A Quantitative Examination of the Relationship between
Age, Gender, and Burnout
in Public Accounting Professionals
in a United States National Firm
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Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

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Abstract

Scholars and practitioners agree burnout is a significant problem plaguing the public accounting industry. Burnout is a condition that results from long periods of excessive strain on personal resources, and is often found in public accounting professionals due to the high stress and deadline-driven environment. As the causes for burnout are better understood, the focus has turned to why some individuals are more likely to burnout than others. Identifying who has a tendency to burnout can only help in the quest for solutions. The purpose of this correlational quantitative study was to test the theoretical framework of Maslach and Jackson (1981) by examining the relationship between gender, age, and burnout in a large, national public accounting firm in the United States. Data was collected through anonymous surveys of the client-service professionals of one large, national public accounting firm, and analysis included multiple regression models using age and gender as the independent variables, and the three dimensions of burnout as the dependent variables. Only a weak correlation was identified between age and the dimensions of burnout, while an even weaker correlation resulted between gender and the dimensions of burnout. The results of the study indicated that young, female are more likely to experience the characteristics of burnout, but the regression models were not deemed reliable for use in predicting burnout using age and gender. The data analysis indicated that additional independent variables would be needed to reliably predict the dimensions of burnout within the surveyed population.

Keywords: burnout, public accounting, accountants, age, gender, demographics, emotional exhaustion, depersonalization, personal accomplishment
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Dedication and Acknowledgements

To my Lord and Savior, Jesus Christ, I am so incredibly grateful for my salvation, and the strength, energy, and perseverance You have blessed me with over the past three years. To You, I give all the honor and praise.

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Section 1: Foundation of the Study

Students across the country graduate with undergraduate and graduate degrees in accounting each year, and many of them choose to start careers in public accounting. This industry often offers inexperienced professionals the experience they need to jump-start a careers. While some may choose to stay with public accounting firms for their entire careers, many professionals leave public accounting after two to five years in the profession. Scholars and practitioners alike hypothesize that professionals may be leaving the public accounting industry due to burnout. This study examined the relationship between professionals’ age and gender and their levels of burnout.

Background

Historically, public accounting firms have had extremely high levels of turnover, and the industry continues to deal with an extreme shortage of qualified professionals (Vance & Stephens, 2010). As a result, researchers have begun to explore the causes of turnover in public accounting firms. One area of specific interest has been the psychological phenomenon job burnout, which has been shown to have significant turnover, performance, and satisfaction implications in employees (Guthrie & Jones, 2012). While job burnout can certainly occur in any industry, public accounting is a field prone to the condition because of the high stress environment and emphasis on regulatory and client-imposed deadlines (Jones, Norman, & Wier, 2010).

Researchers agree job burnout is a problem in public accounting firms, and have begun to explore ways to mitigate burnout (Guthrie & Jones, 2012; Jones et al., 2010; Utami & Nahartyo, 2013). Before solutions can be put into practice, researchers must identify and understand trends in who is experiencing burnout. Studies have shown
certain types of support can reduce instances of burnout in accounting professionals (Guthrie & Jones, 2012), but companies must first identify who needs the support, and how it should be administered. Since burnout has been associated with high turnover, researchers must ask: what causes some accounting professionals to stay in public accounting for decades, while others burnout and leave within a few years? In recent years, researchers have examined the effects of personality type (Utami & Nahartyo, 2013) and gender (Guthrie & Jones, 2012) on an accounting professional’s propensity to burnout. While these studies have helped researchers understand who experiences burnout and why, much more research still needs to be completed to fully grasp the problem and identify practical solutions. This research study addressed a current gap in the literature by examining the relationship between age, gender, and burnout in professionals of a national public accounting firm in the United States (the “Firm”).

**Problem Statement**

The general problem addressed in this study was the high level of burnout experienced by professionals employed in the public accounting industry. Certain inherent professional pressures and the nature of the public accounting industry have led to an environment in modern public accounting firms that is ripe for job burnout to occur (Jones et al., 2010; Utami & Supriyadi, 2013). Herda (2012) claimed burnout has implications on the ability of a public accountant to provide quality client service, and also leads to decreased productivity, job absenteeism, and increased turnover and costs to the firms. While researchers seem to agree burnout is an issue within public accounting firms, recent literature has just begun to explore what can be done about this phenomenon (Chong & Monroe, 2015; Utami & Nahartyo, 2013). Potential solutions being explored
include management support, training, better communication of expectations to employees, and improving working conditions, schedules, and assignments. However, before solutions can be further developed and tested, researchers must gain a better understanding of the nature of burnout and what population of professionals seems to be most susceptible to experience it. From a broad perspective, researchers have considered personality type (Utami & Nahartyo, 2013), gender (Guthrie & Jones, 2012), and the employer-employee relationship (Herda 2012). The specific problem addressed in this research study is burnout of professionals within a national public accounting firm in the United States, in an attempt to examine the relationship between gender, age, and burnout.

**Purpose Statement**

The purpose of this correlational quantitative study was to test the theoretical framework of Maslach and Jackson (1981) by examining the relationship between gender, age, and burnout in a large, national public accounting firm in the United States. Researchers have previously examined whether gender has an effect on burnout of professionals in the tax, audit, and consulting service lines of a national public accounting firm (Guthrie & Jones, 2012), and whether personality type has an effect on an auditor’s propensity toward burnout in public accounting firms in Indonesia (Utami & Nahartyo, 2013). This research study contributed to the recent literature by examining the relationship between gender, age, and level of burnout in a specific population of professionals in a large, national public accounting firm.
Nature of the Study

This research was conducted as a correlational quantitative study. The researcher decided not to take a qualitative approach to the research study, since the emphasis within qualitative research is on personal experience, observation, and interpretation (Stake, 2010), as measured through interviews with open-ended questions (Creswell, 2014). In addition, mixed methods approaches, which blend quantitative and qualitative research methods, were considered, but not deemed appropriate due to the use of both open and closed ended questioning to collect data (Creswell, 2014). A quantitative research method was chosen due to the focus on utilizing a specific tool or method to measure and quantify data that can be analyzed to draw conclusions for a larger population (Creswell, 2014). Historically, quantitative research methods have generated more reliable evidence than qualitative methods (Shuval et al., 2011). Because the emphasis of this research study was on measuring burnout, and not personal experiences or observations, a quantitative approach to this research study was considered most appropriate.

The correlational research design was chosen because of this design’s emphasis on identifying relationships between multiple variables (Creswell, 2014). While experimental and quasi-experimental designs identify and sometimes manipulate an independent variable to determine its effect on dependent variables, correlational studies seek to examine the variables in their natural settings (Simon & Goes, 2013). In addition, descriptive research designs explore the problem and initially identify the variables to be considered, but correlational research studies seek to establish the relationships between the variables (Creswell, 2014). The researcher sought to examine the relationship between gender, age, and level of burnout, and did not seek to manipulate the
independent variables to effectively conclude a causal relationship. Thus, a correlational quantitative design was considered most appropriate.

**Proposed Research Questions**

Recent literature has begun to explore how demographic factors and personal characteristics affect a professional’s tendency towards burnout (Ben-Porat & Itzhaky, 2015; Lambert, Kelly, & Hogan, 2013; Serin & Balkan, 2014). This study focused specifically on a population of public accounting professionals within a large national public accounting firm in the United States. In addition, the study contributed to the research by examining the correlation between the demographic factors, age and gender, and a public accounting professional’s level of burnout.

First, the study examined the correlation between age and a public accounting professional’s level of burnout. Age has recently been considered as a variable in the study of burnout, and one recent study specifically identified a negative relationship between age and burnout in a survey performed in Turkey. However, the results were limited to a population of Turkish public sector workers, and the researchers recommended further research in other industries and countries (Serin & Balkan, 2014). This study expanded upon the previous research by testing the correlation between age and level of burnout in public accounting professionals of a large, national public accounting firm in the United States.

Secondly, the study examined the correlation between a public accounting professional’s gender and level of burnout. Recent studies demonstrated inconclusive results on this topic, which required further exploration. For example, Serin and Balkan (2014) found little evidence of a relationship between gender and burnout in Turkish
public workers, but Guthrie and Jones (2012) were able to identify trends in the relationship between gender and certain factors of burnout in employees of a United States public accounting firm. These conflicting results indicated further research was necessary regarding the relationship between gender and burnout in public accounting professionals.

A professional’s level of burnout is measured using the three dimensions recommended by Maslach and Jackson (1981). Burnout is characterized and measured by the presence of emotional exhaustion, depersonalization, and personal accomplishment. Thus, three separate research questions were proposed, since each of these dimensions must be measured separately. The researcher’s three research questions were as follows:

Research Question #1: Do age and gender have an influence on a public accountant’s level of emotional exhaustion, as it relates to burnout?

Research Question #2: Do age and gender have an influence on a public accountant’s level of depersonalization, as it relates to burnout?

Research Question #3: Do age and gender have an influence on a public accountant’s level of personal accomplishment, as it relates to burnout?

**Hypotheses**

$H_{10}$: Age and gender do not influence a public accountant’s level of emotional exhaustion, as it relates to burnout.

$H_{11}$: Age and gender do influence a public accountant’s level of emotional exhaustion, as it relates to burnout.
**H2₀**: Age and gender do not influence a public accountant’s level of depersonalization, as it relates to burnout.

**H2**: Age and gender do influence a public accountant’s level of depersonalization, as it relates to burnout.

**H3₀**: Age and gender do not influence a public accountant’s level of personal accomplishment, as it relates to burnout.

**H3**: Age and gender do influence a public accountant’s level of personal accomplishment, as it relates to burnout.

**Theoretical Framework**

This research study was based on certain research and theories relating to the causes and effects of burnout and job or role stress. First, the study of burnout was based partially on the person-environment theory, which suggests stress occurs when there is a poor fit between the employee and the employer (Devereux, Hastings, & Noone, 2009). The understanding that stress, and inevitably burnout, can result from the employee/employer relationship was essential to this study. In addition, Spielberger, Vagg, and Wasala (2003) suggested role conflict and role ambiguity result from the stress derived from poor person-environment fit. Burnout research consistently uses role overload, role conflict, and role ambiguity as the causes or environmental factors that lead to burnout (Fogarty, Singh, Rhoads, & Moore, 2000). While some researchers may favor two factors instead of all three (Ghorpade, Lackritz, & Singh, 2011; Mulki, Jaramillo, & Locander, 2007), all three of these factors have been discussed in recent research relating to job stress.
Another similar theory that relates to the study of burnout is the demand-control model. This particular theory suggests the negative impact of employment on employees will be “highest in jobs characterized by the combination of high job demands and low job control” (Bakker, van Veldhoven, & Xanthopoulou, 2010, p. 3). Essentially, this theory implies employees in high stress positions will need significant autonomy and control to help mitigate the negative effects of the environment or position. This theory may be instrumental in identifying practical ways of mitigating burnout in the workplace.

Lastly, and most importantly, this research study was based on the theoretical framework proposed by Maslach and Jackson (1981) regarding the dimensions and measurement of burnout. The symptoms or effects of burnout are widespread, but are generally summarized into the categories of emotional exhaustion, depersonalization, and a loss of a sense of personal accomplishment, which are the three factors measured in the Maslach Burnout Inventory (Coker & Omoluabi, 2009). Emotional exhaustion is “a feeling of depleted energy resulting from excessive psychological and emotional demands” (Mulki et al., 2007). Depersonalization is the condition in which an individual lacks emotion, sensitivity, and sympathy and thus takes a cynical approach to dealing with people (Utami & Nahartyo, 2013). Lastly, individuals who lack a sense of personal accomplishment critically analyze their own achievements, and instead of feelings of pride or excitement, they experience discontent (Ghorpade et al., 2011). These three factors are the basic characteristics of burnout, and must be understood before undertaking a study on burnout. Burnout cannot be identified if an individual is not experiencing emotional exhaustion, depersonalization, and a loss of personal accomplishment.
Definition of Terms

Burnout: Burnout is a psychological condition that causes an individual to feel fatigued and become less productive and motivated as a result of long periods of extreme stress and excessive wear on personal resources (Freudenberger, 1974).

Depersonalization: Depersonalization is the display of negative, insensitive, critical, or callous attitudes towards others in daily interaction (Hollet-Haudebert, Mulki, & Fournier, 2011).

Emotional exhaustion: Emotional exhaustion is an individual’s reaction to emotional stress, which consists of “feeling overextended and depleted of one’s resources” (Rubino, Volpone, & Avery, 2013, p. 75), and may be aggravated during social interaction with others (Kowalski et al., 2010).

Personal nonaccomplishment: Personal nonaccomplishment, or a lack of personal accomplishment, represents an employee’s lack of a sense of self-confidence and competence in relation to his or her ability to complete work tasks (Hollet-Haudebert et al., 2011). This feeling often manifests in feelings of incompetence (Shih, Jiang, Klein, & Wang, 2013).

Role ambiguity: Role ambiguity is when an employee is confused regarding management’s expectations for his or her role within the company. The employee lacks sufficient information to fully understand and complete the role to management’s expectations (Devereux et al., 2009; Ghorpade et al., 2011).

Role conflict: Role conflict can be approached in three separate ways. First, role conflict can refer to a situation in which an employee’s roles or tasks are in direct conflict with his or her personal values (Devereux et al., 2009; Ghorpade et al., 2011). Secondly,
role conflict can result when an employee’s expectations provided by multiple parties within the company are inconsistent (Ghorpade et al., 2011). Lastly, role conflict can result when an employee’s individual job tasks or requirements are inconsistent and conflicting (Ghorpade et al., 2011).

*Role overload:* Role overload refers to an employee’s feelings of being overwhelmed due to an excess of responsibilities, obligations, and tasks in the work environment that are inconsistent with his or her available time (Bolino & Turnley, 2005).

**Assumptions, Limitations, and Delimitations**

**Assumptions**

The assumption for the study were that professionals who participate in the study answer honestly and truthfully. Measuring burnout involves obtaining information regarding an individual’s personal feelings, emotions, and attitudes about experiences as an employee of a specific public accounting firm, so there was some risk individuals might not answer honestly in fear of a negative response from the employer. In order to mitigate this risk, the researcher assured survey participants of their anonymity. The employer was provided summarized anonymous data. The nature of the study required the responses obtained from participants to be utilized without question, and thus, all responses obtained from participants were accepted as provided, and were not vetted or validated in any way.

**Limitations**

One limitation of the study is the lack of generalizability. The study focused on one national public accounting firm in the United States, and thus, the conclusions drawn
from the study were not necessarily applicable to other firms. Regional or local firms, or national firms of different sizes, may generate different results, if the study were performed within those organizations.

In addition, the measure of burnout was limited by the participants’ willingness to openly and honestly answer questions that measure burnout. A participant’s mental attitude, environment, and personal circumstances may have affected his or her willingness to participate and answer truthfully. The participant’s current working conditions, including whether he or she is in the middle of a particularly stressful period, may have also caused the results to be negatively biased; thus, the responses may not represent the professional’s average or normal level of burnout.

**Delimitations**

The study measured burnout of professionals employed by one specific national public accounting firm in the United States. Employees of other firms were not included in the study. The conclusions from the study apply only to professionals within one national public accounting firm.

**Significance of the Study**

Burnout plagues the public accounting industry, and has significant implications for employers, such as increased turnover intentions (Han, Bonn, & Cho, 2016) and decreased productivity (Fernet, Gagné, & Austin, 2010). Better understanding the condition, and its implications on the public accounting industry, is imperative to developing practical solutions. This section will address the study’s significance to the public accounting industry, and its contribution to the current scholarly literature. The study’s relationship to God’s purpose for man’s work on earth will also be discussed.
Reduction of Gaps

Researchers have long agreed turnover is a major issue in the public accounting industry (Gaertner, Hemmeter, & Pitman, 1987; Nouri & Parker, 2013). In recent years, as the psychological phenomenon termed burnout has been explored, researchers have seen a trend of high levels of burnout in public accounting firms (Fogarty et al., 2000; Guthrie & Jones, 2012). The focus of the research has shifted in the last few years towards better understanding the characteristics of individuals who are vulnerable to burnout in an attempt to explore possible solutions and prevention strategies. Jones et al. (2010) noted they continue to address the challenge set forth by Maslach in 1982, stating, “the promise inherent in understanding burnout is the possibility of doing something about it” (p. 35). While this charge was given in 1982, the task is still far from complete, as numerous researchers have called for additional burnout research (Chong & Monroe, 2015; Dewa et al., 2014).

Researchers have begun to explore who has a tendency to burnout. Serin and Balkan (2014) completed a study with one public accounting firm in Turkey, in an attempt to determine if there was any relationship between gender, age, work experience, education level, and title and level of burnout. While the scope of the study was very limited, the researchers found younger employees tended to be more burned out than older employees, but those individuals with more demanding job titles experienced higher levels of burnout, presumably due to the complexity of the positions. No other significant relationships between demographic factors and burnout were identified, but the researchers suggested further research should be completed in other sectors and in different countries to help provide for better generalizability of the results.
Other recent studies include those completed by Utami and Nahartyo (2013), which focused on personality type and burnout, and Guthrie and Jones (2012) which focused on gender differences in burnout. Both of these studies had valid conclusions, but the researchers called for further exploration into additional areas. For example, none of the studies completed thus far have specifically examined gender and age in relationship to burnout. This research study filled a gap in the literature by providing needed information regarding those with a higher propensity to burnout, and by addressing a population previously unaddressed in scholarly research.

Implications for Biblical Integration

Van Duzer (2010) said today’s global environment, in which business professionals are constantly connected via smartphones and the Internet, is exhausting its workers. They are expected to always be on call, and to work as long and hard as they can. He even noted “since the end of World War II, the average American has added almost an additional month of work (i.e., 150 to 160 hours) to his or her work year” (p. 71). God’s intention is for work to be “situated in a rhythm of activity and rest, work and leisure” (p. 71). Solomon alluded to this in his writing in Ecclesiastes 3, which said, “for everything there is a season, and a time for every matter under heaven” (3:1, ESV). The concept of role overload, one of the triggers of burnout, is not consistent with God’s intentions for man’s work environment.

In addition, Van Duzer (2010) recommended numerous ways businesses should further God’s purposes through the treatment of employees, such ensuring they are compensated with “livable wages” (p. 59), listening to them and minimizing workplace drama and deceit (p. 59), protecting their privacy (p. 61), and avoiding “dehumanizing
and abusive policies” (p. 60). Role conflict, role ambiguity and role overload, the antecedents to burnout, all represent situations in which employees are not valued, are not properly managed, and are not given the best care possible by their employers.

God created humans with an innate need to complete fulfilling work. Ecclesiastes 3:10-11a says, ”I have seen the business that God has given to the children of man to be busy with. He has made everything beautiful in its time” (ESV). In fact, even secular researchers, who do not necessarily admit this innate need comes from God, agree this desire is present within humans. Stanley (2004) wrote “there is a human need to derive meaning from work” (p. 11). Indeed, he suggested an employee’s innate desire to “make a difference” leads to feelings of burnout when hopes and dreams cannot be fulfilled.

The Bible seems to specifically address the feeling of burnout when it reminds in Hebrews 12:1b-2,

> let us also lay aside every weight, and sin which clings so closely, and let us run with endurance the race that is set before us, looking to Jesus, the founder and perfecter of our faith, who for the joy that was set before him endured the cross, despising the shame, and is seated at the right hand of the throne of God (ESV).

God wants His children to be edified through the work environment, not torn down. Burnout occurs when the employee has been discouraged until he or she has lost the interest in succeeding, or no longer feels accomplished in the work setting. Leiter et al. (2013) wrote, “losing the capacity to be energetically involved in work, something that normally strengthens self-efficacy, imposes huge costs on personal fulfillment and organizational productivity” (p. 959). Leiter et al. said not only does burnout have individual ramifications, but it also affects the employer as a whole. Companies should
seek to identify ways to keep employees motivated, because it is God’s design for humans in business, and also because motivated employees are productive employees.

**Relationship to Field of Study**

This research study addressed an ongoing problem faced by professionals in the accounting industry, and provided data that may assist with effective practice management. Because of the technical nature of the accounting field, much research has been dedicated to attracting and retaining quality talent within public accounting firms (Hall & Smith, 2009). Even during the recent economic downturn, Yamamura, Birk, and Cossitt (2010) reported “the ‘talent crunch’ continues,” stating that among technically-trained professionals, accounting positions are among the most difficult to fill, and the U.S. Bureau of Labor Statistics suggests that the field will continue to expand at a rate faster than average growth. This research study contributed to the goal of identifying practical solutions for the growing issue of burnout, which is a major cause for turnover in public accounting firms (Fogarty et al., 2000).

**A Review of the Professional and Academic Literature**

Job burnout results from extended periods of stress and excessive strain on personal resources, and typically leads to “(1) emotional exhaustion, (2) depersonalization, and (3) feeling of reduced personal accomplishment” (Shepherd, Tashchian, & Ridnour, 2011, p. 397). The topic of job burnout has grown popular throughout many industries, but has gained a special amount of interest in public accounting due to the specific factors in public accounting firm environments that contribute to the condition. Job burnout results in physical and mental health issues in those who experience it, as well as decreased productivity and increased turnover
intentions. The condition affects not only the employee, but also the employer. Thus, because of the wide reaching impact of job burnout, research has turned towards identifying plausible solutions. However, an important piece of working towards solutions includes identifying those who are most likely to experience the condition, in an effort to provide them with specialized, unique resources for both the prevention and treatment of job burnout.

The first section of this literature review will provide an overview of the term burnout, and its related history. While the term is often used flippantly, a group of psychologists officially began researching the condition in the 1970s. Since then, the condition’s signs and symptoms have been well documented, as well as the overarching consequences for the employee and the employer. In addition, job burnout will be related to a number of stress theories discussed in academic and scholarly literature. Most importantly, the antecedents commonly attributed to burnout, which originated as part of the role stress theory, are discussed.

The next section of this literature review relates job burnout to public accounting. What makes the public accounting environment so susceptible to the development of job burnout in employees? The environment, along with its various stressors, will be discussed. Examining these environmental factors is crucial to obtaining an understanding of the development of burnout among public accounting professionals.

In addition, solutions for job burnout will be explored. Experts have proposed many possible solutions, both for the prevention and treatment of burnout. While it may be difficult for public accounting firms to fully eliminate or even significantly decrease the demands of the workplace, these solutions attempt to help professionals cope with
job-related stress. Such solutions include increased employee autonomy, detachment from the workplace, exercise, mentoring, and education.

As researchers begin to explore the possible solutions for burnout, they have collected data on certain demographics, and how those demographics seem to affect a professional’s development of burnout. This literature review summarizes the results of the studies completed relating to education level, age, gender, personality type, and family dynamics. The variables used in similar studies are outlined in support of the researcher’s research variables. Understanding who is most likely to burnout may help companies and researchers better hone techniques for mitigating the effects of burnout in the workplace.

**History and Development of Burnout**

The term *burnout* gained popularity in the 1970s in a community of psychologists, and has since been recognized within the psychology and business communities. While technically it describes a mental health condition, burnout impacts a person’s professional life in a real and identifiable way. Before considering burnout’s impact on the accounting profession, it is first important to understand the term’s development and history.

**Early discussions of burnout.** Most researchers trace the history of the term back to Herbert Freudenberger (1974). As a result of personal experience volunteering in free clinics, Freudenberger and other psychologists joined together to begin to discuss the phenomenon, and solidify the term’s meaning. While burnout could easily be found in the dictionary, it had not been thoroughly researched as a term specifically applied to one’s vocation or profession. Freudenberger (1974) identified the signs or symptoms of
the condition, who might be prone to the condition, and some initial ideas of potential solutions or mitigating factors.

**Burnout defined.** Burnout is often used flippantly in informal settings, but few are aware of the term’s greater implications for professionals. A simple definition of the term, as provided by Merriam-Webster (n.d.) is “exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration.” Freudenberger (1974) and others utilized a similar definition, with some researchers characterizing it as “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people-work’ of some kind” (Maslach & Jackson, 1981, p. 99). Beheshtifar and Omidvar (2013) echo that sentiment by stating how “burnout is defined as a psychological response to job stress” (para. 2).

It is important to note the difference between burnout and chronic fatigue syndrome (CFS), as both conditions seem to produce similar symptoms. Van Dam (2016) explained the difference by pointing out burnout is the result of the work environment, while CFS is the result of physical ailments or conditions. Thus, the focus for burnout is on the feelings or experiences of an individual that directly result from their profession or work environment, though job-related burnout can impact a burned out individual in other areas of life (Bianchi & Laurent, 2015). Even Freudenberger’s (1974) original discussion of the term resulted from his own feelings of burnout from his work as a psychologist. Like most psychological conditions and syndromes, most researchers seem to define and characterize burnout by the symptoms typically exhibited by someone experiencing it. Thus, most literature focuses on those signs and symptoms.
**Signs and symptoms.** Due to the complexity of humans and the varying nature of work environments, no two individuals will experience the exact same manifestations of burnout. However, researchers have generalized the signs and symptoms into three primary categories. Most commonly, those with burnout experience emotional exhaustion, depersonalization, and reduced personal accomplishment (Serin & Balkan, 2014). Maslach and Jackson (1981) suggested each dimension of burnout is separate, and can be experienced independently of the other factors.

**Emotional exhaustion.** Emotional exhaustion is the first characteristic of burnout, and is perhaps the most prevalent and commonly discussed (Rubino et al., 2013). Kowalski et al. (2010) defined emotional exhaustion as “a feeling of excessive emotional stress and being drained by contact with other people” (p. 1655). Maslach, Schaufeli, and Leiter (2001) noted people who typically characterize themselves as being burned out are doing so based on the feelings of emotional exhaustion. While the work environment may be the context within which the emotional exhaustion is experienced or developed, an individual’s overall mental health is impacted when experiencing emotional exhaustion (Y. Huang, Du, Chen, Yang, & I. Huang, 2011).

**Depersonalization.** Depersonalization is sometimes referred to in the literature as desensitization or cynicism (Serin & Balkan, 2014). Shih et al. (2013) considered depersonalization to be synonymous with “the dehumanizing of relationship” (p. 582). Further, Hollet-Haudebert et al. (2011) suggested this factor of burnout “can manifest itself as uncaring responses and a callous attitude toward coworkers and other individuals” (p. 411), and noted this factor is particularly problematic for individuals who interact frequently with others while on the job and are required to display sensitivity
during one-on-one interaction. Depersonalization can be summarized as a cynical attitude toward others.

**Reduced sense of personal accomplishment.** The final dimension of burnout is typically referred to as reduced personal accomplishment. While an employee may be sufficiently competent to complete employment-related tasks and reach pertinent goals at work, he or she may experience feelings of incompetence or nonaccomplishment (Hollet-Haudebert et al., 2011). Shih et al. (2013) supported this conclusion, stating this factor could be defined as “a decline in one’s feeling of competence and successful achievement” (p. 583).

**Order of appearance.** Researchers seem to agree emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment are the primary signs or symptoms of burnout. However, these factors do not manifest all at the same time in a person experiencing burnout. As it related to their study of burnout in information technology workers, Shih et al. (2013) cited research that suggested emotional exhaustion is typically the first factor to be experienced by a burned-out worker, and depersonalization and a loss of sense of personal accomplishment follow. In addition, most burned out individuals are able to easily identify emotional exhaustion, since it is based on feelings, but depersonalization and loss of a sense of personal accomplishment may be harder to identify. In contrast to Shih et al.’s position, it could be argued emotional exhaustion is not necessarily the first dimension of burnout to be experienced, but is instead the easiest to identify by individuals experiencing burnout.

**Relationship to stress theories.** Burnout has a close relationship with several theories relating to stress. While burnout and stress are not synonymous terms, burnout is
the result of prolonged periods of stress in the work environment. Thus, it is important to obtain an understanding of the pertinent theories that examine the relationship between stress, burnout, and one’s role as an employee.

**Person-environment theory.** What about the work environment specifically causes stress on the employee such that he or she develops burnout, or experiences other negative consequences of stress? The person-environment theory suggests stress occurs when there is a poor fit between employee and the employer (Devereux et al., 2009). When employee and employer agree on certain relevant issues and expectations, there is a good fit between the two, and thus, little conflict occurs. However, when there is inconsistency between employee and employer on crucial and relevant areas related to employee’s performance, a poor fit results, and stress is the outcome (Lambert, Altheimer, Hogan, & Barton-Bellessa, 2011). The poor fit can result from a variety of different factors between employee and employer. However, the most important conclusion is a mismatch between employee and employer goals and expectations results in higher levels of stress for the employee.

**Role stress model.** The role stress model provides a more in-depth explanation for possible reasons for employee stress in the workplace. While these three stressors primarily relate to job-related stress under the role stress model, researchers have suggested role overload, role conflict, and role ambiguity are the stressors or antecedents to burnout (Fogarty et al., 2000; Ghorpade et al., 2011). Further, empirical evidence directly relates these three stressors to higher instances of the three dimensions of burnout (Fogarty et al., 2000).
*Role conflict.* When an employee experiences a conflict relating to his or her role, or position, within the company, he or she is experiencing role conflict. This can be the result of several situations. First, the employee can experience a conflict of expectations. When an employee has certain expectations given to him or her by the employer, but other expectations imposed upon him or her by family, friends, or other acquaintances, the employee can experience conflict regarding his or her position at work. Secondly, role conflict can result when the employee is given seemingly conflicting tasks in the workplace. This can include tasks which are incompatible due to time or the nature of the work. Lastly, an employee can experience role conflict due to an inconsistency between his or her tasks or role at work, and his or her personal values or morals (Ghorpade et al., 2011).

*Role ambiguity.* Role ambiguity results when an employee is given insufficient information to fully understand his or her role. The ambiguity often results from unclear or insufficient communication on the part of the employer, either from the employee’s direct supervisors, management, or the human resources department. For example, an employer might fail to fully communicate the extent of an employee’s role, or might fail to communicate how the employee is expected to meet the employer expectations (Ingram, 2013). Regardless of the cause of role ambiguity, it likely causes increased stress on the employee experiencing it.

*Role overload.* When an employee feels overwhelmed or overburdened by the number of tasks or level of responsibility assigned to him or her in the workplace, this is called role overload. Essentially, whether due to time constraints or ability, he or she believes he or she is incapable of completing the tasks assigned. This typically causes an
employee to begin to exert additional time and energy to complete the tasks, including taking work home and working outside of designated hours (Bolino & Turnley, 2005).

**Job demand control model.** The job demand control model characterizes the relationship between a job’s demands and the amount of control the employee has over his or her work environment as a predictor of how the work environment affects an employee psychologically. This model suggests positions with high demands, characterized as professions which require high levels of productivity, excessive overtime, and role conflict, coupled with low employee autonomy or control produce high levels of psychological strain or stress on the employee. Employee control is described as an individual’s ability to make decisions regarding when and how he or she uses skills to complete professional tasks (Huang et al., 2011).

Since the job demand control model relates to an employee’s likelihood of experiencing psychological stress in the workplace, it is easy to see the potential implications for burnout relating to this model. Milam (2012) made this connection, stating “a person with high job demand but low control over his or her job would be more likely to experience burnout” (p. 57). This model helps provide better insight into the possible causes of burnout, and also implies possible solutions to the problem of burnout through increased employee control or autonomy.

**Consequences of burnout.** Experts agree the consequences of burnout are far-reaching. The condition affects the physical, emotional, and mental health of the person experiencing it, and thus, the employee’s family, friends, and co-workers can also be impacted. While researchers have been unable to fully understand the scope of the effects of burnout, they have conclusively identified certain consequences of burnout
relating to an employee’s physical and mental health, as well as effects on the individual’s role as an employee.

**Physical and psychological health implications.** Stress in its simplest form has an effect on the psychological and physical health of the person experiencing it. However, burnout results from long periods of extreme stress. Thus, the psychological and physical implications of burnout are often extreme. This section summarizes some of the primary health implications of burnout, including a variety of forms of physical illness and substance abuse.

**Physical illness.** The first broad category of consequences of burnout, referred to as physical illness, can manifest in many different ways. Physical issues are typically associated with stress are associated with burnout as well, and researchers report burnout typically leads to an overall decrease in physical health (Erickson & Grove, 2007). For example, some with burnout suffer from headaches or gastrointestinal problems, and burnout can even lead to heart disease (Law, 2003). Individuals in high stress environments may develop tension headaches or stomach ulcers as a result of the stress, or they may suffer from acid reflux. Heart disease may also occur, and can lead to life-threatening issues like heart attacks. Physically, those with burnout also often report feelings of fatigue (Beheshtifar & Omidvar, 2013; Serin & Balkan, 2014), which relates to the burnout factor of emotional exhaustion (Lambert et al., 2013). Even though burnout is associated with emotional exhaustion, emotional exhaustion can also translate to physical exhaustion as well.

Further, burnout has been tied to numerous psychological conditions. If not properly addressed, burnout can lead to increased instances of depression and anxiety
(Erickson & Grove, 2007). Freudenberger (1974), in his early writings about burnout, stated a person with burnout “looks, acts and seems depressed” (p. 161), though at that time, he did not necessarily hypothesize those with burnout actually suffered from clinical depression. Further, Bianchi and Laurent (2015) suggested there is a fine line between burnout and depression, and completed a study which stated “the overlap of burnout with depression extends to the cognitive processing of emotional information” (p. 32). More recent studies have suggested burnout may be a form of depression (Wurm et al., 2016). In addition, anxiety is closely related to job-related stress and tension, and has been directly linked to burnout (Guthrie & Jones, 2012).

Substance abuse. Freudenberger (1974) first mentioned increased substance abuse might be a problem for those suffering from burnout. He suggested a person with burnout “may resort to an excessive use of tranquilizers and barbiturates. Or get into pot and hash quite heavily. He does this with the ‘self con’ that he needs the rest and is doing it to relax himself” (pp. 160-161). Freudenberger’s words are written from the perspective and culture present in the 1970s, but substance abuse in burned out individuals continues to be a problem in the twenty-first century. Why might a person with burnout add to his or her emotional and physical stress by taking medication or other controlled substances? Freudenberger (1974) landed on the cause when he suggested burned out individuals make the choice as a means to relax. This is often because they cannot identify another way to control or mitigate their work-related stress, and it has infiltrated other areas of their lives. Because other methods of controlling the stress have not been successful, and the stress is causing severe emotional and physical
consequences, they decide to turn to substance abuse as a way to cope. Researchers seem to agree this coping mechanism is common (Chen, Wu, & Wei, 2012; Shih et al., 2013).

**Increased turnover intentions.** Turnover intentions can be defined as an individual’s willingness and interest to terminate his or her own employment with an employer (DeTienne, Agle, Phillips, & Ingerson, 2012). When an employee leaves a company, and a replacement must be hired by the employer, the costs are astronomical, but vary by industry, the expertise required for the position, and the supply of available replacements. These costs are exceptionally high in fields such as the medical profession, law, or accounting, where employees require a unique set of skills and certifications. While very little research provides exact figures for the costs of turnover in public accounting employees, researchers agree the costs of turnover for the public accounting industry are increasing (Folami & Bline, 2012). However, a sample of costs for similar technical fields can be found in scholarly literature. For example, one study reports turnover costs for nurses can range from $25,000 to $88,000, depending largely on the methodology behind calculating the costs (Roche, Duffield, Homer, Buchan, & Dimitrelis, 2015). Further, a Canadian article reported the cost to replace an experienced legal associate is approximately $315,000 (Durrani & Singh, 2011).

Why is turnover so expensive for employers? Many of the costs relating to replacing a professional are often overlooked. First, both the cost of recruitment and the cost of training the new professional must be considered (Herda, 2012). In addition, the loss in productivity due to an employee leaving, which includes the weeks leading up to his or her departure, and the effects on morale for the surviving or remaining employees are difficult to monetize (Esty, 1989). The cost of replacing valuable employees may be
even higher when the position requires a unique set of skills or expertise, so employers must be aware of issues like burnout which increase the likelihood employees leave current employers.

Individuals experiencing burnout are very likely to experience increased intentions to leave their jobs (Han, Bonn, & Cho, 2016). Employees may consider leaving a current employer when the work environment is perceived as too stressful. They may consider looking for another position they perceive will provide characteristics they believe will mitigate or reduce the likelihood of burnout. In addition, they may simply look for a position that allows them to be more content, since burnout is associated with low job satisfaction (Shih et al., 2013).

**Decreased organizational commitment.** Organization commitment relates to employees’ sense of loyalty to their employers, which can be seen through the employees’ willingness to put forth effort towards helping their employing organizations reach goals and objectives, and the employees’ interest in continuing employment (Hollet-Haudebert et al., 2011). Burnout significantly affects employees’ commitment to their employers, presumably because employees at least partially blame the employers for the burnout being experienced. Researchers have consistently identified a decrease in organizational commitment in individuals experiencing burnout (Chen et al., 2012; Hollet-Haudebert et al., 2011).

**Decreased productivity.** Productivity is a relevant and sometimes hot topic in professions where there is a low supply of those who possess the technical skills necessary to be successful. For example, productivity in public accounting firms is an often researched topic, as academicians seek to understand what affects and influences
productivity in public accounting firms, since productivity is closely tied to profitability (Farag & Elias, 2012). Productivity refers to how efficiently and effectively employees complete work-related tasks. Fernet, Gagné, and Austin (2010) linked a decrease in productivity to the burnout dimension of personal accomplishment. That is, as employees experience burnout and thus begin to feel less and less accomplished at their jobs, they become less efficient and effective at completing job-related tasks.

A review of the literature on burnout and productivity reveals most of the research in this area has been focused on medical professionals. For example, Dewa, Loong, Bonato, Thanh, and Jacobs (2014) completed a literature review which specifically focused on burnout and productivity in physicians, and concluded the research on burnout and productivity is very new and underdeveloped, as there are still many questions left to be answered. However, there does seem to be some agreement that burnout results in reduced worker productivity.

This section of the literature review has provided a framework for the discussion of burnout. While sometimes used as a slang or informal term, burnout has gained significant recognition in the psychological and business communities as a cause for increasing employer costs. Though it has been researched for decades, much research yet needs to be completed to better understand the condition and identify methods of mitigating burnout in organizations. Next, it is important to examine why the organizational culture of many public accounting firms is so ripe for the development of job burnout in employees.
Burnout can be found in most businesses. Employees can experience burnout in a variety of settings and environments; however, the nature of some professions is simply more likely to breed burnout than others. For example, much burnout research focuses on the medical profession. Dewa et al. (2014) pointed out physician health has become an interest of research, because physicians’ work environments have been identified as particularly likely to cause work-related stress, and thus, burnout. Similarly, public accounting firms employ individuals with technical accounting skills to provide taxation, assurance, and consulting services to a wide variety of clients, and these employers often have highly stressful environments (Utami & Supriyadi, 2013). This is due to several different factors unique to public accounting.

Environment. Chen et al. (2012) wrote, “job burnout is related to intense and excessive emotional demand, job stressors and strains, interpersonal stressors, and dysfunction of the work conditions” (p. 802). Jones et al. (2010) identified four specific reasons public accounting is a particularly difficult environment in which to work. These four reasons include the overtime required to meet deadlines, the complexity of accounting standards, the pressure to become certified as a Certified Public Accountant, and the inability to leave work-related stress at the workplace.

Overtime and deadlines. Jones et al. (2010) noted employees of public accounting firms often have to work overtime for long periods of time due to regulatory deadlines and other factors, typically referred to as busy season. Busy season is common in the public accounting industry primarily due to the seasonal nature of the work. Clients with similar year-ends require financial statements, audit reports, and tax returns
to be completed in order to meet the requirements of regulatory agencies, lenders, and investors. Thus, public accounting firms must get a large portion work completed in a short period of time. Hsieh and Wang (2012) wrote the period of January to May each year is almost always a busy time for auditors working in public accounting, and these auditors are commonly under a great deal of stress because of the overload of work tasks assigned to them during this period of time. Utami and Supriyadi (2013) similarly mention the requirement for public accountants to work more than ten hours per day for many months during the year. While the timing and frequency of overtime varies by firm, service line, and seniority, many individuals entering the field of public accounting often have a minimum expectation of periods of overtime throughout the year. However, new employees are often unprepared for the toll these periods of overtime have on their physical and emotional health.

**Complexity of accounting standards.** Jones et al. (2010) stated economic conditions have created an increasingly complex environment which requires considerable attention to accounting standards and legislation. As economies rise and fall, and businesses look towards expanding internationally, accountants must possess the required skills and expertise to assist their clients in these transitions. This often requires accountants to be aware of the legal, tax, accounting, and general business implications of strategic decisions, which can be significant and complex. Accountants play an important role in this process, and make themselves aware of relevant laws, rules, and regulations (Borisova & Bekhteneva, 2015). The pressure to stay up-to-date on accounting standards, and other laws and regulations, creates a particularly stressful environment that can lead to burnout.
**Pressure for certification.** Professionals must sit for and pass the CPA exam to remain employed by public accounting firms, but many recent graduates simply cannot balance the time commitment required to work full-time and study for the exam. As a result, the profession is faced with an extreme shortage of qualified professionals. Charron and Lowe (2009) wrote the demand for accounting professionals and enrollment in collegiate accounting programs is far surpassing the number of professionals who are becoming licensed as a CPA. Among the reasons Charron and Lowe provided for why students are not completing the CPA exam are lack of motivation by employers, and organization cultures which do not support the time required to study for and take the exam. Further, Vien (2015) reported, “once students graduate, the single greatest influence on whether they sit for the CPA exam is support from their employer to pursue their license, including time off to study and financial compensation” (para. 9). While becoming a CPA is extremely important, since it has been well-supported the profession is experiencing a shortage of qualified employees, the culture of public accounting firms is creating an atmosphere ripe for burnout. The toll working full-time and studying for and taking the CPA exam takes on a young professional’s health and well-being is significant, and is a major factor leading to feelings of burnout.

**Lack of boundaries.** Accounting professionals are often unable to leave their job-related stress at the workplace. Individuals working in public accounting typically have to work long hours at a rapid pace, and may encounter intrusions to their out-of-work time, like phone calls and emails. Beheshtifar and Omidvar (2013) supported the wide range of responsibilities of accounting professionals, and how, in turn, these responsibilities often lead to increased time working with others, and managing job tasks.
Research stresses the importance of rest as one of the most important ways for individuals to overcome or mitigate job-related stress (Hsieh & Wang, 2012). Unfortunately, today’s culture, and the idea of being constantly connected to the workplace through smartphone technology, causes employees to be unable to disconnect from the workplace. Combined, these factors lead to higher instances of job burnout, and employees find it difficult to fully relax in their personal time, as the expectation to be perpetually on duty is perceived from employers.

In summary, the environment in typical public accounting firms is unique, and can also be described as high pace, competitive, and stressful. The nature of the environment implies employees face certain factors which create an excessive strain on their personal resources. The pressure to stay up-to-date on accounting standards and to pass the CPA exam require time and energy that is often scarce in the life of an accounting professional. Support and careful management of these expectations by employers is very important, so burnout and job stress can be avoided.

**Proposed Solutions for Burnout in Literature**

With an understanding of the development of burnout comes an attempt by researchers at identifying ways to mitigate burnout. Numerous solutions to burnout have been identified, though the research fails to provide examples of successful implementation of these solutions in industries which have high occurrences of burnout. However, it is important to continually strive towards identifying and implementing strategies to decrease levels of burnout due to the wide-reaching effects of the syndrome. Beheshtifar and Omidvar (2013) recommended companies implement a detailed program
to identify and address burnout among employees. This section summarizes some potential strategies to help mitigate burnout.

**Eliminating the elements of the role stress model.** The role stress model provided three primary stressors or antecedents to burnout in the workplace. If role overload, role ambiguity, and role conflict lead to increased levels of burnout, then logic seems to indicate reducing these stressors, or eliminating them entirely, would help decrease the development of burnout. This section focuses on strategies for mitigating the specific elements of the role stress model.

**Role overload.** Since role overload relates to employees’ feelings of having too much to accomplish during work time, Matthews, Winkel, and Wayne (2014) suggested the solution for role overload is more realistic expectations on employees during work time. While the economy and recent employment trends have turned towards pushing individual employees to take on work that may have previously been spread over numerous employees, it is important employers remain mindful of the effect this pressure can have on employees over long periods of time. Organizational culture and employers’ positions on work-life balance play a large part in whether employees experience role overload (Matthews et al., 2014).

**Role ambiguity.** When employees feel they do not have enough information to properly complete work-related tasks, they are experiencing role ambiguity. Some employees need ambiguity in their work to allow for creativity and autonomy. However, in many cases, ambiguity creates stress for employees, as they want to achieve success with their employers, but lack sufficient information to understand what is perceived as successful. Poor communication within the organization, insufficient training, and the
age of the organization can result in ambiguity (Ghorpade et al., 2011). To reduce the likelihood of role ambiguity developing, organizations should develop policies and procedures, and train supervisors, to ensure tasks and task expectations are clearly communicated to staff.

**Role conflict.** Role conflict results when employees experience a conflict between work tasks and personal values, or when tasks or roles in the workplace seemingly conflict (Devereux et al., 2009). Role conflict relates to employees’ perception of work tasks, and can be carefully managed through communication with supervisors. For example, it is possible employees may perceive a conflict, when a conflict does not actually exist. The perceived conflict may simply be the result of poor communication relating to the task, and may be solved through communication with management. Management and human resources departments can communicate clear expectations through detailed job descriptions.

**Increasing employee control, influence, and autonomy.** The job demand control model suggests employees experience high levels of stress in their professions when they experience extreme psychological demands and low job control (Huang et al., 2011). Job control relates to employees’ ability to make decisions which affect their employing organizations. The model suggests higher levels of psychological stress and low levels of control result in job strain and poor psychological health in employees.

Researchers suggest the conclusions of the job demand control model can be applied directly to burnout in employees of public accounting firms (Herda, 2012; Herda & Levelle, 2012). In many cases, the level of psychological stress placed on employees of public accounting firms cannot be significantly mitigated (Herda, 2012). Thus, if
firms cannot control the demand element of the job demand control model, management must attempt to adjust the control element to minimize strain on employees. Adjusting the control element of the model means ensuring employees perceive they have an influence on the company, and on the use of their own skills to achieve the company’s objectives (Herda, 2012). Employees gauge the fairness of an employer’s treatment of employees by the amount of input employees have on the decision-making process, which, in turn, affects the likelihood of employer turnover and the development of burnout (Herda & Lavelle, 2012).

A recent study of burnout among social workers confirmed the relevance of the job demand control model in the mitigation of burnout. Social workers, who felt they had the ability to influence their workplace, including the development of workplace policies and procedures, and being able to contribute to organizational decisions, were less likely to burnout in their positions (Ben-Porat & Itzhaky, 2015). In addition, Javadi (2014) supported this conclusion in his study of burnout among Iranian teachers. He proposed teachers’ burnout levels were directly related to their perception of autonomy in the classroom. Teachers who felt in control over their classroom content were less likely to develop burnout. In conclusion, he suggested school systems evaluate programs to ensure teachers feel involved and supported, which should increase teachers’ feelings of personal accomplishment and prevent burnout.

Research on professional autonomy in public accounting can be traced back numerous decades. Lengermann (1971) addressed the issue of professional autonomy in public accounting and emphasized its importance:
Professional autonomy is one of the most basic and valued characteristics of a professional occupation. It means the freedom or prerogative of professionals to carry out their professional work activity according to their own collective and, ultimately, individual judgment in the application of their profession’s body of knowledge and expertise. Since only the professionals themselves and their professional peer group possess the relevant knowledge and expertise, neither clients nor any public body is seen to have the right or ability to direct or pass judgment over their work. (p. 665)

Lengermann (1971) studied a growing concern among CPAs regarding their loss of professional autonomy, especially in large accounting firms. While this research was completed in the 1970s, it is still relevant in the public accounting industry. Kalbers and Cenker (2008) echoed Lengermann’s comments about professional autonomy when they suggested autonomy is pivotal in the public accounting profession, as autonomy is one of the trademarks of being a professional. Accountants must be able to utilize their professional judgment in the research and analysis of relevant accounting standards. Further, as a result of their research, Kalbers and Cenker concluded there is a positive relationship between autonomy, experience, and job performance, while there is a negative correlation between role ambiguity and autonomy. Their study indicated increasing employee autonomy and decreasing role ambiguity are pivotal to ongoing job satisfaction, good job performance, and low levels of burnout in the public accounting profession. Accountants must feel free to exercise their professional judgment, and have the ability to influence the activities of their accounting firms, to help mitigate the psychological stress of their positions.
**Healthy lifestyle.** Current research suggests a healthy lifestyle can help to prevent and decrease burnout in professionals. While employers work to improve the working conditions within their companies, employees must find ways to help deal with the impact of burnout on their physical and mental health. Jones et al. (2010) suggested a healthy lifestyle, which includes “maintaining a program of regular physical exercise, a balanced diet, good sleep habits, and refraining from excessive alcohol and tobacco consumption” (p. 35), helps to mitigate the effects of role stress in public accounting professionals. While their study focused solely on role stress, this is one of the three factors which contribute to job stress and burnout, along with role ambiguity and role overload. Further, this section summarizes strategies that contribute to a healthy lifestyle, and help prevent and reduce job-related burnout.

**Detachment from work.** First and foremost, research indicates employees must be able to fully benefit from and utilize non-work time on non-work endeavors. Professionals and employers have been primarily concerned with how personal issues affect a professional’s work performance (Toker & Biron, 2012). However, professional issues affect a professional’s personal life similarly. The boundary between work and personal life can become blurry; thus, it is important to ensure employees are mindful of appropriately separately the two aspects of their lives, and that the organizational cultures of employing organizations supports separation. Sonnentag and Fritz (2015) concluded the act of psychological detachment from the workplace was crucial to employees being able to cope with the stress of the workplace environment. *Psychological detachment* is defined as, “both refraining from job-related activities (e.g., not checking job-related e-mails) *and* not thinking about job-related issues (e.g., temporarily forgetting about a
difficult task or a social conflict with a coworker) during off-job time” (Sonnentag, 2012, p. 114). While detachment might be particularly difficult in highly-stressful positions, it is imperative to employees’ overall health that they are able to detach from work. Sonnentag and Fritz (2015) strongly encourage organizations to mindfully and deliberately institute policies and procedures to facility detachment. Employers need to establish and enforce policies which encourage employees to disconnect both mentally and technologically when away from the workplace (Sonnentag, 2012). Clear policies must be communicated to employees and consistently upheld in order to help employees better utilize time away from the office, and help decrease the occurrence of role overload, and thus, burnout.

**Exercise.** Numerous studies have reported exercise can help mitigate the effects of stress and burnout. One study showed exercise mitigated the effects job-related burnout and depression (Toker & Biron, 2012). In addition, twelve male individuals who were identified as having high levels of burnout relating to emotional exhaustion and depersonalization, were put on a twelve-week exercise regimen, and were tested for their levels of burnout before and after the study, as well as throughout the twelve-week period (Gerber et al., 2013). The researchers utilized the Maslach Burnout Inventory to measure the participants’ levels of emotional exhaustion and depersonalization. They concluded the study’s results provided support that physical activity prevents the development of depression, and reduces an individual’s perception of stress in those suffering from burnout. In fact, the researchers even noted an improvement in the participants’ moods as a result of one single session of exercise.
Further, a study completed by Lindwall, Gerber, Jonsdittir, Börjesson, and Ahlborg (2014) examined the relationship between burnout, anxiety, depression, and physical activity in healthcare professionals in Sweden. The research data supported the conclusion that physical activity serves to prevent and treat stress and burnout in professionals. The authors noted those employees who were not physically active experienced higher levels of depression and burnout.

In addition, Bretland and Thorsteinsson (2015) further supported this theory with their research study that utilized a group of Australian adults. The participants, previously inactive, were put on a four-week exercise regimen. Comparing their results on three different scales before the exercise regimen with the results from after the four-week period indicated that exercise helps decrease stress and burnout. The researchers observed how “cardiovascular exercise tended to be better than resistance exercise when it came to reducing psychological distress” (p. 11).

Workplace relationships. Employees’ perception of their roles in the workplace plays a significant part in the development of burnout, and workplace relationships provide employees with the support they need to adapt to work-related pressure. In 2011, Hollet-Haudebert et al. wrote about the burnout dimensions of depersonalization and personal nonaccomplishment in salespeople. In their discussion of the need for future research relating to the topic, they wrote, “while studies have looked at the role of social support in helping employees cope with stress, the role of supervisors in creating a supportive work environment should be studied to get a better understanding of the phenomenon of burnout” (p. 424). Herda and Lavelle (2012) further supported these statements, noting a public accounting professional’s perception of the fairness of the
practices of the employer are directly related to how managers or supervisors behave and make decisions. Relationships between supervisors and employees are imperative to ensuring employees feel valued and do not develop burnout. Chong and Monroe (2015) also noted the support of supervisors, and the environment created by upper management in an accounting firm is imperative to improving employees’ perceptions of the job.

**Educating employees about burnout.** As research seems to consistently imply employees’ perceptions of the workplace seems to drive the development of job burnout, it becomes necessary to examine ways to help employees develop realistic expectations of the work environment. In addition, it is important both employers and employees recognize the risks of burnout, and take steps to put procedures in place to help prevent burnout from developing. This process must begin with open, honest communication, and the education of both employees and employers regarding burnout.

**Educating management.** Those who have studied burnout indicate further education of management is necessary to help deal with the effects burnout has in the workplace. Since burnout is an oft proposed result of role conflict, role overload, and role ambiguity, management must be mindful of their communication with employees in order to ensure that these conditions do not develop. For example, if role ambiguity represents uncertainty in one’s position or tasks, management must take steps to clearly communicate employee responsibilities.

In addition, management of organizations, especially organizations in high stress industries, should be trained on job burnout. This training should include its causes, symptoms, and treatments. Support from supervisors is key to helping employees deal with conflicts at work that may lead to feelings of burnout (Naveed & Rana, 2013).
Thomas and Lankau (2009) advised a good system of supervisory support in the workplace helped reduce the likelihood of burnout occurring and concluded the research findings:

- illuminate the direct role supervisors play in reducing burnout. Supervisors need guidance on how to communicate role expectations consistently and fairly across subordinates and how to socialize employees through role changes. Supervisors need to be aware of how they can minimize the potential for unrealistic or unmet expectations about employees’ job experiences and outcomes. In addition, supervisor can learn to fine-tune their skills in trying to create high-quality exchanges with their subordinates. (p. 429)

Organizations with high-stress environments need to stress the importance of supervisors implementing policies and procedures that demonstrate an awareness of burnout, and potentially reduce the likelihood of burnout occurring. This support is crucial to managing employees’ perception of the work environment.

**Educating other employees.** Not only do supervisors need to be aware of the implications of burnout in the workplace, but employees throughout the organization also need to be educated regarding the early warning signals, risks, and preventative strategies of developing burnout. In early burnout research, Jackson and Maslach (1982) noted The Occupational Safety and Health Act (OSHA) called for increased “awareness of potentially hazardous work environments” (p. 63), which includes those with psychological implications. Some industries, like public accounting, possess inherent characteristics which make employees more susceptible to the development of stress-related syndromes and other psychological trauma. Organizations with cultures that put
intense pressure on employees should educate employees about the job-related stress they will face in order to manage expectations and put preventative measures in place. A recent article by Ben-Porat and Itzhaky (2015) highlighted the importance of raising awareness in young social workers regarding the emotional strain and consequences of dealing with trauma victims. The authors suggested regularly holding training sessions for workers as a means to ensure social workers are well prepared for the stress they face. This education should take place frequently, and should consist of honest communication relating to the risks of burnout and realistic methods of prevention.

Further, increased awareness and education among employees about job-related burnout can have significant positive implications for the employer as well. Guthrie and Jones (2012) note human resource departments should be motivated to better educate employees regarding job-related burnout, and provide resources to employees to prevent and treat burnout due to rising healthcare costs. Since burnout often leads to other physical and mental health problems in employees, employers can benefit through reduced healthcare costs as a result of burnout prevention policies.

While many solutions have been proposed to help prevent and mitigate job-related burnout, one must consider who needs these interventions. Do all employees of public accounting firms suffer from job-related burnout? Previously collected data across many industries suggests the development of burnout is person-specific. Thus, it is important to ask: why do some people do well in the public accounting industry, while others can only work for a short period of time? This leads one to further examine demographic factors which may have an impact on one’s ability to maintain a career in public accounting.
Demographic Factors and Burnout

While the term burnout originated in the 1970s, researchers have only recently begun to explore the effect demographic factors may have on a person’s tendency to burnout. As researchers have explored the problem further, they have identified a wide range of results regarding burnout levels in specific professions. Because every human is different, and reacts differently to his or her environment, it is important to understand the effect those differences have on a person’s tendency towards developing burnout. This section reviews the research available regarding different factors which may influence a person’s tendency to burnout.

Call for demographic factors to be considered. Attafar, Asl, and Shahin (2011) studied burnout in librarians in Iran. Their initial research of professional and academic research showed varying levels of burnout among University librarians, so to further explore the issue, the researchers examined burnout levels in Iranian librarians of various ages, genders, educational backgrounds, and experience levels. The researchers concluded males were more likely to experience the emotional exhaustion and depersonalization elements of burnout, while seniority and marital status appeared to have no effect on the level of burnout.

Attafar et al. (2011), among other researchers, have begun to consider the correlation between demographic factors and burnout. These research studies are summarized in this section. Attafar et al. wrote, “The importance of identifying the most important demographic factors…is crucial if management is to be able to implement appropriate strategies of prevention and/or alleviation of stressful situations, or provide useful help to valuable workers, once burnout has occurred” (p. 282). Because burnout is
such a difficult concept to understand, a consideration of demographic factors relating to levels of burnout helps researchers gain an understanding of who has a tendency to burnout in an effort to assist employers with developing methods to mitigate or correct the condition.

**A review of studies already completed.** Recent studies have begun to attempt to draw a correlation between specific demographic factors and the level of burnout in employees. Results have been varied and inconclusive. This section addresses a few major demographic factors that have been addressed in the literature, along with a summary of the researchers’ findings. Major demographic factors to be discussed include educational background, age, gender, personality type, and family dynamics.

**Educational background.** Education relating to one’s profession can be looked at from two different perspectives. First, most technical professions require an individual obtain education, typically a college degree, before entering the profession, and perhaps become certified or licensed. Second, these professions often require continuing education through the professional’s career to ensure retention of basic technical knowledge, and to update the population regarding changes or new methodology. Each of these types of education may have an impact on an individual’s likelihood to burnout; however, research in this area is inconclusive and limited.

The studies relating to the educational level of professionals and their propensity to burnout offer mixed conclusions. Some studies showed there is little correlation between education level and burnout, while others imply a relationship does exist. In a study of correctional officers, Lambert, Kelley, and Hogan (2013) concluded level of education had no effect on officers’ tendency to burnout. However, in a Swiss study of
professionals from a variety of industries, that followed the participants over a course of 30 years, the research data indicated those with more education typically had more autonomy in the workplace, which mitigated the risk of burnout (Rossler, Hengartner, Ajdacic-Gross, & Angst, 2015). Ben-Porat and Itzhaky (2015) echoed that conclusion in their study of burnout in social workers. They wrote, “…the more the participants believed in their ability to influence their work environment, the lower their levels of burnout were” (p. 615).

In contrast, a study of accounting and finance academicians in Ireland reported high levels of burnout relating to personal accomplishment, even though the population consisted of those with terminal degrees, Master’s degrees, or other professional qualifications (Byrne, Chuhtai, Flood, Murphy, & Willis, 2013). A study of professionals providing care to patients with eating disorders similarly concluded those with higher levels of education experienced higher levels of burnout (Warren, Schafer, Crowley, & Olivardia, 2013). The varying conclusions likely result from the differing professions of the studies’ participants and environmental factors. Regardless of the cause, current research makes it difficult to draw a definitive correlation between educational background and propensity to burnout.

Another type of education that must be considered is continuing education. Many technical professions, such as law, medicine, and accounting, require professionals complete a certain number of hours of continuing education courses on an ongoing basis to remain current regarding changes in the industry and practice. A few researchers have considered whether ongoing continuing education has any impact on individual’s propensity to burnout; however, since the previously mentioned professions typically
require all of their members to complete continuing education courses, future research studies may need to explore what types of continuing education actually help with burnout. A study of Danish doctors completed by Brondt, Sokolowski, Olesen, and Vedsted (2008) indicated doctors who not only completed their continuing education requirements, but also participated in a continuing medical education (CME) group may be less likely to burnout than those who were not members of a CME group.

**Personality type.** Since all humans are different, personality plays a significant role into each individual’s response to stress situations, and thus, the development of burnout. A significant amount of research regarding personalities and burnout focuses on locus of control, which relates to the job demand control model. While the job demand control model suggests there must be an appropriate balance between job demands and the amount of control employees have over their own work environments, locus of control focuses on how they perceive events to be within their control. Hsieh and Wang (2012) wrote, “employees with high internal locus of control are more confident about dealing with frustration and job stress, and they can effectively control their own behavior,” reducing the likelihood of burnout developing (p. 6).

In consideration of personality type, research seems to indicate the Type A personalities are more likely to experience burnout. Watson, Minzenmayer, and Bowler (2006) noted Type A personalities are more likely to experience depression, and are also more likely to experience role overload. Further, Utami and Nahartyo (2013) concluded Type A personality intensified the effects of role conflict and role overload in relation to the development of burnout in auditors of public accounting firms in Indonesia.
Family Dynamics. Employees’ marital status and the presence of children may affect how job-related stress is handled and processed. In early burnout research, Cordes and Dougherty (1993) noted married individuals seem to be less likely to experience burnout than those who are single. The researchers hypothesized married individuals may be less likely to experience burnout because of the benefits of the relationship they enjoy with their spouses. Spouses can offer a distraction from work-related stress when employees are on personal time, and can also help provide accountability regarding personal and mental health. A more recent study of job burnout in professionals who treat individuals with eating disorders supported these early findings; married individuals reported lower levels of emotional exhaustion and depersonalization than those who were single (Warren et al., 2013).

Research related to whether burnout is higher in parents versus childless professionals is conflicting. Warren et al. (2013) proposed that individuals who have children reported lower levels of burnout characteristics than their childless counterparts; however, a study by Lingard (2004) led to a different conclusion. Lingard explored burnout relating both personal and professional environments in Australian civil engineers, and concluded the onset of emotional exhaustion for professionals without children was easily traced to the number of hours being worked, while the onset of emotional exhaustion in professionals with children was much more difficult to identify. Lingard suggested work and family balance dynamics caused an additional layer of stress on parents, which their childless peers did not experience.

The research study by Lingard (2004) also made some important conclusions relating to the prevention of burnout in the workplace. This study focused on the family
demographics of participants, including whether the professionals were members of single-income or dual-income households, and whether they had children, and the study indicated some significant differences in the burnout based on the home life of the study’s participants. As a result, the author stated employers might need to begin to implement creative strategies to address the needs of employees due to the growing diversity in the demographics of the current workforce. This statement supports the purpose of this research study, in further exploring the impact demographic variables have on the development of burnout, in an effort to better inform burnout solutions.

**Gender**

Gender is one of the demographic factors utilized as an independent variable in this correlational study, in order to examine the relationship between gender and burnout. Several recent studies have been conducted to determine the effects of gender on a person’s ability to handle stress and tendency to burnout, and the studies seem to offer varying results. A general study of Turkish working professionals concluded there was a relationship between burnout and gender (Serin & Balkan, 2014). Rubino et al. (2013) further examined differences in male and female responses to stress in the workplace, and the authors pointed out one cannot ignore the impact of the traditional gender roles on an individual’s response to work-related stress. For example, males encountered higher levels of stress and burnout when they were under-employed, while women were more impacted by being over-employed. Rubino et al. suggested these responses were related to traditional gender roles, and the different expectations typically set forth for men and women in the home and the workplace.
In contrast, however, Asgari (2012) studied the correlation between burnout, gender, and marital status in English teachers employed in Iranian secondary schools. The results of the quantitative study indicated there was no relationship between burnout and gender. The author noted these results were in contrast to earlier studies (Capel, 1992; Davis & Wilson, 2000; Formanuik, 1995) that had examined the correlation between gender and burnout in teachers.

Guthrie and Jones (2012) examined the effect of gender on burnout in audit, tax, and consulting professionals in a large public accounting firm in the United States, and noted significant differences in the results of their study between the audit, tax, and consulting service lines. Their study also resulted in differences between men and women relating to the dimensions of burnout. Females seemed to respond to stress more negatively than males, leading to a higher rate of burnout in females than males. Guthrie and Jones also pointed out only twenty-one percent of partners in public accounting firms in the United States are female, which has led to a further observation that female accountants turn over at higher rates than males in public accounting. This information seemingly supports the conclusion that females respond in a more negative manner to the stressful environment of public accounting.

Another research study conducted by Troutman, Burke, and Beeler (2000) examined the relationship between self-efficacy, assertiveness, and stress in male and female professionals in public accounting, as these characteristics relate to an individual’s tendency to leave their current positions. While this study did not specifically address burnout, the focus on how gender affects an individual’s response to stress in the workplace, and the likelihood the individual’s condition would lead to turnover closely
relates to the study of gender differences in burnout. In the study, the researchers concluded self-efficacy, assertiveness, and stress all played a part in a professional’s tendency to burnout and subsequently turnover; however, the impact the various factors had on the development of burnout depended on whether the professional was male or female. The study concluded self-efficacy has a more significant impact on a male’s intention to turnover, while assertiveness was more likely to affect females. Stress seemed to equally affect both males and females, though the researchers noted female public accountants tended to have higher stress levels than their male counterparts.

Age

Researchers have begun to address the relationship between age and burnout, but the results have been inconclusive and varied. As a result, age was utilized as an independent variable in this study, in order to examine the relationship between age and burnout. Initially, several other studies have indicated younger individuals tend to be more likely to burnout than older individuals. For example, Erickson and Grove (2007) completed a study of burnout in registered nurses serving patients in two hospitals in the Midwestern United States. The sample population for the study was predominantly female, due to high number of females in the nursing field, and thus, the results of their study primarily related to females. Consistent with previous research in the field, the study concluded nurses under the age of thirty have a much higher likelihood of burnout. The researchers related this tendency towards burnout in younger nurses to the emotional experience of caring for ill patients, and proposed that older nurses, who were more experienced at handling their emotions in the workplace, could mentor or coach younger nurses to help reduce the levels of burnout. Similarly, another study of professionals in
Turkey concluded younger individuals experience higher levels of burnout, while the study’s results suggested no significant differences between men and women in this area (Serin & Balkan, 2014). In addition, Ben-Porat and Itzhaky (2015) concluded younger social workers were more likely to develop burnout, as they were less experienced at dealing with the stress of their positions.

In contrast, a study completed by Ahola, Honkonen, Virtanen, Aromaa, and Lonnqvist (2008) of adult professionals in Finland said younger and older women and middle-aged men experienced higher levels of burnout, while younger and older men, and middle-aged women seemed to be less likely to develop feelings of burnout. In conclusion, the researchers recommended additional research to further examine the relationship between age, gender, and level of burnout, as the study’s results covered a wide population, and thus, did not allow researchers to draw firm conclusions.

Why is age a factor in the development of burnout? Bennett, Pitt, and Price (2012) wrote about generational issues, and their impact on the workplace, and pointed out the workplace is becoming increasingly diverse in age. While age diversity may be an organizational strength, management needs to carefully manage age differences to eliminate certain obstacles that could impede the flow of knowledge in the workplace. Each generation has a different set of needs, and thus, employers must be willing to adapt and tailor HR policies and organizational culture to fully engage all generations of workers.

The current workforce has been commonly divided into four different generations. Those generations include the Traditionalists, born 1909 to 1945, the Boomers, born 1946-1964, the Gen X’ers, born 1965 to 1978, and the Millennials, born
1979-2000. Each generation possesses its own pros, cons, and work preferences, and business must learn to be flexible in light of the changing nature of the workforce (Bennett et al. 2012). Bal, de Lange, Ybema, Jansen, and van der Velde (2011) pointed out older workers, such as those from the Traditionalist or Boomer generations are more loyal and slow to turnover in response to difficulties in the workplace, while younger workers, such as those from the Millennial generation, are much faster to react and turnover when they are dissatisfied. These types of generational issues are suspected to play an impact on the development of job-related burnout.

In addition to generational factors, research seems to indicate older individuals become somewhat immune or desensitized to stress in the workplace over time. Scott, Sliwinski, Mogle, and Almeida (2014) studied the emotional response of individuals at various ages to life experiences, and found evidence older individuals are better able to put life experiences in context. The researchers hypothesized, through reappraising or reprocessing life events, older individuals are more able to add perspective to life experiences and thus, may not react as negatively as their younger counterparts. When applied to the professional environment, life experience, and the ability to handle and reprocess negative experiences, may help older professionals better deal with stress.

While research seems to indicate older individuals would be less likely to burnout, limited research is available relating to the relationship between burnout and age in public accounting firms. Older individuals would likely have more autonomy in their positions in public accounting, which has been linked to lower instances of burnout, but positions were higher levels of responsibility also come with higher levels of stress and more demands on the personal resources of the professional. This research study fills a
needed gap in the literature by further examining the relationship between burnout and age in public accounting professionals.

**Study Variables**

Previous research informed this dissertation project, and helped to identify the relevant variables to be used. This section summarizes the independent, dependent, and moderating variables used in this study, and how those variables were determined. It also references similar studies, which informed the researcher’s choices.

**Defining independent, dependent, and moderating variables.** Independent and dependent variables are the basis for quantitative research studies. Independent variables influence, or are believed to affect, dependent variables (Creswell, 2014). Dependent variables represent the focus of the study; the purpose of the study is to explain them (Zikmund, 2003). Independent variables represent those factors suspected to produce a particular outcome, or the dependent variable (Creswell, 2014). While independent and dependent variables are the primary focus for the study, some studies also have moderating or mediating variables. Moderating variables are believed to change or mediate the effect of the independent variables on the dependent variables (Creswell, 2014). At a minimum, studies must contain independent and dependent variables.

Previous research informed the researcher’s choice of study variables. In their 2013 study, Utami and Nahartyo sought to examine how personality type impacted an auditor’s development of burnout as a result of the role stressors: role conflict, role overload, and role ambiguity. In addition to studying the effect personality had on the development of burnout, the researchers also sought to examine the relationship between the role stressors and the development of the burnout factors of emotional exhaustion,
depersonalization, and a reduced sense of personal accomplishment. Accordingly, the researchers chose to use role conflict, role overload, and role ambiguity as the independent variables, since these factors are believed to directly influence the development of the dependent variable, level of burnout. The researchers, however, utilized personality type as the moderating variable. They hypothesized auditors with a Type A personality would increase the likelihood role conflict, role overload, and role ambiguity would lead to burnout. Their study concluded Type A personality only intensified the effects of role conflict and role overload, but not role ambiguity.

In 2012, Guthrie and Jones published a study which examined job burnout in public accounting. A sample of 1,681 professionals of a large national public accounting were surveyed, and the authors reviewed the data from several different perspectives, but the primary purpose of the study was to determine whether gender, functional area, and position affected a public accountants’ development of burnout. In addition, the researchers sought to examine the correlation between emotional exhaustion, reduced personal accomplishment, and depersonalization, the factors of burnout, with job satisfaction, job performance, and turnover intention. In this study, gender, functional area (audit, tax, or consulting), and position within the firm were consistently the moderating variables; however, the researchers took two approaches to the independent and dependent variables. In one analysis, the stressors of the public accounting environment were the independent variable, while level of burnout was the dependent variable. In another, level of emotional exhaustion, depersonalization, and reduced personal accomplishment were the independent variables, while job satisfaction, job performance, and turnover intention were the dependent variables. The researchers
concluded a strong correlation between emotional exhaustion, turnover intention, and job performance, and also noted differences between the genders in the development of certain outcomes as a result of the burnout dimensions.

Ghorpade et al. (2011) examined the moderating effect personality had on the development of burnout as a result of role conflict and role ambiguity among professors of a California university. Role conflict and role ambiguity were the researchers’ independent variables, and burnout was the dependent variable. Personality, defined by characteristics like extraversion, conscientiousness, agreeableness and emotional stability, were the researchers’ moderating variables.

Serin and Balkan (2014) completed a correlational study of 261 Turkish government employees which sought to examine the relationship between demographic factors and burnout. The researchers utilized demographic factors including title, education level, age, experience level, and gender as the independent variables, and level of burnout as the dependent variable. Most notably, the researchers concluded the younger employees were more burned out than their older counterparts.

**Variables to be used in this study.** As a result of the variables reviewed in other similar studies, the researcher concluded this study would utilize age and gender as the independent variables and level of burnout, as measured by the three dimensions, as the dependent variables. That is, the study examined whether age and gender have a statistically significant relationship, or correlation, with a professional’s level of emotional exhaustion, depersonalization, and sense of personal accomplishment. Other similar studies have used role stressors as the independent variables, as the researchers have sought to simultaneously identify the relationship between role overload, role
conflict, and role ambiguity, and burnout (Guthrie & Jones, 2012; Utami & Nahartyo, 2013), however, this research study did not have a similar objective. The purpose of the research study was solely to examine whether there is an identifiable correlation between age, gender and burnout. The study was very similar to the study completed by Serin and Balkan (2014), and responded to the researchers’ call for similar studies to be completed in other industries and companies.

**Conclusion**

Initially identified as a term that impacts professionals in the workplace in the early 1970s, burnout has gained significant momentum among researchers, academicians, and practitioners. Research suggests stressors, such as role conflict, role ambiguity, and role overload, and especially when experienced for long periods of time, may cause employees to develop job-related burnout that has a major impact on both the employee and employer alike. Employees can experience an identifiable deterioration in physical and mental health, while employers suffer from decreased productivity and increased turnover as a result of the condition. Since the effects are so far-reaching, more research needs to be done to address the issue.

Burnout affects many professions, but the public accounting industry seems relatively more susceptible than others to the development of burnout in employees. The seasonal nature of the work, driven by client-imposed and regulatory deadlines, requires long periods of overtime. In addition, the technical nature of the work coupled with pressure to pass the CPA exam cause employees excessive stress. In a profession that suffers from an insufficient population of qualified talent, it is extremely important to
find ways to mitigate the stressful environment. Solutions are needed to fully address this growing issue among employees.

However, before solutions can be fully put into practice, employers and researchers need more information regarding who is most susceptible to burnout. Researchers have begun to correlate demographic factors like marital status, personality type, age, and gender to the presence of burnout, but the research is in its infancy and the results have been widespread. This research study responded to a growing need to further explore whether a correlation exists between demographic factors and burnout.

Section 2: The Project

Research has clearly indicated there is much to be learned about job burnout, especially as it relates to the public accounting profession. One of the most pressing areas of concern is identifying who is most likely to burnout. Understanding what groups of professionals are inclined to burnout help inform the solutions proposed for the condition. Recent research has turned towards identifying a correlation between demographic factors and professionals' tendency to burnout, and this dissertation sought to further explore whether a correlation indeed exists. This section provides a review of the project’s purpose, and addresses the role of the researcher, the participants used in the study, the research method and design, the population and sampling procedures, data collection instruments and techniques, data organization techniques, data analysis techniques, and the reliability and validity of the data collected.

**Purpose Statement**

The purpose of this correlational quantitative study was to test the theoretical framework of Maslach and Jackson (1981) by examining the relationship between
gender, age, and burnout in a large, national public accounting firm in the United States. Researchers have previously examined whether gender has an effect on burnout of professionals in the tax, audit, and consulting service lines of a national public accounting firm (Guthrie & Jones, 2012), and whether personality type has an effect on an auditor’s propensity toward burnout in public accounting firms in Indonesia (Utami & Nahartyo, 2013). This research study contributed to the recent literature by examining the relationship between gender, age, and level of burnout in a specific population of professionals in a large, national public accounting firm.

**Role of the Researcher**

The researcher set up the survey instrument, and oversaw its electronic distribution to participants, but was not directly involved in the data collection process. Participants never met, nor interacted with the researcher in any way during the data collection process. All data was collected electronically using the survey only, and was input solely by the participants using their computers or mobile devices.

**Participants**

Participants of the study were the professional staff of a large national public accounting firm in the United States. The professional staff included those who were directly involved with providing assurance, taxation, or consulting services to clients. Employees at the staff, senior, manager, director, and partner level were included in the population, while administrative professionals or executives, who had little or no client service responsibilities, were excluded from the population.

The researcher had no previous relationship with the Firm, its management, or its employees. The researcher gained access to the Firm through a relationship with a
mutual peer, and developed a relationship with the Firm through professional communication. The Firm’s management cooperated with the researcher in the data collection process. A member of management emailed the recruitment email and survey link to appropriate members of the Firm’s employee roster; the participants were not contacted by the researcher directly, but were provided the researcher’s contact information in case of questions or concerns. The Firm employees were assured their participation was completely voluntary, and the data would be kept confidential. Survey responses were not linked to specific individuals, unless participants optionally provided their email addresses to enter for the chance to win one of two monetary prizes.

The researcher depended completely on the Firm’s management for making contact with the study’s participants. Since an online survey was used, participants never met with the researcher in person, and thus, establishing trust and a working relationship was not an issue. Instead, the participants chose to participate in the study based on the word and reputation of Firm management, who provided the participants with the survey information.

**Research Method and Design**

This research project was designed as a correlational quantitative study. This section summarizes the rationale behind the researcher’s selection of the research method and design. Support for the researcher’s project is provided based on best practices for scholarly research, and a review of scholarly academic literature relating to similar studies.
Method

The research project was designed as a quantitative study. The researcher’s decision regarding the research method was based on the objectives of the research project and the status of related research. Qualitative studies focus on the exploration of the problem, and do not assist in the measurement of the relevant variables (Zikmund, 2003). In addition, qualitative research is more subjective in nature; it focuses on observations and other data that may be less reliable due to the possibility for bias in interpretation (Creswell, 2014). The problem of burnout in public accounting firms has already been well documented by researchers (Guthrie & Jones, 2012; Utami & Nahartyo, 2013), and thus, it is not necessary to take a qualitative approach in order to better explore or conceptualize the problem of burnout. The researcher sought to instead take a quantitative approach in order to test, using objective measures, the problem that has already been identified and explored in literature: the correlation between age, gender, and burnout in public accounting firms.

The method of measurement also supported the use of a quantitative research method. Historically, quantitative research studies have been deemed more reliable than qualitative studies because they offer concrete data which is typically more objective and generalizable (Simon & Goes, 2013). The researcher favored this approach because of the documented need in literature to test the correlation between demographic variables and job burnout in various population and geographic locations (Serin & Balkan, 2014). Open-ended, interview-style questions, which are typically the primary means of gathering information in qualitative studies, were considered less desirable for the study due to potential issues with collecting the participants’ responses (Creswell, 2014). Due
to the nature of the topic of burnout, the researcher feared the open-ended questions would not result in honest, forthright responses. The focus on collecting data using an objective survey that measures burnout in a quantifiable way led the researcher to selecting a quantitative method. The subjective nature of qualitative studies, supported by data collection techniques like observation and interviews did not support the level of confidence the researcher hoped to produce with this study.

**Research Design**

This research study was designed as a correlational quantitative study. Zikmund (2003) pointed out the research design is extremely important because it helps to ensure the research study results in data that supports the objectives of the study. As a result of the researcher’s choice of a quantitative method, the research design was limited to either experimental or non-experimental designs (Creswell, 2014). Experimental designs utilize a treatment or influence to see if it results in a specific outcome. The researcher intentionally imposes the treatment, or manipulates the variables, to see what the result will be. In this research study, however, the researcher did not desire to manipulate the research variables, but instead sought to observe and measure the variables in their natural settings. Thus, experimental designs were not considered appropriate for the study.

Correlational designs are also related to descriptive research, which examine the phenomenon in its natural setting, and seeks to simply gather data in an effort to answer basic questions regarding the issue (Simon & Goes, 2013). Descriptive research helps to investigate or explore an issue, and summarizes data in an effort to help validate explanations (“What is,” n.d.). Descriptive research designs can be quantitative or
qualitative in nature, but do not allow for any manipulation of the environment or variables by the researcher (“What is,” n.d.). This correlational study represents a type of descriptive research design.

Non-experimental designs, which do not allow for researcher manipulation of the variables, include causal and correlational designs (Creswell, 2014). Causal designs look for cause and effect relationships between variables. A relationship between variables would indicate one variable precedes and causes the second variable (Zikmund, 2003). In contrast, however, correlational designs seek to identify a relationship between variables, but do not imply sequence or causation. Correlational designs simply seek to identify a correlation or relationship between the two variables (Simon & Goes, 2013). This research study sought to examine the relationship between demographic variables and the level of job burnout, without implying the demographic variables caused or created the level of job burnout. Thus, the researcher determined the correlational design was most appropriate, as it allowed for the measurement of the relationship between the variables, without implying a cause and effect relationship. The reason for correlation is not the objective, or desired outcome of the study. Further research would be necessary to determine the cause of any correlation identified.

The variables of this correlational study were determined after a review of the scholarly and academic literature surrounding the topic of burnout. Researchers have acknowledged job-related burnout is an issue among accounting professionals, and have moved towards attempting to identify who has a tendency towards burnout (Guthrie & Jones, 2012), and possible solutions for the condition (Utami & Supriyadi, 2013). This research study contributes to the current literature on who has a tendency towards
burnout by examining whether there is a correlation between demographic factors of the professional and the level of job-related burnout. As a result, the demographic information of the professionals, specifically age and gender, were utilized as the independent variables, while the levels of the three dimensions of job-related burnout were the dependent variables. The correlational research design allowed the researcher to quantify the relationship, or correlation, between the independent and dependent variables.

The researcher proposed null and alternative hypotheses relating to each of the research variables. The null hypotheses indicated there was no correlation between the demographic variables and burnout, while the alternative hypotheses stated there was a correlation between the variables. The researcher did not hypothesize regarding the direction of any possible correlation between the variables, as the previous literature has been inconclusive thus far (Asgari, 2012; Erickson & Grove, 2007; Guthrie & Jones, 2012; Serin & Balkan, 2014).

Data was obtained through an electronic survey in order to test the researcher’s chosen hypotheses. The electronic survey required participants to self-report demographic information, as well as complete the Maslach Burnout Inventory – Human Services Survey (MBI-HSS, 1981), in order to measure level of job-related burnout. The presence and direction of correlation between the demographic information and the level of burnout were measured using data obtained from participants in the electronic survey.

**Population and Sampling**

This research study focused on one large national public accounting firm in the United States. The population utilized included the 2,094 client service professionals
employed by that Firm. Client service professionals included those who provide assurance, taxation, and consulting services to clients on a regular basis. The population excluded the Firm’s administrative or non-client service personnel. The population included only client service professionals since the focus of the study was on those with accounting expertise, who provide accounting-related services. The scope of the study did not allow for the inclusion of individuals with administrative responsibilities, such as human resources personnel, information technology, and other professionals. Including these individuals would have made the research data difficult to analyze due to the different job tasks, responsibilities, and expectations of these different professionals. The survey instrument asked participants to self-report their job title, service line, and industry specialization so ineligible participants could be excluded from the data.

The researcher did not take a sample from the population, but instead invited the entire population to complete the survey. Suskie (1996) suggested, assuming a reasonable sampling error of about 5%, a sample size of approximately 322 participants is appropriate for a population of around 2,000 (as cited in Simon & Goes, 2013). Thus, while surveys were provided to all eligible professionals, data collected was deemed representative of the population when at least 322 responses or more were received.

**Data Collection**

The data collection process was very important to the objectivity, reliability, and validity of the study. This section summarizes the instruments utilized and the rationale behind their selection. In addition, the data collection and organization techniques employed by the researcher are presented.
Instruments

Data was collected using an electronic survey hosted by SurveyMonkey. The first page of the survey included the informed consent information, which explained to participants the survey was completely optional, and the survey data would remain confidential. Participants were asked to proceed to the next page only if they understood and agreed to the terms of participating in the study.

Demographic reporting. On the second page of the electronic survey, participants were asked to self-report select demographic information. The participants provide their age and gender, among other demographic information, which were the independent variables of the study. The participants were given check box options for all of the demographic questions, and only one option could be selected under each question. Please see Appendix A for a list of the demographic questions included in the survey instrument. Once demographic questions were completed, the participants could proceed to the next page of the survey.

Burnout reporting. The next section of the survey consisted of the Maslach Burnout Inventory – Human Services Survey (MBI-HSS, 1981). The MBI-HSS presented the participants with twenty-two statements relating to their feelings regarding their work environment, and the participants were asked to rate their level of agreement with these statements using a seven item scale, ranging from zero, indicating they never experience the job-related feelings, to six, indicating they experience the job-related feelings every day. Due to copyright restrictions, the entire survey instrument could not reproduced in this document. However, a sample of three questions from the MBI-HSS are included in Appendix A. For the actual participant survey, the MBI-HSS was used in
its original form, and was not edited in any way. Participants did not need any special training or resources to complete the survey; they were instructed to simply complete the survey based on their own thoughts and feelings related to their job. Once the MBI-HSS was completed, participants were presented with the final page of the survey, which provided them the opportunity to email the researcher to enter into a drawing for the chance to win one of two monetary prizes.

**Selection of burnout measurement instrument.** In 1981, Maslach and Jackson suggested the three dimensions of burnout and developed a tool, called the Maslach Burnout Inventory (MBI), to measure the characteristics of burnout. Since its inception in 1981, the MBI has been used in countless studies to measure emotional exhaustion, depersonalization, reduced sense of personal accomplishment, and inevitably, burnout. As a result, researchers have become convinced of its reliability and validity (Gil-Monte, 2005; Serin & Balkan, 2014; Utami & Nahartyo, 2013). No other instruments have been noted in the literature to be as widely used and accepted as the MBI.

The human services version of this survey instrument was utilized due to the nature of work in public accounting. Herda (2012) claimed burnout in auditors of public accounting firms is caused by ongoing interpersonal communication with and the constant pressure to meet client demands. Additionally, clients frequently treat auditors poorly (Herda, 2012). While the MBI-HSS was designed for those who typically provide health or social assistance to others (Maslach, Leiter, & Jackson, 1996), the instrument was deemed appropriate for this survey due to the extensive interaction between public accounting professionals and their clients. The general version of the survey is designed for those in professions which are not people-oriented, and do not require direct
interaction with the recipients of the services being provided (Maslach et al., 1996).

Jones, Norman, and Wier (2010) similarly used elements of the MBI-HSS in their study regarding role stress in public accounting.

**Burnout measured.** The participants’ level of job-related burnout, as characterized by emotional exhaustion, depersonalization, and personal accomplishment, represents the dependent variables of this study, and was measured using the MBI-HSS. The MBI-HSS was scored utilizing the scoring key provided in the accompanying manual (Maslach et al., 1996). The scoring key utilizes the number associated with the participants’ survey responses to calculate a participants’ level of burnout relating to the three dimensions of burnout. Each of the twenty-two statements included in the instrument relates to the one of the three dimensions. Once a score for each dimension was calculated, the scoring key further provides guidance as to whether the participants’ levels are considered high, moderate, or low. Raw data from the survey is not presented within this document, but is available upon request.

The MBI-HSS was not utilized to calculate one single measure of burnout. Maslach, Leiter, and Schaufeli (2008) wrote that calculating a single measure of burnout which combines all three dimensions has not be successfully accomplished, nor is it recommended. Combining all three dimensions of burnout into one measure distorts the data, and does not provide the level of detail intended for research and analysis. As a result, the researcher instead focused on the participants’ levels of emotional exhaustion, depersonalization, and reduced personal accomplishment, as indicators, or dimensions, of the overall syndrome of burnout. Thus, the use of three separate dependent variables was considered appropriate for this research study.
Data Collection Techniques

The researcher utilized online provider SurveyMonkey to collect the research study data. The researcher chose SurveyMonkey due to its relative low cost, ease of use, and customizable survey design options. In addition, SurveyMonkey’s commitment to the security and privacy of data, as well as the ability to download data into spreadsheets or SPSS contributed to the researcher’s decision.

The researcher prepared a draft of the electronic survey one month ahead of distribution, and tested the survey to ensure proper operation. Three members of the participating Firm’s human resources personnel also tested the survey link. Once proper operation was confirmed, the survey was duplicated, and prepared by the researcher for dissemination.

The researcher provided the final SurveyMonkey link to a member of the Firm’s executive leadership for dissemination to the population. The Firm’s human resources personnel had previously filtered the Firm’s entire employee list to confirm only those eligible for the survey were emailed. This list included all of the Firm’s client-service personnel in its assurance, taxation, and consulting service lines. The researcher had no access to the Firm’s list of employees, and relied completely on the Firm’s human resources department for the dissemination of the survey.

Informed consent information was included on the first page of the SurveyMonkey survey site. The eligible population was presented with general information relating to the purpose of the study, along with the approximate completion time, confidentiality information, and other relevant facts which could affect the participants’ willingness to participate. At the bottom of the informed consent page,
participants were asked to click “next” if they agreed to participant, or click “exit” or close their browser if they declined. Participation was completely optional and anonymous.

The SurveyMonkey link was left open for two weeks from the date of dissemination. Approximately one week after the initial communication was sent, a member of the Firm’s executive team sent a follow-up email, reminding the eligible population of the survey’s closing date. Using the SurveyMonkey website, the researcher confirmed the minimum sample size was met before the survey was closed at the end of the two week period.

Data Organization Techniques

A partial example of the survey instrument can be found in Appendix A. The demographic questions and three sample items from the MBI-HSS are included, while the remaining questions from the MBI-HSS are excluded due to copyright restrictions. Once the survey was closed, the raw data files were downloaded from the SurveyMonkey website. All data analysis was completed in Microsoft Excel and SPSS, and the results of the data analysis were then translated to Microsoft Word for presentation. Any research notes and observations were kept in either Microsoft Word or OneNote. No extensive journals or catalogues were necessary due to the simplicity of the data.

Data Analysis Techniques

This section outlines the researcher’s procedures for analysis of the data obtained utilizing the electronic survey. Procedures of the compilation, review, and statistical analysis will be discussed. In addition, the researcher documented how the data analysis
procedures produce results that allow for the acceptance or rejection of the hypotheses proposed.

**Initial review procedures.** The researcher downloaded the survey data from the SurveyMonkey website using a secure internet connection, and saved the data to the hard drive of a password-protected and encrypted laptop with backup, secure cloud storage, and a password-protected external hard drive. The hard drive was immediately stored in a fireproof safe, while the files on the laptop were used for analysis. The researcher reviewed the data in spreadsheet format, looking for incomplete surveys. SurveyMonkey saves respondents’ progress, regardless of whether the entire survey is completed; thus, the researcher excluded the surveys that were not complete. Incomplete surveys were those in which the participant did not provide a response to all demographic questions and the MBI-HSS.

**Summary of data.** The researcher reviewed the data to confirm the minimum sample size of 322 responses was received. Next, the researcher summarized the respondents by demographic information to gain a better understanding of the population. The number and percentage of respondents were summarized by demographic factors including age group and gender. The results of this analysis were presented in chart format.

Next, using spreadsheet functions, the researcher calculated the level of the three factors of burnout for each participant. Emotional exhaustion, depersonalization, and reduced sense of personal accomplishment were calculated using the scoring key included in the MBI manual. Lastly, the researcher summarized the mean level of emotional exhaustion, depersonalization, and reduced sense of personal accomplishment
for the entire population, and each major demographic area. The mean level of each factor was calculated for each gender and age group. This information was also presented in chart format for the overall population. Burnout is characterized by high levels of emotional exhaustion and depersonalization, along with low levels of, or a reduced sense of, personal accomplishment (West, Dyrbye, Sloan, & Shanfelt, 2009). This information was utilized to assess the level of burnout for the population, and specific demographic groups.

Testing of hypothesis. This research study utilized two independent variables, age and gender, and three dependent variables: emotional exhaustion, depersonalization, and personal accomplishment. Since Maslach, Leiter, and Schaufeli (2008) discouraged one single measure of burnout which combines the scores from the three dimensions, each dimension was viewed and tested as a separate independent variable. Multiple regression was deemed most appropriate to test the hypotheses. Three separate multiple regressions were completed, so the relationship between age, gender, and each of the three dimensions of burnout could be examined separately. For each of the regression models, the researcher successfully rejected the null hypothesis if the regression generated a model that was statistically significant (p<.05), and indicated a correlation between the independent and dependent variables. The null hypothesis was accepted if the regression generated a model that was not statistically significant (p>.05), and indicated no correlation between the independent and dependent variables.

Each regression model provided information regarding the relationship between the independent variables and the dependent variable, and the ability to predict the dependent variable based on the independent variables. SPSS also generated data with
the regression that indicated the relationship between the independent variables individually and the dependent variable, and how much each independent variable individually contributed to the regression model. While this information was certainly useful in the analysis of the relationship between age, gender, and burnout, it was not relevant to the testing of the null hypotheses.

In addition to considering the statistical significance of the models, the researcher had to verify the assumptions of linear regression were not violated, compromising the integrity and reliability of the models. The researcher determined the residuals of the regression models were normally distributed through review of the histograms and P-P plots.

Another assumption for multiple regression is that minimal or no collinearity exists in the model. Collinearity indicates relationships exist between the independent variables, which can cause the regression model to be unstable or unreliable (Williams, Grajales, & Kurkiewicz, 2013). In order to determine little to no collinearity existed between the model variables, the researcher looked for VIF values below 10, and tolerance values above 0.2.

Regression models are also grounded on the assumption that no auto-correlation exists. Auto-correlation indicates a lack of independent in the residuals of the model. Thus, regression models require the residuals be independent of each other. Auto-correlation was tested using the Durbin-Watson statistic. The researcher looked for the Durbin-Watson d-statistic to fall within the acceptable range of 1 to 3 in order to rule out auto-correlation.
The final assumption for regression models is homoscedasticity. Homoscedasticity is present when the residuals are evenly distributed about the regression line for all levels of the independent variable(s). The opposite, or heteroscedasticity, is present when the residuals vary from the regression at different distances, or intervals, based on the level of the independent variable. Homoscedasticity for the regression models was confirmed through a visual review of the ZPRED vs. ZRESID scatterplots. The researcher felt confident with the results of the testing of the hypotheses once it was confirmed the relevant regression model assumptions were not violated.

**Presentation and summary.** After the three hypotheses were tested, and all supplemental testing was completed, the quantitative results of the regression model were summarized and presented in chart and narrative form. The summarized results of the study were presented either in the body of this research project, or in Appendix B. Overall, the data analysis, including the presentation and interpretation, is consistent with the researchers’ hypothesis and overall objectives of the study. The analysis provided quantitative data that supported the rejection and/or acceptance of the null hypotheses, and was consistent with the theoretical framework presented. In conclusion, the researcher considered the reliability and validity of the research project.

**Reliability and Validity**

Before any researcher embarks on a research study, it is important to consider both the reliability and the validity of the study. The reliability and validity of the study directly impacted the researcher’s ability to depend on the research data and draw
meaningful conclusions from it. This section reviews the researcher’s considerations and conclusions regarding the reliability and validity of this research study.

**Reliability**

The reliability of a study relates to the ability of the study to consistently and repeatedly generate the same error-free results (Zikmund, 2003). The instrument used in this research study consisted of demographic questions and the MBI-HSS. The researcher considered the reliability of the demographic questions to be high, due to the nature of the questions and the options provided to survey participants. Participants were expected to consistently answer demographic questions in the same manner unless their circumstances changed. In addition, clear, check-box options were provided for each demographic question, so they were not considered confusing, nor do they leave room for a variety of interpretations. Thus, the researcher focused primarily on the reliability of the MBI-HSS.

**External reliability.** The external reliability of the MBI-HSS is the measure of how well the instrument consistently provides the same result with repeated use (Simon & Goes, 2013). One of the most popular measures of external reliability is the test-retest method. This method provides a group of participants with the same test multiple times to determine the results are comparable and consistent (Zikmund, 2003). In relation to the MBI-HSS, Naudé and Rothmann (2004) cited several groups of researchers’ successful test-retest reliability statistics. Maslach et al. (1997) computed test-retest reliability at two to four weeks for a group of graduate students and professionals, while Jackson, Schwab, and Schuler (1986) found favorable results in a group of teachers after one year (as cited in Naudé & Rothmann, 2004, p. 23). Schaufeli, Enzmann, and Girault
(1993) echoed the researchers’ conclusions regarding the high test-retest reliability of the instrument, and said conclusions indicated emotional exhaustion was the most consistent of the burnout dimensions, while depersonalization was the least consistent. However, they stated burnout does seem to be a chronic condition overall, indicating results should be consistent when the instrument is administered multiples times over time.

While the test-retest method is considered a strong measure of reliability, the usefulness of this test to measure reliability was limited by the fact that the thoughts, feelings, and circumstances of those taking the survey instrument can change over time (Zikmund, 2003). The objective of the MBI-HSS is to measure the participants’ level of burnout at one point in time, and because the instrument is rooted in the feelings of the individuals about their jobs, those feelings may change over time. Statistical analysis has consistently resulted in strong test-retest reliability of the MBI-HSS; however, less favorable results could be explained by a change in circumstances of the individuals taking the survey.

The second most popular measurement of external reliability is inter-rater reliability. Inter-rater reliability relates to how the researcher collects and scores data. The collection and scoring process should be objective, consistent, and free from error, as these factors affect the ability to use and draw conclusions from the data (Clark-Carter, 2009). Because the MBI-HSS uses a uniform scoring key, which is provided in the accompanying manual, to quantitatively score the survey responses, the chance the scoring process was negatively impacted by inter-rater reliability were very minimal. As long as scorers use the same scoring key, different scorers should consistently generate the same results. The MBI-HSS does not require scorers interact with participants and
interpret open-ended responses. All responses were provided by participants using a numerical scale, and required no subjective interpretation by the researcher. Instead, the researcher used the scoring key provided with the survey instrument for scoring, so there was minimal risk to reliability.

Internal reliability. Internal reliability relates to how consistent an instrument is within itself at measuring a dimension or area of interest, and Cronbach’s alpha is the single most popular measure of internal reliability (Simon & Goes, 2013). Cronbach’s alpha is shown on a scale from zero to one, and relates to “the extent to which all the items in a test measure the same concept or construct” (Tavakol & Dennick, 2011, para. 3). Nunnally (1975) suggested a reliability of under 0.7 is insufficient, and thus, this guideline was used for the consideration of the internal reliability of the MBI-HSS.

Maslach and Jackson (1981) originally reported Cronbach’s alpha for the three dimensions of burnout ranging from the lowest at 0.74 for depersonalization to the highest, at 0.89 for personal accomplishment. Serin and Balkan (2014) calculated Cronbach’s alpha as 0.81 in their study of burnout in Turkish public sector professionals. Jones et al. (2010) reported an overall score of 0.83 in their study of public accounting professionals, in which they used an abbreviated version of the MBI. Ghorpade et al. (2011) calculated Cronbach’s alpha scores of 0.90, 0.74, and 0.82 for emotional exhaustion, depersonalization, and personal accomplishment, respectively, in using the educators’ version of the MBI. In addition, Shih et al. (2013) calculated Cronbach’s alpha scores ranging from 0.82 to 0.89 for the three dimensions of burnout using the MBI. Researchers have consistently proven the internal reliability of the MBI, and its
related human services and educator versions, using Cronbach’s alpha. As a result of these measures, the MBI-HSS was considered reliable for use in this research study.

**Validity**

Reliability and validity are not mutually inclusive concepts. A study can have reliability without validity (Simon & Goes, 2013). The researcher has sufficiently confirmed internal and external reliability of the survey instrument using measures such as the test-retest method and Cronbach’s alpha, but it is also important to consider the validity of the study. Validity relates to whether the data collected by the researcher truly represents or measures the phenomenon or problem being examined (Clark-Carter, 2009). Validity can be examined from both the external and internal perspectives.

**External validity.** The researcher considered the study’s external validity, or the ability to generalize the results of the study to other populations beyond the one used for data collection (Zikmund, 2003). The population of this study was the client service professionals of one large, national public accounting firm in the United States. The researcher did not sample the population, but instead, provided the survey to all eligible members of the population. The results from the participants who completed the survey were considered to be representative of the entire population of client service professionals employed by that Firm, because of the sample size and the fact that all employees experienced the same environmental factors. Organizational culture factors, like human resource policies, staffing procedures, and management structure, may affect the development of burnout; however, within the Firm being sampled, all employees should have had similar experiences. Thus, the ability to generalize the research data within the Firm being sampled was considered strong.
In addition, conclusions from the research data may also apply to professionals from other public accounting firms. It should be noted public accounting firms are similar as the workload is typically seasonal, and overtime is usually required of employees (Jones et al., 2010). Regardless of the size or location of the firm, public accounting firms share certain innate characteristics which allow for some generalizability of the research data. However, further research may be necessary to determine whether different size firms, or firms in other geographic locations would generate similar results.

Because the population is from one specific firm, the researcher was cautious regarding making sweeping generalizations from the data for the public accounting profession as a whole. Certain restrictions and limitations should be taken into consideration before attempting to draw similar conclusions for different populations. First, the organizational cultures of public accounting firms vary due to differences in size, location, management structure, staffing policies, and more. Role conflict and role ambiguity, two stressors which have been documented as causes of burnout, are rooted in the idea professionals in different organizations, positions, and under different supervision experience a variety of working conditions which can affect the professionals in different ways (Utami & Nahartyo, 2013). Thus, while similar trends may be found in professionals of other public accounting firms, it is important to note organizational culture differences affect the ability to compare public accounting firm populations.

In addition, the ability to generalize data across professions and geographic locations may be limited. Two research studies completed in Iran recommended further research be completed in other geographic areas in order to determine whether
geographic location, and related cultural dynamics, impacts the development of burnout (Asgari, 2012; Attafar, Asl, & Shahin, 2011). At present, it appears insufficient data has been collected from researchers to support the idea populations from different geographic locations would produce consistent results.

Overall, the researcher believed there was sufficient evidence to support the generalizability of the research data for the Firm population, and with limitations, to the public accounting profession as a whole. This research study contributed to the growing body of research among various professions and geographic locations regarding the relationship between demographic factors and job-related burnout. The researcher believed the external validity of the research data was sufficient.

**Internal validity.** Internal validity relates to the researcher’s ability to effectively conclude there is a relationship between the independent and dependent variables (Simon & Goes, 2013). Internal validity is of most concern in experimental studies in which the researcher manipulates the independent variable in order to determine the effect of the manipulation on the dependent variable (Balnaves & Caputi, 2001). Internal validity requires the researcher to address the risk that the outcome of the dependent variable is not directly related to the independent variable, but instead, is the result of some other environmental factor. Internal validity is high when the researcher can establish the dependent variable most likely responded to the independent variable and the independent variable only, while internal validity is low when the researcher unable to confirm that cause and effect relationship.

This research study did not involve researcher manipulation of the independent variables, and did not seek to suggest a cause and effect relationship between the
independent and dependent variables. This study sought to instead examine whether there was a correlation between the demographic variables and job-related burnout. Correlation simply implies a relationship between the variables, but does not imply causation. Thus, internal validity, or the ability to imply a cause and effect relationship in this research study, was low.

Several factors affected the internal validity of the study. Zikmund (2003) summarized the threats to internal validity into six categories: history, maturation, testing, instrumentation, selection, and mortality. Most of these risks relate to experimental studies that take place over time; thus, the history and maturation risk factors were not relevant to this study. In addition, due to the nature of the survey used, the instrumentation risk was also irrelevant.

Testing risk implies the participants of the study may have become privy to information regarding the nature and objective of the study, perhaps through a preliminary test, which may affect their participation (Zikmund, 2003). The researcher considered the risk participants’ knowledge regarding the nature of the study would affect the honesty and forthrightness of their responses. This risk was mitigated by offering limited information regarding the objective of the study in the informed consent document, and also ensuring the anonymity of the survey responses. Participants were assured their responses were completely anonymous and could not be linked to their identity.

Selection risk refers to the risk the research data might be compromised due to the make-up of the population or sample selected (Zikmund, 2003). Selection risk was addressed in this study in several ways. First, only eligible participants, defined as client
service professionals employed by the Firm, received the survey invitations. Secondly, the informed consent information provided on the first page of the survey link clearly specified who was eligible to participate in the survey. In addition, the researcher utilized an additional safeguard against the inclusion of ineligible participants by having participants self-report demographic information. Lastly, the researcher filtered survey responses before completing the data analysis so that only eligible participants were included in the research data, and no incomplete survey data was used in the analysis. These procedures were considered sufficient to effectively mitigate the selection risk.

Lastly, mortality risk relates to participants who do not fully complete the survey (Zikmund, 2003). Mortality risk was effectively mitigated by ensuring no incomplete surveys were included in the research data before analysis was completed. The researcher also verified the minimum sample size was met after eliminating incomplete surveys.

Internal validity of the research study was considered low, due to the nature of the correlational research design. The researcher considered the risks to internal validity, and ensured procedures were in place to effectively mitigate the risks identified. The overall reliability and validity of the research study was considered sufficient to proceed.

**Transition and Summary**

This section has summarized the researcher’s work relating to the design of the research project. The overall purpose and role of the researcher has been discussed, as well as the participants of the study and overall sampling procedures. The research methodology and designed have been described, as well as data collection procedures. The researcher’s choice of instruments was supported through scholarly literature, and
organization and analysis techniques were also summarized. Lastly, the reliability and validity of the research project were supported, setting the stage for the completion of the research project. Next, the researcher documents the research study findings, and their impact on the public accounting profession as a whole.

Section 3: Application to Professional Practice and Implications for Change

This section summarizes the results of the study, as completed by the researcher. The purpose of the study and its relative impact on the public accounting profession is reviewed. In addition, a detailed description of the researcher’s findings are presented. Further, the researcher will discuss the implication of the study’s findings on the accounting profession, and how those findings can help management improve the public accounting firm organizational culture and environment. Lastly, the researcher provides reflections on the project, as well as recommendations for future research.

Overview of Study

This research study contributed to the growing body of research relating to the relationship between personal characteristics and burnout, which represents an effort to better understand who has a higher likelihood of developing the condition in the workplace. Through a survey of client service professionals at one large, national public accounting firm in the United States, the researcher gathered data to further examine the relationship between age, gender, and burnout. This section summarizes the researcher’s findings as a result of the data analysis. In summary, the research data indicated only a very weak relationship, or correlation, between age, gender, and burnout.
Presentation of the Findings

Survey Participants

A member of the Firm’s management sent the survey invitation to all of its 2,094 eligible employees, including only those who were employed in the assurance, taxation, or consulting services lines as client-service professionals. The survey was made available to eligible participations, and was left open for twelve days. The researcher then closed the survey so no additional data could be collected following the twelfth day.

In total, 582 survey responses were received. However, 28 responses were incomplete, which left 554 complete surveys to be used in data analysis. This number far exceeded the minimum sample size suggested by Suskie (1996) of 322 survey participants (as cited in Simon & Goes, 2013), so the survey response was considered representative of the population as a whole.

The survey asked respondents to self-report demographic information including age and gender. A summary of survey participants by other demographic areas is presented below in Table C1, found in Appendix C. None of the participants fell into the under twenty category, but participants ranged from the age twenty-one to twenty-five category to over sixty-five. About fifty-seven percent of participants were age forty or under, while around forty-three percent of participants were over age forty. Participants were split fairly evenly between male and female, with fifty-two percent of respondents being male, and forty-eight percent female.

Reliability

Cronbach’s alpha was calculated for the three dimensions of burnout measured by the MBI-HSS: emotional exhaustion, depersonalization, and personal accomplishment. The
MBI-HSS contains twenty-two questions. Nine questions measure emotional exhaustion, five questions measure depersonalization, and eight questions measure personal accomplishment. Nunnally’s (1975) standard of reliability of at least 0.7 was utilized to consider the internal reliability of the MBI-HSS in measuring the participants’ levels of emotional exhaustion, depersonalization, and personal accomplishment. Cronbach’s alpha was 0.913 for emotional exhaustion, 0.762 for depersonalization, and 0.807 for personal accomplishment. Because Nunnally’s threshold of 0.7 was satisfied for all three burnout dimensions, the survey data was deemed reliable, and the researcher proceed with data analysis.

**Tests of Hypotheses**

The researcher tested the research questions by utilizing the survey data to build three multiple regression models in SPSS. Before importing the data into SPSS, the researcher scored the survey participants’ MBI-HSS using the scoring key provided in the MBI manual (Maslach et al., 1996). Total scores by participant were calculated for emotional exhaustion, depersonalization, and personal accomplishment, respectively. This data was imported into SPSS for use in the multiple regression analysis.

**Null hypothesis #1:** Age and gender do not influence a public accountant’s level of emotional exhaustion, as it relates to burnout.

The researcher completed a multiple regression in SPSS, using age and gender as the independent variables, and emotional exhaustion as the dependent variable. Table 1, as generated by SPSS, was reviewed to determine the level of correlation between the independent variables, age and gender, individually, and the dependent variable, emotional exhaustion. The data indicates there is a weak negative correlation between
age and emotional exhaustion, as the correlation coefficient was calculated as -0.229.

The correlation between gender and emotional exhaustion was calculated as .076, which indicates a much weaker correlation relationship than the one calculated for age and emotional exhaustion. This data suggests age alone has a stronger correlation with emotional exhaustion than gender alone; however, neither of these variables appears to be significantly correlated with emotional exhaustion, when evaluated independently from other variables.

Table 1
*Means, Standard Deviations and Intercorrelations for Emotional Exhaustion, Age, and Gender*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
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<td>10.206</td>
<td>554</td>
<td>-.229</td>
<td>.076</td>
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<td>554</td>
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<td>.4783</td>
<td>.49998</td>
<td>554</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

The results of the regression analysis for age, gender, and emotional exhaustion are presented in Table 2. The use of age and gender together to predict the level of emotional exhaustion in public accounting professionals was statistically significant, $F(2,551)=15.711, p<.001$. The results of the analysis suggest age better predicts the level of emotional exhaustion, $p < .001$, when both variables are included.

Table 2
*Regression Summary for Age and Gender Predicting Emotional Exhaustion (n=554)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>25.089</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.892</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>.851</td>
</tr>
</tbody>
</table>
Table 3
ANOVA for Age, Gender, and Emotional Exhaustion

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3107.645</td>
<td>2</td>
<td>1553.823</td>
<td>15.711</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>54494.983</td>
<td>551</td>
<td>98.902</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57602.628</td>
<td>553</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In conclusion, the researcher rejected the first null hypothesis, as the regression results indicate there is a relationship between age, gender, and emotional exhaustion. While neither age nor gender alone appear to have a strong correlation with emotional exhaustion in public accounting professionals, the combination of the two factors created a statistically significant multiple regression model. As shown in Table 3, it should be noted age is statistically significant, or stronger in predicting the level of emotional exhaustion; however, as shown in Table 2, the use of age alone is not as reliable as the combination of both age and gender.

Null hypothesis #2: Age and gender do not influence a public accountant’s level of depersonalization, as it relates to burnout.

The researcher completed a multiple regression using age and gender as the independent variables, and depersonalization as the dependent variable. The correlation between the independent variables, individually, and the dependent variable was reviewed by the researcher and summarized in Table 4. There was a weak, negative correlation between depersonalization and age, with a correlation coefficient of -.215. However, the relationship between gender and depersonalization was even weaker with a
correlation coefficient of -.021. Individually, the data suggests there is only a very weak, negative correlation between the individual independent variables, age and gender, and the dependent variable, depersonalization. Further, Table 5 presents the regression summary for age, gender, and depersonalization. While age and gender individually do not have a strong correlation with depersonalization, the use of age and gender together to predict the level of depersonalization in public accounting professionals was statistically significant, $F(2,551)=14.319, p < .001.$

Table 4
*Means, Standard Deviations and Intercorrelations for Depersonalization, Age, and Gender*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depersonalization</td>
<td>5.68</td>
<td>4.890</td>
<td>554</td>
<td>-.215</td>
<td>-.021</td>
</tr>
<tr>
<td>Age</td>
<td>5.37</td>
<td>2.542</td>
<td>554</td>
<td>--</td>
<td>-.155</td>
</tr>
<tr>
<td>Gender</td>
<td>.4783</td>
<td>.49998</td>
<td>554</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 5
*Regression Summary for Age and Gender Predicting Depersonalization*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.257</td>
<td>.543</td>
<td>15.209</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.431</td>
<td>.081</td>
<td>-.224</td>
<td>-5.328</td>
</tr>
<tr>
<td>Gender</td>
<td>-.543</td>
<td>.411</td>
<td>-.056</td>
<td>-1.321</td>
</tr>
</tbody>
</table>

Table 6
*ANOVA for Age, Gender, and Depersonalization*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>653.327</td>
<td>2</td>
<td>326.664</td>
<td>14.319</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>12570.393</td>
<td>551</td>
<td>22.814</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13223.720</td>
<td>553</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In conclusion, the researcher rejected the second null hypothesis, as the data indicates a relationship between age, gender and depersonalization does exist, though weak in nature. While a regression model of age, gender, and depersonalization is statistically significant, gender and age do not appear to independently have a strong correlation with depersonalization. In addition, the relationship identified, while weak, is negative in nature, indicating as age increases, depersonalization decreases.

*Null hypothesis #3: Age and gender do not influence a public accountant’s level of personal accomplishment, as it relates to burnout.*

The researcher prepared a multiple regression model using age and gender as independent variables, and level of personal accomplishment as the dependent variable. Personal accomplishment is the only one of the three burnout dimensions in which higher scores are considered more desirable. Emotional exhaustion and depersonalization are evaluated in the opposite manner, with lower levels of these dimensions being more desirable and indicating a lower level of burnout. As shown in Table 7, the data indicated there was a positive, weak correlation between age and personal accomplishment, as a coefficient of .278 was calculated. In contrast, there was a negative, weak correlation between gender and personal accomplishment, demonstrated by the coefficient of -.183. Each of these correlation coefficients indicate that, individually, age and gender could not be used to effectively predict the level of personal accomplishment. Further, Table 8 presents the results of the regression analysis using age, gender, and personal accomplishment. The model produced a statistically significant result, in which $F(2,551)=29.815$, $p < .001$. 


Table 7  
Means, Standard Deviations and Intercorrelations for Personal Accomplishment, Age, and Gender

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Accomplishment</td>
<td>35.17</td>
<td>7.319</td>
<td>554</td>
<td>.278</td>
<td>-.183</td>
</tr>
<tr>
<td>Age</td>
<td>5.37</td>
<td>2.542</td>
<td>554</td>
<td>--</td>
<td>-.155</td>
</tr>
<tr>
<td>Gender</td>
<td>.4783</td>
<td>.49998</td>
<td>554</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 8  
Regression Summary for Age and Gender Predicting Personal Accomplishment

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>32.220</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.738</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-2.104</td>
</tr>
</tbody>
</table>

Table 9  
ANOVA for Age, Gender, and Personal Accomplishment

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>2892.471</td>
<td>2</td>
<td>1446.235</td>
<td>29.815</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>26726.894</td>
<td>551</td>
<td>48.506</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29619.365</td>
<td>553</td>
<td>48.506</td>
<td></td>
</tr>
</tbody>
</table>

The researcher rejected the third and final null hypothesis, as the regression model indicates there is a relationship between age, gender, and personal accomplishment. Age and gender individually do not appear to have a strong correlation with personal accomplishment. However, both age and gender together yield a statistically significant regression model for personal accomplishment.
Analysis of Regression Models

The hypothesis testing yielded three statistically significant regression models; however, further review of these models must be completed before they can effectively be relied upon to predict the dependent variables. This review included a review of the adjusted R-square values for each of the models, as well as a review for normality of the residuals, homoscedasticity, multicollinearity, and autocorrelation. The models were not considered generalizable and reliable until certain assumptions for each were satisfied.

Model #1: Age, Gender, and Emotional Exhaustion. The multiple regression model for age, gender, and emotional exhaustion yielded an adjusted R-square value of .051, which indicated only 5.1% of the variance in emotional exhaustion was explained by the model. The relative low adjusted R-square value, as presented in Table 10 implied other variables, other than age and gender, likely contribute to emotional exhaustion, and would need to be added to the model in order to better predict the dependent variable.

Table 10
Model Summary for Age, Gender, and Emotional Exhaustion

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.232</td>
<td>.054</td>
<td>.051</td>
<td>9.945</td>
<td>1.036</td>
</tr>
</tbody>
</table>

Table 10 also presents the Durbin-Watson statistic, which indicates the level of autocorrelation in the residuals from the regression analysis. Ideally, the Durbin-Watson $d$ statistic should fall between 1 and 3 (Field, 2009). The regression model for age, gender, and emotional exhaustion provided a $d$-statistic of 1.036, which indicates there is little evidence of autocorrelation in the residuals.
Table 11 presents the collinearity statistics for the regression model for age, gender, and emotional exhaustion. Multicollinearity indicates there is a relationship or correlation between independent variables in the model, and high levels of collinearity in a regression model cause issues in the use of the regression model (Field, 2009). Tolerance levels below 0.2, or variance inflation factors (VIF) above 10, indicate issues with multicollinearity in the data. The regression model for age, gender, and emotional exhaustion resulted in tolerance and VIF levels within the acceptable range.

Table 11

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>25.089</td>
<td>1.130</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>.851</td>
<td>.856</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.892</td>
<td>.168</td>
</tr>
</tbody>
</table>

In order to confirm normality of errors for the model, the researcher reviewed the histogram and normal P-P plot, as shown in Figures 1 and 2. Normality of errors is characterized by normally distributed data on the histogram, and a line that does not significant vary from the data plots on the normal P-P plot. The figures presented data which indicated the residual values were relatively normally distributed.
Finally, the researcher reviewed the scatterplot of the ZPRED vs. ZRESID, as shown in Figure 3, to determine there was no heteroscedasticity in the model. The scatterplot presented fairly homoscedastic data, indicating a consistently in the residuals.
relating to their distance from the regression line. This indicates the model is fairly reliable and generalizable.

Figure 3: Scatterplot for Residuals for Age, Gender, and Emotional Exhaustion

Overall, the regression model for age, gender, and emotional exhaustion indicated the model was a good fit for the data, except for the low adjusted R-square value. As a result, while the regression model fits the data, it is not particularly reliable for use in predicting a professional’s level of emotional exhaustion, because the adjusted R-square value indicates there are other variables that contribute to a professional’s level of emotional exhaustion. As a result, it is not recommended to use this model to predict emotional exhaustion based on age and gender alone.

Model #2: Age, Gender, and Depersonalization. The multiple regression model for age, gender, and depersonalization yielded an adjusted R-square value of .046, which indicated only 4.6% of the variance in depersonalization was explained by the model. The relative low adjusted R-square value, as presented in Table 12 implied other
variables, other than age and gender, likely contribute to depersonalization, and would need to be added to the model in order to better predict the dependent variable.

Table 12
Model Summary for Age, Gender, and Depersonalization

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.222</td>
<td>.049</td>
<td>.046</td>
<td>4.776</td>
<td>1.600</td>
</tr>
</tbody>
</table>

Table 12 also presents the Durbin-Watson statistic, which indicates the level of autocorrelation in the residuals from the regression analysis. The regression model for age, gender, and depersonalization resulted in a $d$-statistic of 1.600, which fell within the ideal range of one to three, and thus, indicated little evidence of autocorrelation in the residuals.

Table 13
Coefficients for Age, Gender, and Depersonalization

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>1</td>
<td>(Constant) 8.257</td>
<td>.543</td>
<td>15.209</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-.543</td>
<td>.411</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-.431</td>
<td>.081</td>
</tr>
</tbody>
</table>

Table 13 presents the collinearity statistics for the regression model for age, gender, and depersonalization. The tolerance and VIF levels for this model fell within the recommended range, which indicated little evidence of multicollinearity in the data.
This indicates the relationship between the independent variables is minimal, and thus, acceptable for the model’s use.

In order to confirm normality of errors for the model, the researcher reviewed the histogram and normal P-P plot, as shown in Figures 4 and 5. Both the histogram and the normal P-P plot indicated a lack of normality in the residuals, which causes problems with the reliability of the model. Lastly, the researcher reviewed the scatterplot of the ZPRED vs. ZRESID, as shown in Figure 6, to check for heteroscedasticity in the model. The scatterplot presented data which indicated heteroscedasticity, further calling into question the reliability and generalizability of the model.

Figure 4: Histogram for Residuals for Age, Gender, and Depersonalization
Figure 5: Normal P-P Plot for Residuals for Age, Gender, and Depersonalization

Figure 6: Scatterplot for Residuals for Age, Gender, and Depersonalization
The regression model for age, gender, and depersonalization demonstrated some problematic characteristics. The low adjusted R-square value indicated there are a number of other variables which contribute to the level of depersonalization in accounting professionals. Further, the lack of normality of the residuals, and the heteroscedasticity of the model, indicate the model is not a good fit for the data. As a result, it is not recommended to use this model in order to attempt to predict a professional’s level of depersonalization.

**Model #3: Age, Gender, and Personal Accomplishment.** The multiple regression model for age, gender, and personal accomplishment yielded an adjusted R-square value of .094, which indicated only 9.4% of the variance in personal accomplishment was explained by the model. The relative low adjusted R-square value, as presented in Table 14 implied other variables, other than age and gender, likely contribute to personal accomplishment, and would need to be added to the model in order to better predict the dependent variable.

Table 14

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.312a</td>
<td>.098</td>
<td>.094</td>
<td>6.965</td>
<td>1.952</td>
</tr>
</tbody>
</table>

Table 14 also presents the Durbin-Watson statistic, which indicates the level of autocorrelation in the residuals from the regression analysis. The regression model for age, gender, and personal accomplishment resulted in a $d$-statistic of 1.952, which fell
within the ideal range of one to three, and thus, indicated little evidence of autocorrelation in the residuals.

Table 15

*Coefficients for Age, Gender, and Personal Accomplishment*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>32.220</td>
<td>.792</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-2.104</td>
<td>.600</td>
<td>-.144</td>
</tr>
<tr>
<td>Age</td>
<td>.738</td>
<td>.118</td>
<td>.256</td>
</tr>
</tbody>
</table>

Table 15 presents the collinearity statistics for the regression model for age, gender, and personal accomplishment. The tolerance and VIF levels for this model fell within the recommended range, which indicated little evidence of multicollinearity in the data. This indicates the relationship between the independent variables is minimal, and thus, acceptable for the model’s use.

Finally, the researcher reviewed Figures 7, 8, and 9 in order to confirm normality of errors and the homoscedasticity of the model. Figures 7 and 8 presented data which indicated the residual values were relatively normally distributed. Figure 9 indicated homoscedasticity of the model.
Figure 7: Histogram for Residuals for Age, Gender, and Personal Accomplishment

Figure 8: Normal P-P Plot of Residuals for Age, Gender, and Personal Accomplishment
Overall, the regression model for age, gender, and personal accomplishment indicated the model was a good fit for the data, except for the low adjusted R-squared value. As a result, while the regression model fits the data, it is not particularly reliable for use in predicting a professional’s level of personal accomplishment, because the adjusted R-square value indicates there are other variables that contribute to a professional’s level of personal accomplishment. As a result, it is not recommended to use this model to predict personal accomplishment based on age and gender alone.

Comparison of Results to Previous Literature

The results of the study led the researcher to conclude age and gender are not individually able to reliably predict the levels of the various burnout dimensions within a reasonable margin of error; however, the results of the regression analysis indicate a multiple regression using both age and gender can predict the levels of the various burnout dimensions. However, even though the results of the individual correlation tests
were not statistically significant, they do indicate the nature of the correlation between age and gender and the burnout dimensions.

**Age.** The correlation between age and emotional exhaustion, depersonalization, and personal accomplishment was -.229, -.215, and .278. Since emotional exhaustion and depersonalization are both interpreted such that higher scores are less desirable, and personal accomplishment is interpreted such that lower scores are less desirable, the correlation coefficients indicate, overall, burnout, as measured by the three dimensions, gets better with age. For example, in a simple review of the mean emotional exhaustion of each age group, the mean level of emotional exhaustion consistently decreases by age group, with only a few exceptions. The twenty-one to twenty-five age group reported a mean level of emotional exhaustion of 24.61, while the sixty-one to sixty-five and over sixty five age groups reported mean levels of emotional exhaustion of 13.67 and 14.46 respectively. See Table C2 in Appendix C for the mean emotional exhaustion by age group.

The level of depersonalization seems to also decrease by age, as shown in Table C3. While there are a few inconsistencies in the mean progression, specifically between ages thirty and sixty, the disparity between the level of depersonalization of the youngest age group (7.56), and the oldest age group (2.62) seems to support the overall trend. Of the three burnout dimensions, the correlation between age and depersonalization was the weakest, at -.215, which was likely due to the inconsistencies in the mean progression in the age thirty to sixty professionals.

The level of personal accomplishment appears to increase, or demonstrate a positive correlation, with age. The correlation coefficient for age and personal accomplishment
was the highest of the three burnout dimensions at .278, though still weak in strength. A review of the mean personal accomplishment by age group demonstrated professionals aged twenty-one to twenty-five indicated the least feelings of personal accomplishment, while those aged sixty-one to sixty-five felt much more accomplished. Table C4 presents the mean level of personal accomplishment for all age groups.

While the strength of the relationship between age and the burnout dimensions individually seems to be weak, the regression model indicates age is the most statistically significant factor in predicting a public accounting professional’s level of burnout. These findings are consistent with the conclusions of previous researchers (Ben-Porat & Itzhaky, 2015; Erickson & Grove, 2007; Serin & Balkan, 2014), who said younger professionals are more susceptible to burnout. Scott, Sliwinski, Mogle, and Almeida (2014) further proposed older individuals are better able to process negative life experiences, and put them in perspective, and thus, may be able to handle the pressures of the workplace in more healthy ways than their younger counterparts. Bal, de Lange, Ybema, Jansen, and van der Velde’s (2011) suggestion older generations are less likely to react negatively to workplace stress was also supported by the results of this study. Minimal research conflicts with the results of this study. For example, Ahola, Honkonen, Virtanen, Aromaa, and Lonqvist (2008) drew conflicting results relating to age and the development of burnout, especially relating to females. Overall, the results from the study seem to be consistent with the regression model, indicating there is a negative correlation between age and emotional exhaustion and depersonalization, and a positive correlation between age and personal accomplishment.
**Gender.** The results of the study indicate a weak correlation between gender and the dimensions of burnout. There is a positive correlation between gender and emotional exhaustion, indicating females typically experience higher levels of emotional exhaustion than men. The negative correlation between gender and depersonalization indicates men typically experience higher levels of depersonalization. Finally, the negative correlation between gender and personal accomplishment suggests men typically experience higher levels of personal accomplishment, while women experience lower levels. These correlations seem to indicate women are more likely to experience the three dimensions of burnout, though it is important to note these correlations are not statistically significant. The relationships are weak, indicating men and women’s levels of burnout were not materially different. A review of the mean levels of emotional exhaustion, depersonalization, and personal accomplishment by gender (as presented as Tables C5 through C7 in Appendix C), support these conclusions. Females averaged higher levels of emotional exhaustion, while males averaged higher levels of depersonalization and personal accomplishment, but only by small margins. Further, in the regression analysis performed for age, gender, and the three dimensions of burnout, it should be noted gender was only statistically significant in predicting the dependent variable with respect to personal accomplishment (p<.001). The values for emotional exhaustion (.321) and depersonalization (.187) indicated gender did not significantly contribute to the result.

The results of this study, indicating there is a weak correlation between gender and level of burnout, is supported by the conclusions reached by Guthrie and Jones (2012) and Serin and Balkan (2014), which indicated there was a relationship between gender and burnout, and females respond more negatively to stress than their male
counterparts. However, while the results seem consistent with these studies, the
correlation coefficients calculated in this study would not support the rejection of a null
hypothesis relating to the correlation between gender and level of burnout.

The results of this study have implications for the Firm employing the population
surveyed, as well as for the accounting profession as a whole. Job-related burnout, along
with its related issues of turnover and loss of productivity, continue to plague the
profession. Utilizing results from studies such as this one could potentially provide
public accounting firms with valuable information with which to guide the management
practice, human resource policies, and strategic initiatives of their enterprises.

Additional Observations

While age and gender were the focus of this research study, the researcher also
collected demographic data relating to the participants’ role within the Firm, marital
status, parental status, and service line. Multiple regression models were not prepared for
these additional demographics; however, the researcher calculated the mean levels of
emotional exhaustion, depersonalization, and personal accomplishment for each of the
demographic categories, in order to determine if the data may indicate some notable
results.

Table C8 presents the mean level of the three dimension of burnout by employee
role. Those in the associate, senior, and director roles demonstrated the highest levels of
emotional exhaustion, while those in the associate and senior roles demonstrated the
highest levels of depersonalization. Personal accomplishment was similarly lowest in
those in the associate and senior roles. In contrast, those in the principal positions
demonstrated the lowest levels of emotional exhaustion and depersonalization, and the
highest levels of personal accomplishment. Since professionals typically progress through the roles with experience and age, these results indicate some consistently with the correlation identified between age and burnout. As employees grow older, and in turn, get promoted to higher roles, they experience lower levels of burnout as time passes.

Table C9 presents the mean level of the three dimensions of burnout by marital status. Participants self-reported marital status as either single, married, divorced/separated, or widowed. Single professionals demonstrated the highest levels of emotional exhaustion; however, widowed professionals reported the highest levels of depersonalization. In contrast, however, the highest levels of personal accomplishment were reported by widowed individuals, while single professionals demonstrated the lowest levels of personal accomplishment. Overall, single professionals seemed to consistently demonstrate the characteristics of burnout in comparison to their peers, which could be a function of age. However, the high levels of depersonalization in widowed professionals could be an interesting focus for future research.

Table C10 presents the mean level of the three dimensions of burnout based on whether professionals are parents. The data demonstrates those without children more consistently demonstrated the characteristics of burnout than their peers who had children. These results could be related to age, however, since many professionals do not have children until later in their careers.

Table C11 presents the mean level of emotional exhaustion, depersonalization, and personal accomplishment by service line. Participants self-reported their service line as either assurance, taxation, consulting, or multiple. Those who reported the category “2 or more” were not solely committed to one service line, but served in multiple areas.
Approximately 41.5% of responses were received from those in the assurance service line, while only 33.2% of the responses were from taxation, and only 5.2% were from consulting. Thus, the number of data points collected from the various services lines may have influenced the results. Overall, the mean level of the three dimensions of burnout indicated those in the consulting service line demonstrated the lowest levels of burnout, while those in the assurance and tax service lines demonstrated the highest levels of burnout.

The data presented in this section is for information purposes only, and was considered supplemental to the researcher’s objectives. This data was not used to test the researcher’s research questions, and was not used in data analysis. The results are presented in order to provide data which may inform future research initiatives relating to burnout in public accounting, and the relationship between demographic factors and burnout.

**Applications to Professional Practice**

The findings of this study contribute to the literature already available regarding the development of job-related burnout in public accounting professionals. Nouri and Parker (2013) wrote “employee turnover in public accounting firms is a costly, on-going problem” (p. 145), and cited burnout as one of the influencers of turnover among accounting professionals. In an effort to further examine the factors that contribute to burnout, this research study utilized data from a large, national public accounting firm in order to determine the relationship between age, gender, and the three dimensions of burnout.
The premise behind better understanding the relationship between demographic factors and burnout is, if researchers and practitioners can better understand who is most susceptible to develop burnout, then this information can better inform strategies employed to combat the development of the condition. This study and others do not seek to assert causation between demographic factors and burnout, but instead simply propose the correlation, or relationship, between demographic factors and burnout. While burnout can affect professionals of all characteristics, research has previously indicated trends may exist relating to the professionals who are primarily plagued by the condition (Erickson & Grove, 2007; Serin & Balkan, 2014).

This study produced data that indicated a weak correlation exists between age and the dimensions of burnout, while an even weaker correlation was found between gender and the dimensions of burnout. However, the regression models that resulted from this study were not deemed reliable enough to be used to predict the level of burnout in accounting professionals based on age and gender alone. Since these results were based on data obtained from a population of professionals employed by one single public accounting firm, the generalizability of the results are limited. However, some limited inferences may be made from the research data. The data analysis indicated younger professionals and females are slightly more susceptible to the development of burnout, and thus, this information should be utilized to target these populations with initiatives that aid in the prevention of burnout. Human resource policies, benefits, and the organizational culture are all areas that could potentially impact the development of burnout.
Within the Firm population utilized for the survey, the levels of burnout were not extreme. The MBI-HSS scoring key provided scales for each of the individual dimensions, so the results can be rated high, moderate, or low. The mean level of emotional exhaustion, depersonalization, and personal accomplishment were 20.71, 5.68, and 35.17, respectively, for the firm as a whole. According to the scoring key, emotional exhaustion and personal accomplishment within the Firm were rated at moderate, while the level of depersonalization was low. While ideally the results would indicate low levels of emotional exhaustion and depersonalization, and high levels of personal accomplishment, these results indicate the Firm’s employees are not experiencing extreme levels of burnout. Other similar studies have not specifically reported the mean levels of burnout in the sample, so the researcher was unable to determine if these levels are comparable to other studies completed (Guthrie & Jones, 2012; Serin & Balkan, 2014). Overall, however, the results indicate the Firm being sampled may be utilizing initiatives and encouraging an organizational culture that helps combat the development of burnout.

In conclusion, the results of this study help researchers and practitioners better understand the relationship between demographic factors and levels of burnout. As the body of literature on the topic grows, better solutions can be proposed to help mitigate the development of burnout. Within the Firm utilized for the study, and other public accounting firms, data from this and similar studies can be helpful in the development of initiatives that combat the rising costs resulting from burnout.

**Biblical integration.** The results of this study contribute to the overall objective of operating businesses in a manner consistent with a Biblical worldview. Burnout
results from sin’s distortion of God’s intentions for human work. From a management perspective, maintaining reasonable expectations of employees, and offering compensation and benefits reasonable for the position, are imperative. From the employee perspective, it is important not to let work become an idol, or an obsession that takes over life. Each of these areas is addressed, in relation to how this study contributes to God’s will for businesses, and for employees’ work.

In owning and operating a business, management must carefully manage the requirements of the workplace in order to avoid conditions that are detrimental to employees’ health. The very definition of burnout implies the psychological condition results from workplace stress (Beheshtifar & Omidvar, 2013). Thus, from a Biblical worldview, it is important employers manage the work environment to verify that the environment is not inherently stressful. While stress can result from almost any situation, managers should take certain steps to minimize workplace pressures.

Taking a Biblical worldview on the workplace requires owners, or management of public accounting firms, view employees as their charges, or children, which leads to a protective relationship between employer and employee. The Bible encourages husbands to care for their wives, as Christ loves and cares for the Church (Ephesians 5:22-23, ESV), and similarly, employers should love and care for their employees. Ephesians 6:5-9 (ESV) also discusses the relationship between servant and master, indicating God’s view on the relationship between employer and employee. Owners and management of public accounting firms need to take this responsibility very seriously, and do what they can to minimize the pressures of the workplace. Van Duzer (2010) suggested this requirement is a calling, which results from the redemptive work of Christ in the world
after the Fall in the Garden of Eden. Taking this charge seriously results in positive changes in the work environment that help prevent or mitigate burnout in employees.

In addition to the requirement of management to take care of employees, it is employees’ responsibility to carefully manage priorities. Hardy (1990) wrote, “work is an important part of life, but it is not the whole of life” (p. 118). He stressed the importance of maintaining a good balance between one’s professional career and other responsibilities, like those as a spouse, parent, or child. Thus, while employers have a responsibility to create an environment that protects employees, the employees must also take steps toward protecting themselves from being overburdened by the many responsibilities of life. The Bible says humans are to flee idolatry and put no gods before the one true God (Exodus 20:3-4); thus, humans must avoid letting work become the highest priority in life. Employees are individually responsible for their own actions, and thus, must take steps toward protecting their own psychological health against the effects of burnout.

Research shows burnout it mitigated by periods of rest or detachment from the workplace (Sonnentag & Fritz, 2015), but this idea originated from the Bible. Van Duzer (2010) noted the Bible encourages periods of work and periods of rest, and that, as employees try to continue to squeeze more and more tasks and responsibilities into their daily lives, they move further away from God’s intentions for His Children. God modeled His view of work when he created the earth in six days, and then rested on the seventh (Genesis 2:2-3). Further, passages like Ecclesiastes 3 suggest humans should enjoy both periods of work and rest. God’s intention for mankind was not to allow work to overtake one’s life. Instead, He intended for there to be both periods of work and rest,
which helps to prevent the development of psychological and emotional stress and conditions like burnout.

The study provides important information to both employees and employers regarding the detrimental effects of burnout in public accounting firms. God intended for the human’s work to be fulfilling, but sinfulness and distraction from God’s original purpose has led to environments ripe for burnout to develop. The results of this study help to better inform employers and employees regarding the demographic factors of those experiencing burnout, in order to increase awareness regarding the condition, and to help fuel further research and study on the topic.

**Recommendations for Action**

The results of this study provide several pieces of evidence that may prove useful in helping to combat the issue of burnout within the Firm surveyed and for the public accounting industry as a whole. This section summarizes the researcher’s recommendations for action following the data analysis. The data collected should inform management practices within public accounting firms, in order to begin to combat the issues identified within this study.

First, the data indicated the surveyed population had moderate levels of emotional exhaustion and personal accomplishment, and low levels of depersonalization. These results are fairly optimistic, and indicate the Firm’s organizational culture discourages the development of depersonalization or cynicism. The researcher would recommend the Firm consider these results in order to determine what initiatives, if any, the Firm has in place to discourage cynicism in its employees. These initiatives, when identified, should be continued for the foreseeable future, in order to maintain the relatively low level of
depersonalization present among the employees. The researcher would also encourage management of the Firm to take an inventory of initiatives and policies that specifically address employees’ emotional exhaustion and personal accomplishment. Ideally, the Firm should investigate methods of converting these moderate scores into low average levels of emotional exhaustion, and high levels of personal accomplishment. The data collected for this study was specific to one large, national public accounting firm, so this specific population could potentially benefit the most from the data collected.

In general, the study indicated there was a weak correlation between age and gender and the level of burnout; however, even a weak correlation can provide useful information for the industry as a whole. The data indicated, in general, as age increases, the level of burnout decreases, which is consistent with other research that has indicated an improvement in burnout with age (Erickson & Grove, 2007). While the correlation calculated by this study was not strong, it is consistent with other research, and thus, supports the need to consider ways to help reduce burnout in younger professionals.

Several researchers have proposed methods of helping younger professionals adjust to the work environment. For example, Church (2014) conducted a study regarding the assimilation of public accounting professional into public accounting firms, and concluded the personal relationships, in addition to formal training, are key to helping young professionals survive the pressures of public accounting in their first few years of employment. She also pointed out predictable time away from the workplace and positive role models helped as well. Reinstein, Sinason, and Fogarty (2012) further expanded on this topic, noting, “Mentoring provides an excellent method for motivating staff, increasing productivity, reducing turnover and enhancing the protégés’ and
mentors’ self-worth” (p. 46). While neither of these studies specifically addresses burnout in younger accounting professionals, they certainly seem to address issues relevant to the development of burnout, like dealing with the stress of the public accounting environment, and the sense of self-worth or personal accomplishment. Personal relationships between upper management and younger staff, and even mentoring relationships, should be encouraged and incentivized within public accounting firms to help mitigate the development of burnout, and as a result, to reduce turnover and improve productivity.

The relatively weak correlation between gender and the level of burnout does not indicate any further action should be taken by the profession as a whole relating to this area. However, the slight correlation may indicate this is an area to watch for public accounting firms. As future researchers complete additional research, gender issues may become more prominent in the development of burnout.

**Recommendations for Further Study**

The study of burnout in public accounting professionals is a growing area of literature, and thus, much research is still needed in the area. The results of this study contribute to the growing body of literature, but are limited due to the fact the population included only one, large national public accounting firm. Additional research is necessary to better understand the relationship between demographic factors and the level of burnout in the industry as a whole, and in public accounting firms of difference sizes, and in different geographic areas.

The results of this study indicated a weak correlation between gender and age individually, and the level of burnout, indicating additional research is necessary to
determine the presence and/or strength of this relationship for the industry as a whole. While individually, the relationship between the independent variables and dependent variables was weak, the two independent variables together were able to predict the level of burnout in a statistically significant manner. However, due to the low adjusted R-squared values, these models can only account for a small percentage of the variance in the dependent variables. Adding additional demographic factors to the model may help to increase the accuracy of the prediction of burnout, but caution must be taken in choosing additional independent variables in order to avoid autocorrelation in the independent variables. Additional factors that may be useful to for future burnout models include personality type and overtime hours worked.

**Reflections**

This research project resulted from my own experience working in one specific public accounting firm, and observations of the experiences of peer public accounting professionals from a variety of firms, including national, regional, and local firms. My observations led me to question what individual characteristics resulted in a professional’s ability to flourish in the public accounting environment for a long period of time, while some peers were unable to stay in the industry for more than two or three years. My intuition led me to question whether personality traits or demographics led to these differences.

When it came time for me to complete this dissertation, I could not resist the opportunity to contribute to the literature on the issue of burnout, which so clearly results in turnover and loss of productivity in public accounting firms. The public accounting industry is well-known for its high turnover, and the literature provides evidence to
clarify this is not a myth: public accounting firms spend excessive amounts of money recruiting, onboarding, and training new hires each year, only to repeat the process again when new hires choose to leave due to the stressful working environment. This cycle is crippling public accounting firms of all sizes, and while the literature suggests this issue has been discussed for decades, little progress has been made to reach any conclusions.

When I began this research project, I believed females were going to exhibit significantly higher levels of burnout, and would be outnumbered by their male counterparts. This hypothesis was based on my own personal observations of watching fellow female public accounting professionals struggle with juggling the responsibilities of being a spouse, parent, and professional. The most recent data gathered by the AICPA reports that, as of 2014, women only hold about twenty-four percent of the partnership positions in United States public accounting firms (AICPA, 2015). I do not believe this preconceived notion affected my research project, but simply represented my expectation of the project’s results.

I was surprised at the results of my survey in relation to the differences by gender. In the population surveyed, the percentage of males and females were approximately fifty-two percent and forty-eight percent, respectively, which demonstrated a fairly even distribution of the client service professional population by gender. In addition, the correlation coefficient demonstrated a relatively weak relationship between gender and the level of burnout, indicating men and women both experienced relatively equal levels of burnout. I was surprised to see there was not a statistically significant difference in the level of burnout between men and women. While the model did not result in a significant correlation between gender and burnout, the distribution between male and female in the
older participants was significantly skewed. Male survey participants over the age of 50 equaled 87, while only 53 female participants over the age of 50 responded to the survey. This indicates female professionals may still be having a harder time successfully maintaining a long career in public accounting.

My initial thoughts relating to the correlation between age and burnout were mixed. Personal experience and intuition tells me the longer a person does something, the more desensitized and weary they become, which leads me to hypothesize older individuals would be more burned out. However, based on personal observations, I noticed the younger generations seem to be having more difficulty dealing with the stress of the workplace. Indeed, the results seemed to indicate burnout is worse in younger professionals, and gets better with age. I do not believe my position on the subject resulted in any bias or effect on the research project’s validity.

In relation to age, I believe the problem is two-fold. First, younger generations are having a harder time adapting to the expectations of the workplace because of the culture and current business environment. In comparing the culture present when Boomers were entering the workplace versus the culture Millennials are facing now, there are noticeable differences, such as the presence of smart phones that lead to a much more stressful work environment today. In addition, the recent economic downturn has resulted in an environment that stresses productivity. In turn, however, managers and supervisors value productivity over training. The mentor relationships and personal interaction between entry-level professionals and management is crucial to helping younger professionals become accustomed to the work environment.
Lastly, this study has profound Biblical implications for the workplace. I have been disheartened to watch many of my intelligent competent peers become burned out in the workplace because of the constant pressure placed on them by upper management. Colleagues have spoken of leaving the profession due to extreme anxiety and the physical effects of stress, like obesity, high blood pressure, and chest pain. Public accounting firms offer valuable services to their communities, but they cannot continue to neglect the emotional, physical, and mental health of their employees at the expense of productivity and profitability. God intended for work to be a fulfilling and pleasurable part of life, and many public accounting firms are not allowing employees to enjoy a work environment consistent with God’s intentions. I sincerely hope this study is just one small step towards making the work environments of public accounting firms more hospital and pleasurable for employees who work in them.

Summary and Study Conclusions

Job-related burnout is a growing issue among public accounting professionals, which results in costly turnover and loss of productivity. The deadline-oriented nature of the profession and excessive overtime required during busy seasons are suspected to drive employees to feelings of emotional exhaustion, depersonalization, and a loss of a sense of personal accomplishment. This study tested the theoretical framework developed by Maslach and Jackson (1981) in order to determine whether a relationship exists between the age and gender of accounting professionals and their level of burnout. The MBI-HSS, developed by Maslach, Jackson, and Leiter (1996) was used to measure the three dimensions of burnout in a population of client service professionals from a large, national public accounting firm in the United States. Participants were asked to
self-report select demographic information, as well as complete the MBI-HSS to
determine their level of burnout. The researcher concluded, using a multiple regression
model, the correlation between age and gender, individually, and the level of burnout was
weak. In addition, a model using age and gender to predict the level of burnout was not
reliable and generalizable to the population as a whole, as the relatively low adjusted R-
square values indicated that other factors contribute to the variability in burnout.

The results of this study contribute to the growing body of literature on burnout in
public accounting professionals, but much research still needs to be completed on the
issue. Recommendations for further research include investigating burnout in firms of
various sizes and geographic locations, as well as consideration of additional
demographic factors in order to better predict burnout. Lastly, and most importantly, it is
imperative researchers and practitioners continue to gain a better understanding of the
issue in order to research and propose solutions to mitigate the development of burnout in
public accounting professionals. Reducing the occurrence of burnout can not only reduce
the costs of public accounting firms, but also helps firms to better adhere to God’s
original intentions for human work.
References


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doi:10.1002/job.1830


doi:10.1371/journal.pone.0016937


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doi:http://dx.doi.org/10.1371/journal.pone.0149913


Appendix A: Survey Instrument

Demographic Questions

What is your age in years?
- 20 or under
- 21-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- 56-60
- 61-65
- Over 65

What is your gender?
- Single
- Married
- Divorced/Separated
- Widowed

Do you have children?
- Yes
- No

What is your current role?
- Associate
- Senior Associate
- Manager
- Director
- Principal

What is your employment status?
- Full-time
- Part-time
- (A third option has been omitted to protect the confidentiality of the Firm.)

What is your service line?
- Assurance
- Taxation
- Consulting
- 2 or more
What is your industry specialization?
- Options were omitted to protect the confidentiality of the Firm.

**Burnout Questionnaire**

Due to copyright restrictions, a full copy of the MBI-HSS cannot be reproduced here. Three sample questions are included below.

I feel emotionally drained from my work.
- Never
- A few times a year or less
- Once a month or less
- A few times a month
- Once a week
- A few times a week
- Every day

I feel I’m positively influencing other people’s lives through my work.
- Never
- A few times a year or less
- Once a month or less
- A few times a month
- Once a week
- A few times a week
- Every day

I’ve become more callous toward people since I took this job.
- Never
- A few times a year or less
- Once a month or less
- A few times a month
- Once a week
- A few times a week
- Every day
Appendix B: Supplemental Tables for Multiple Regression Models

Table B1
*Collinearity Diagnostics for Age, Gender, and Emotional Exhaustion*

<table>
<thead>
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<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition</th>
<th>Variance Proportions</th>
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<td>2.311</td>
<td>.02</td>
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<td></td>
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<td>5.463</td>
<td>.96</td>
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Table B2
*Residuals Statistics for Age, Gender, and Emotional Exhaustion*

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<th>Maximum</th>
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<td>Std. Residual</td>
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Table B3
*Collinearity Diagnostics for Age, Gender, and Depersonalization*

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<th>Eigenvalue</th>
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<td>.02</td>
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<td>.460</td>
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<td>.02</td>
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<tr>
<td>3</td>
<td></td>
<td>.082</td>
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Table B4
*Residuals Statistics for Age, Gender, and Depersonalization*

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Table B5
*Collinearity Diagnostics for Age, Gender, and Personal Accomplishment*

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Table B6
*Residuals Statistics for Age, Gender, and Personal Accomplishment*

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## Appendix C: Supplemental Tables for Population and Means

### Table C1
**Summary of Survey Participants by Age and Gender**

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<th>Age Group</th>
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<th>Female</th>
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</thead>
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<tr>
<td>Number</td>
<td>Percentage of Total Participants</td>
<td>Number</td>
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<td>Age Under 20</td>
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<td>Age 21-25</td>
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<td>30</td>
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</tr>
<tr>
<td>Age 61-65</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Age Over 65</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

### Table C2
**Mean Emotional Exhaustion by Age Group**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 21-25</td>
<td>24.61</td>
<td>72</td>
<td>9.708</td>
</tr>
<tr>
<td>Age 26-30</td>
<td>22.27</td>
<td>93</td>
<td>10.536</td>
</tr>
<tr>
<td>Age 31-35</td>
<td>20.76</td>
<td>88</td>
<td>9.058</td>
</tr>
<tr>
<td>Age 36-40</td>
<td>23.48</td>
<td>64</td>
<td>9.845</td>
</tr>
<tr>
<td>Age 41-45</td>
<td>19.32</td>
<td>53</td>
<td>9.315</td>
</tr>
<tr>
<td>Age 46-50</td>
<td>17.73</td>
<td>44</td>
<td>10.165</td>
</tr>
<tr>
<td>Age 51-55</td>
<td>18.46</td>
<td>54</td>
<td>9.912</td>
</tr>
<tr>
<td>Age 56-60</td>
<td>19.67</td>
<td>52</td>
<td>11.548</td>
</tr>
<tr>
<td>Age 61-65</td>
<td>13.67</td>
<td>21</td>
<td>6.628</td>
</tr>
<tr>
<td>Age Over 65</td>
<td>14.46</td>
<td>13</td>
<td>10.906</td>
</tr>
<tr>
<td>Total</td>
<td>20.71</td>
<td>554</td>
<td>10.206</td>
</tr>
</tbody>
</table>
Table C3
*Mean Depersonalization by Age Group*

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 21-25</td>
<td>7.56</td>
<td>72</td>
<td>5.536</td>
</tr>
<tr>
<td>Age 26-30</td>
<td>6.94</td>
<td>93</td>
<td>5.092</td>
</tr>
<tr>
<td>Age 31-35</td>
<td>4.99</td>
<td>88</td>
<td>4.013</td>
</tr>
<tr>
<td>Age 36-40</td>
<td>6.78</td>
<td>64</td>
<td>5.767</td>
</tr>
<tr>
<td>Age 41-45</td>
<td>4.58</td>
<td>53</td>
<td>4.396</td>
</tr>
<tr>
<td>Age 46-50</td>
<td>4.93</td>
<td>44</td>
<td>4.751</td>
</tr>
<tr>
<td>Age 51-55</td>
<td>4.81</td>
<td>54</td>
<td>4.057</td>
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<td>Age 56-60</td>
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<td>4.713</td>
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<td>5.68</td>
<td>554</td>
<td>4.890</td>
</tr>
</tbody>
</table>

Table C4
*Mean Personal Accomplishment by Age Group*

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 21-25</td>
<td>32.58</td>
<td>72</td>
<td>6.458</td>
</tr>
<tr>
<td>Age 26-30</td>
<td>32.67</td>
<td>93</td>
<td>6.847</td>
</tr>
<tr>
<td>Age 31-35</td>
<td>34.43</td>
<td>88</td>
<td>6.757</td>
</tr>
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<td>34.55</td>
<td>64</td>
<td>6.815</td>
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<td>36.38</td>
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<td>6.657</td>
</tr>
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<td>Age 46-50</td>
<td>37.64</td>
<td>44</td>
<td>8.477</td>
</tr>
<tr>
<td>Age 51-55</td>
<td>37.15</td>
<td>54</td>
<td>7.207</td>
</tr>
<tr>
<td>Age 56-60</td>
<td>36.94</td>
<td>52</td>
<td>8.168</td>
</tr>
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<td>21</td>
<td>4.700</td>
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<td>Age Over 65</td>
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<td>35.17</td>
<td>554</td>
<td>7.319</td>
</tr>
</tbody>
</table>
Table C5  
*Mean Emotional Exhaustion by Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>19.97</td>
<td>289</td>
<td>10.366</td>
</tr>
<tr>
<td>Female</td>
<td>21.52</td>
<td>265</td>
<td>9.986</td>
</tr>
<tr>
<td>Total</td>
<td>20.71</td>
<td>554</td>
<td>10.206</td>
</tr>
</tbody>
</table>

Table C6  
*Mean Depersonalization by Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5.78</td>
<td>289</td>
<td>5.007</td>
</tr>
<tr>
<td>Female</td>
<td>5.58</td>
<td>265</td>
<td>4.767</td>
</tr>
<tr>
<td>Total</td>
<td>5.68</td>
<td>554</td>
<td>4.890</td>
</tr>
</tbody>
</table>

Table C7  
*Mean Personal Accomplishment by Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>36.46</td>
<td>289</td>
<td>7.218</td>
</tr>
<tr>
<td>Female</td>
<td>33.77</td>
<td>265</td>
<td>7.182</td>
</tr>
<tr>
<td>Total</td>
<td>35.17</td>
<td>554</td>
<td>7.319</td>
</tr>
</tbody>
</table>

Table C8  
*Mean Emotional Exhaustion, Depersonalization, and Personal Accomplishment by Role*

<table>
<thead>
<tr>
<th>Role</th>
<th>N</th>
<th>Mean Emotional Exhaustion</th>
<th>Mean Depersonalization</th>
<th>Mean Personal Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate</td>
<td>95</td>
<td>23.20</td>
<td>7.01</td>
<td>32.48</td>
</tr>
<tr>
<td>Senior</td>
<td>112</td>
<td>21.50</td>
<td>6.13</td>
<td>32.21</td>
</tr>
<tr>
<td>Manager</td>
<td>85</td>
<td>19.73</td>
<td>5.11</td>
<td>36.07</td>
</tr>
<tr>
<td>Director</td>
<td>98</td>
<td>21.74</td>
<td>5.49</td>
<td>34.12</td>
</tr>
<tr>
<td>Principal</td>
<td>164</td>
<td>18.61</td>
<td>5.03</td>
<td>38.91</td>
</tr>
</tbody>
</table>
Table C9
Mean Emotional Exhaustion, Depersonalization, and Personal Accomplishment by Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>N</th>
<th>Mean Emotional Exhaustion</th>
<th>Mean Depersonalization</th>
<th>Mean Personal Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>139</td>
<td>23.86</td>
<td>6.96</td>
<td>31.99</td>
</tr>
<tr>
<td>Married</td>
<td>377</td>
<td>19.64</td>
<td>5.22</td>
<td>36.12</td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td>33</td>
<td>19.82</td>
<td>5.39</td>
<td>37.24</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
<td>19.20</td>
<td>7.00</td>
<td>38.40</td>
</tr>
</tbody>
</table>

Table C10
Mean Emotional Exhaustion, Depersonalization, and Personal Accomplishment by Parental Status

<table>
<thead>
<tr>
<th>Parental Status</th>
<th>N</th>
<th>Mean Emotional Exhaustion</th>
<th>Mean Depersonalization</th>
<th>Mean Personal Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has Children</td>
<td>339</td>
<td>18.83</td>
<td>4.90</td>
<td>36.71</td>
</tr>
<tr>
<td>No Children</td>
<td>215</td>
<td>23.67</td>
<td>6.93</td>
<td>32.75</td>
</tr>
</tbody>
</table>

Table C11
Mean Emotional Exhaustion, Depersonalization, and Personal Accomplishment by Service Line

<table>
<thead>
<tr>
<th>Service Line</th>
<th>N</th>
<th>Mean Emotional Exhaustion</th>
<th>Mean Depersonalization</th>
<th>Mean Personal Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance</td>
<td>230</td>
<td>21.73</td>
<td>5.93</td>
<td>34.11</td>
</tr>
<tr>
<td>Taxation</td>
<td>184</td>
<td>20.88</td>
<td>5.75</td>
<td>35.54</td>
</tr>
<tr>
<td>Consulting</td>
<td>29</td>
<td>16.38</td>
<td>3.07</td>
<td>37.21</td>
</tr>
<tr>
<td>2 or more</td>
<td>111</td>
<td>19.44</td>
<td>5.74</td>
<td>36.23</td>
</tr>
</tbody>
</table>
Appendix D: IRB Approval Letter

August 5, 2016

Jamie Stowe
IRB Exemption 2585.080516: A Quantitative Examination of the Relationship between Age, Gender, and Burnout in Public Accounting Professionals in a United States National Firm

Dear Jamie Stowe,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
   (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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