
3	Between Groups	.805	3	.268	.413	.744
	Within Groups	48.079	74	.650		
	Total	48.885	77			
4	Between Groups	7.756	3	2.585	3.935	.012
	Within Groups	48.616	74	.657		
	Total	56.372	77			
5	Between Groups	.790	3	.263	.252	.859
	Within Groups	77.159	74	1.043		
	Total	77.949	77			
6	Between Groups	2.708	3	.903	1.206	.314
	Within Groups	55.407	74	.749		
	Total	58.115	77			
7	Between Groups	4.642	3	1.547	1.769	.161
	Within Groups	64.743	74	.875		
	Total	69.385	77			
8	Between Groups	2.047	3	.682	.580	.630
	Within Groups	87.132	74	1.177		
	Total	89.179	77			
9	Between Groups	2.464	3	.821	.802	.497
	Within Groups	74.783	73	1.024		
	Total	77.247	76			
10	Between Groups	2.101	3	.700	1.126	.344
	Within Groups	46.014	74	.622		
	Total	48.115	77			
11	Between Groups	4.833	3	1.611	1.608	.195
	Within Groups	74.154	74	1.002		

	Total	78.987	77			
12	Between Groups	2.978	3	.993	1.037	.381
	Within Groups	70.817	74	.957		
	Total	73.795	77			
13	Between Groups	.468	3	.156	.191	.902
	Within Groups	60.403	74	.816		
	Total	60.872	77			
14	Between Groups	5.933	3	1.978	4.303	.007
	Within Groups	34.015	74	.460		
	Total	39.949	77			
15	Between Groups	3.841	3	1.280	2.832	.044
	Within Groups	33.454	74	.452		
	Total	37.295	77			
16	Between Groups	.302	3	.101	.165	.920
	Within Groups	45.185	74	.611		
	Total	45.487	77			
17	Between Groups	8.260	3	2.753	2.640	.056
	Within Groups	77.189	74	1.043		
	Total	85.449	77			
18	Between Groups	.863	3	.288	.405	.750
	Within Groups	52.624	74	.711		
	Total	53.487	77			
19	Between Groups	6.304	3	2.101	2.719	.051
	Within Groups	57.183	74	.773		
	Total	63.487	77			
20	Between Groups	1.176	3	.392	.563	.641
	Within Groups	51.541	74	.697		
	Total	52.718	77			
21	Between Groups	1.944	3	.648	.896	.448
	Within Groups	53.543	74	.724		
	Total	55.487	77			
22	Between Groups	4.635	3	1.545	1.959	.128
	Within Groups	58.353	74	.789		
	Total	62.987	77			

23	Between Groups	3.261	3	1.087	1.299	.281
	Within Groups	61.103	73	.837		
	Total	64.364	76			
24	Between Groups	4.634	3	1.545	1.481	.227
	Within Groups	77.161	74	1.043		
	Total	81.795	77			
25	Between Groups	1.841	3	.614	.865	.463
	Within Groups	52.530	74	.710		
	Total	54.372	77			
26	Between Groups	4.782	3	1.594	1.759	.162
	Within Groups	67.064	74	.906		
	Total	71.846	77			

Appendix N

t-Test Dependents

Question	Dependents	*N*	*M*	*SD*	*SEM*
1	Dependents	34	2.47	1.022	.175
	No Dependents	42	2.00	.826	.128
2	Dependents	35	2.91	2.406	.407
	No Dependents	40	4.03	1.928	.305
3	Dependents	35	3.89	.796	.135
	No Dependents	42	4.02	.811	.125
4	Dependents	35	2.11	.932	.158
	No Dependents	42	1.76	.759	.117
5	Dependents	35	2.71	.957	.162
	No Dependents	42	2.60	1.061	.164
6	Dependents	35	3.74	.817	.138
	No Dependents	42	3.86	.926	.143
7	Dependents	35	2.69	1.022	.173
	No Dependents	42	2.31	.841	.130
8	Dependents	35	2.26	1.146	.194
	No Dependents	42	2.00	1.012	.156
9	Dependents	35	2.77	1.031	.174
	No Dependents	41	2.80	1.005	.157
10	Dependents	35	2.34	.765	.129
	No Dependents	42	2.10	.790	.122
11	Dependents	35	3.66	.998	.169
	No Dependents	42	3.71	1.043	.161
12	Dependents	35	3.14	1.033	.175
	No Dependents	42	3.00	.937	.145
13	Dependents	35	2.57	1.008	.170
	No Dependents	42	2.29	.774	.119
14	Dependents	35	2.54	.780	.132
	No Dependents	42	2.21	.645	.100

15	Dependents	35	2.51	.658	.111
	No Dependents	42	2.40	.734	.113
16	Dependents	35	2.31	.867	.147
	No Dependents	42	2.10	.656	.101
17	Dependents	35	2.43	.979	.165
	No Dependents	42	1.93	1.068	.165
18	Dependents	35	2.46	.919	.155
	No Dependents	42	2.52	.773	.119
19	Dependents	35	2.26	.886	.150
	No Dependents	42	2.14	.926	.143
20	Dependents	35	2.26	.852	.144
	No Dependents	42	2.19	.804	.124
21	Dependents	35	2.03	.891	.151
	No Dependents	42	1.67	.786	.121
22	Dependents	35	2.71	1.100	.186
	No Dependents	42	2.67	.721	.111
23	Dependents	34	2.91	.965	.166
	No Dependents	42	2.93	.894	.138
24	Dependents	35	2.97	1.124	.190
	No Dependents	42	2.95	.962	.148
25	Dependents	35	2.71	.957	.162
	No Dependents	42	2.81	.740	.114
26	Dependents	35	3.17	1.014	.171
	No Dependents	42	3.29	.944	.146

Appendix O

Frequency Tables

Question 1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	26	28.9	31.0	31.0
	Almost Never	23	25.6	27.4	58.3
	Sometimes	29	32.2	34.5	92.9
	Fairly Often	6	6.7	7.1	100.0
	Total	84	93.3	100.0	
Missing	System	6	6.7		
Total		90	100.0		

Question 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	23	25.6	28.0	28.0
	Almost Never	1	1.1	1.2	29.3
	Sometimes	1	1.1	1.2	30.5
	Fairly Often	4	4.4	4.9	35.4
	Often	53	58.9	64.6	100.0
	Total	82	91.1	100.0	
Missing	System	8	8.9		
Total		90	100.0		

Question 3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1	1.1	1.2	1.2
	Almost Never	1	1.1	1.2	2.4
	Sometimes	19	21.1	22.9	25.3
	Fairly Often	41	45.6	49.4	74.7
	Often	21	23.3	25.3	100.0
	Total	83	92.2	100.0	
Missing	System	7	7.8		
Total		90	100.0		

Question 4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1	1.1	1.2	1.2
	Almost Never	27	30.0	32.5	33.7
	Sometimes	34	37.8	41.0	74.7
	Fairly Often	19	21.1	22.9	97.6
	Often	2	2.2	2.4	100.0
	Total	83	92.2	100.0	
Missing	System	7	7.8		
Total		90	100.0		

Question 5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	10	11.1	12.2	12.2
	Almost Never	27	30.0	32.9	45.1
	Sometimes	28	31.1	34.1	79.3
	Fairly Often	14	15.6	17.1	96.3
	Often	3	3.3	3.7	100.0
	Total	82	91.1	100.0	
Missing	System	8	8.9		
Total		90	100.0		

Question 6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Almost Never	4	4.4	4.9	4.9
	Sometimes	27	30.0	32.9	37.8
	Fairly Often	31	34.4	37.8	75.6
	Often	20	22.2	24.4	100.0
	Total	82	91.1	100.0	
Missing	System	8	8.9		
Total		90	100.0		

Question 7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	15	16.7	18.3	18.3
	Almost Never	23	25.6	28.0	46.3
	Sometimes	35	38.9	42.7	89.0
	Fairly Often	8	8.9	9.8	98.8
	Often	1	1.1	1.2	100.0
	Total	82	91.1	100.0	
Missing	System	8	8.9		
Total		90	100.0		

Question 8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	32	35.6	39.0	39.0
	Almost Never	18	20.0	22.0	61.0
	Sometimes	23	25.6	28.0	89.0
	Fairly Often	7	7.8	8.5	97.6
	Often	2	2.2	2.4	100.0
	Total	82	91.1	100.0	
Missing	System	8	8.9		
Total		90	100.0		

Question 9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	7	7.8	8.8	8.8
	Almost Never	24	26.7	30.0	38.8
	Sometimes	35	38.9	43.8	82.5
	Fairly Often	8	8.9	10.0	92.5
	Often	6	6.7	7.5	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total		90	100.0		

Question 10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	15	16.7	18.5	18.5
	Almost Never	37	41.1	45.7	64.2

	Sometimes	26	28.9	32.1	96.3
	Fairly Often	3	3.3	3.7	100.0
	Total	81	90.0	100.0	
Missing	System	9	10.0		
Total		90	100.0		

Question 11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	2.2	2.5	2.5
	Almost Never	8	8.9	9.9	12.3
	Sometimes	23	25.6	28.4	40.7
	Fairly Often	29	32.2	35.8	76.5
	Often	19	21.1	23.5	100.0
	Total	81	90.0	100.0	
Missing	System	9	10.0		
Total		90	100.0		

Question 12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	2.2	2.5	2.5
	Almost Never	21	23.3	26.3	28.8
	Sometimes	36	40.0	45.0	73.8
	Fairly Often	13	14.4	16.3	90.0
	Often	8	8.9	10.0	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total		90	100.0		

Question 13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6	6.7	7.5	7.5
	Almost Never	47	52.2	58.8	66.3
	Sometimes	20	22.2	25.0	91.3
	Fairly Often	3	3.3	3.8	95.0
	Often	4	4.4	5.0	100.0
	Total	80	88.9	100.0	

Missing	System	10	11.1		
	Total	90	100.0		

Question 14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	7	7.8	8.8	8.8
	Almost Never	40	44.4	50.0	58.8
	Sometimes	31	34.4	38.8	97.5
	Fairly Often	1	1.1	1.3	98.8
	Often	1	1.1	1.3	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
	Total	90	100.0		

Question 15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	4	4.4	5.0	5.0
	Almost Never	40	44.4	50.0	55.0
	Sometimes	33	36.7	41.3	96.3
	Fairly Often	2	2.2	2.5	98.8
	Often	1	1.1	1.3	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
	Total	90	100.0		

Question 16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	11	12.2	13.8	13.8
	Almost Never	47	52.2	58.8	72.5
	Sometimes	18	20.0	22.5	95.0
	Fairly Often	3	3.3	3.8	98.8
	Often	1	1.1	1.3	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
	Total	90	100.0		

Question 17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	27	30.0	33.8	33.8
	Almost Never	25	27.8	31.3	65.0
	Sometimes	20	22.2	25.0	90.0
	Fairly Often	6	6.7	7.5	97.5
	Often	2	2.2	2.5	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total		90	100.0		

Question 18

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	8	8.9	10.0	10.0
	Almost Never	32	35.6	40.0	50.0
	Sometimes	35	38.9	43.8	93.8
	Fairly Often	3	3.3	3.8	97.5
	Often	2	2.2	2.5	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total		90	100.0		

Question 19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	19	21.1	23.8	23.8
	Almost Never	33	36.7	41.3	65.0
	Sometimes	23	25.6	28.8	93.8
	Fairly Often	4	4.4	5.0	98.8
	Often	1	1.1	1.3	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total		90	100.0		

Question 20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	18	20.0	22.5	22.5

	Almost Never	32	35.6	40.0	62.5
	Sometimes	27	30.0	33.8	96.3
	Fairly Often	3	3.3	3.8	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total		90	100.0		

Question 21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	31	34.4	39.2	39.2
	Almost Never	35	38.9	44.3	83.5
	Sometimes	10	11.1	12.7	96.2
	Fairly Often	2	2.2	2.5	98.7
	Often	1	1.1	1.3	100.0
	Total	79	87.8	100.0	
Missing	System	11	12.2		
Total		90	100.0		

Question 22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	4	4.4	5.1	5.1
	Almost Never	32	35.6	40.5	45.6
	Sometimes	32	35.6	40.5	86.1
	Fairly Often	7	7.8	8.9	94.9
	Often	4	4.4	5.1	100.0
	Total	79	87.8	100.0	
Missing	System	11	12.2		
Total		90	100.0		

Question 23

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	4	4.4	5.2	5.2
	Almost Never	18	20.0	23.4	28.6
	Sometimes	42	46.7	54.5	83.1
	Fairly Often	7	7.8	9.1	92.2
	Often	6	6.7	7.8	100.0
	Total	77	85.6	100.0	
Missing	System	13	14.4		
Total		90	100.0		

Question 24

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6	6.7	7.7	7.7
	Almost Never	17	18.9	21.8	29.5
	Sometimes	38	42.2	48.7	78.2
	Fairly Often	9	10.0	11.5	89.7
	Often	8	8.9	10.3	100.0
	Total	78	86.7	100.0	
Missing	System	12	13.3		
Total		90	100.0		

Question 25

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	3.3	3.8	3.8
	Almost Never	27	30.0	34.6	38.5
	Sometimes	37	41.1	47.4	85.9
	Fairly Often	8	8.9	10.3	96.2
	Often	3	3.3	3.8	100.0
	Total	78	86.7	100.0	
Missing	System	12	13.3		
Total		90	100.0		

Question 26

		Frequency	Percent	Valid Percent	Cumulative Percent
	Never	3	3.3	3.8	3.8

	Almost Never	12	13.3	15.4	19.2
	Sometimes	35	38.9	44.9	64.1
	Fairly Often	20	22.2	25.6	89.7
	Often	8	8.9	10.3	100.0
	Total	78	86.7	100.0	
Missing	System	12	13.3		
Total		90	100.0		

Appendix P

Self Reported Coping Strategies

Exercise regularly, attend church services regularly, have confidants I can talk to if signficant issues are weighing on me.

Working around the house. Talking with my daughter.

Exercise, cocktails

jog, walk, golf, go to dinner with friends

I do not have a lot of coping mechanisms, I have life habits that create an ability to cope -- diet, exercise, strong personal relationships and continuous self improvement/learning endeavors all combine to dramatically reduce stress of the type contemplated by most of these questions.

Exercise primarily; having a drink or two now and then; spending time with friends; catching a movie; doing work around the house

Work around the house. Skype with our daughter

Exercise: tennis, skiing. Sailing vacations [recommended]. Wine.

Exercise, walking the campus, spending time with family

Exercise, family, friends a full life outside of work and a great deal of faith. This is what I do, not who I am. A job is a means to an end and does not define me.

Exercise, Reading, Keeping up with Grandkids, Eating Out, Working in Yard, Working on Family History though rarely

Try to protect downtime and not attend too many after-hours work-related activities. Like to spend time with my family, read good fiction, cook, watch favorite TV shows/movies, light exercise, prayer/read the Bible and/or religious materials. Try to eat very healthy, take vitamins, bioidentical hormones - really try to protect health without going over-board. Can't get away with as much as I could when I was younger - drink very little now, and can't eat the heavy food that I used to - try to keep a balanced schedule and get my rest.

religious involvement, exercise, hobby's - gardening and singing, social activities with friends and family.

Exercise

Exeercise and engage in outside activities in the community, fan of university athletic programs, do some traveling

Exercise

talking to trusted friends about the source of stress, exercise, putting work aside and reading a good book/going to the movies/going to a musical performance

exercise, yoga, meditation, reflection, talking with friends, short vacations, occasional fun activities

Humor, I have a wicked sense of humor and it keeps me in perspective, especially when things are going astray from the plan and we need to adjust in order to move forward. I also have a team who are as committed as I am to working through the issues with a strategic long term focus.

meditation, religious services, time with friends and family, exercise, watching sports

Exercise, time with my children, teaching classes, talking with friends and family

Massive quantities of exercise Nice meal and quality time at home

exercise and re-prioritizing of key assignments

Exercising, Losing Weight, and a positive attitude with gratitude are the mechism I have used to keep the job in perspective.

exercise

Workout

junk food, taking a walk, personal reading, discussing with spouse, morale building with associates

exercise, prayer

Try to keep a balanced schedule and not attend too many after-hours work-related events (have two teenage kids so have things to attend lots of

things for them right now). Try to protect down-time with things I like to do - read good fiction, cook, light exercise, watch favorite TV shows/light-hearted movies, prayer/read the Bible/related materials, talk things over with my husband. Eat healthy (lean protein, vegetables, vitamins - minimal processed food or high-carb foods), minimal alcohol, take bioidentical hormones. Can't get away with what I did when I was younger - a lot less alcohol, more rest, and try to keep a positive attitude.

Being with family and friends. Breaking things down to one step at a time. Trying to see things as an opportunity rather than a problem. Playing with my pets. Listening to music. Understanding the importance of humor.

Exercise

Exercise Good diet Frequent laughter Ensuring that I do some small thing for someone(s) each day Enjoy my pet Westies

exercise religious beliefs family activities vacation/travel

exercise, entertainment, reading

I try to prioritize things and understand that there is no way to get everything completed. I try to get the things completed that are most important to the strategic goals. When I am feeling large pressures, I talk to others on the team who help me place things in perspective. With a lot of communication with those around you, it's amazing how pressures seem lifted.

Exercise.

Running, cycling, gardening, being with friends, listening to music, yoga

Exercise

Attending sporting events. Attending threatre events.

Exercise, time spent with family

Yoga, swimming, running

exercise, socializing with friends, discussing issues with colleagues and with my direct reports.

A strong spiritual regimen including daily mass (I am a preacticing Catholic), meeting with my spiritual advisor and daily prayer. Physically I

exercise every day (running 3 miles) and mentally I try to read a book a week.

Exercise and Religious Services Ensuring that "To Do" lists are updated

Exercise and outside interests aRE A GREAT HELP!

exercise and family time

Exercise, time away, friends not associated with work, family time

Exercise when I have time, take half hour of quite time in the evening often with a glass of wine or scotch, try to take one day on teh weekend to recreate with family.

Religious services, running/other exercise, food, occasional glass of wine.

walking, golf, music, movies,

Religious meditation/prayer & exercise. Good quality food cooked at home.

Exercisek stretching and deep breathing

working with the horses, working in the yard, doing housework, thinking the issue through.

Reading, physical work, rest

Worship and prayer; the support of my spouse and friends; yoga; water exercise; being outside and moving more; eating healthier food; drinking more water

exercise, talking with my spouse

exercise, activity with family and friends, ue of coach

Exercise

alcohol & exercise

Exercise

Reading, watching TV, going out with friends who are not University employees

eat lunch alone and read theology texts regular worship, prayer member

two sacred singing groups, practice is cathartic of work pressures spend time with grandchildren to refocus from work

Family time

exercise daily

Exercise (running) and a full night of sleep (7+ hours)

Family, church, and exercise

overeating, exercise