INTERGENERATIONAL REACTION TO WORKPLACE STRESS AMONG INDUSTRIAL AUDITORS

A dissertation submitted

by

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October, 2019

to

ASHFORD UNIVERSITY

Upon the recommendation of the Faculty and the approval of the Board of Trustees, this dissertation is hereby accepted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

IN ORGANIZATIONAL DEVELOPMENT AND LEADERSHIP

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by

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Abstract

Much has been written about behaviors and characteristics of different generations of workers in the workplace. Generational groups have been characterized by their personal preferences, work preferences, values, and attitudes. This study focused on a group of industrial auditors working for a certification body in North America and studied auditor reaction to stress and burnout indigenous to their work environment. The mixed method explanatory study involved both quantitative surveys using the Area of Worklife Survey and the Maslach Burnout Inventory General Series, followed by in-depth open-ended interviews of members of the three generational groups within the auditor population. Findings from the surveys and interviews were compared to gauge intergenerational reaction to stress and burnout. The results indicated differences of each generational group to common stressors causing variable levels of stress and burnout among these groups. The study concluded that while all groups of auditors experienced varying levels of stress and burnout in response to their work environment, trends were identified unique to each generational group studied. Baby boomers were able to cope with stress and accept it as a necessary part of their job. Generational Xers were task oriented and experienced stress due to perceived unnecessary delays resulting in additional work. Millennials were focused on perceived respect and on work/life balance and experienced stress when work infringed on personal time.

Key words: coping with stress, causes of burnout, baby boomers, Generation X, millennials



ACKNOWLEDGEMENTS

The number of kind people who have supported me since the beginning of my studies are too numerous to mention. My gratitude extends to Kevin Beard and Jim Dozier of National Quality Assurance, Inc. who permitted me access to the auditor base, and to all of the professional industrial auditors at NQA who took the time to participate in the survey, and especially to the auditors who interviewed for the study. Without their support, this study would not have been possible.

Thank you to my dear friends Sandy and Jim Rosenberg, Linda and Marvin Homonoff, and Wayne Franklin who were there for me when completing this study seemed daunting and impossible.

Thank you to Drs. Scott Burrus and Erick Aguilar for patiently working with me, and for providing me with advice and counsel in methodology and content.

A special thanks to Dr. Peggy Sundstrom, my professor, mentor, and dissertation chair. Dr. Sundstrom challenged me to produce my best work and was an inspiration both in class and throughout this study. She is a true scholar and perfectionist, and her tough love and her quest for excellence kept me focused and inspired throughout the study.

Finally, my deepest love, thanks and appreciation go to my wife, Edna Kurtzman, who sacrificed so much to make this study and degree possible. She has been my greatest critic, supporter, advisor, and partner and has endured the thousands of hours that were required to complete this work. She is and always will be my guiding light.



DEDICATION

This study is dedicated to the late Dr. Cheryl Watkins Snead. Cheryl was a true inspiration to me in pursuing this doctoral degree and to completing this study. As the founder and Chief Executive Officer of Banneker Corporation, Chery set the standard for leadership and organizational development. As a successful entrepreneur, she established a diverse and cohesive corporation which has grown to become a successful international entity.

During this study, Cheryl met with me several times and was both supportive and inquisitive about my work. She was a natural leader, and shared many of her observations of the differences in the reactions of workers to stress and burnout, and how she guided these workers to achieve success. Her drive and determination, and especially her radiant smile were addictive.

As a trustee of Bryant University, Cheryl was empathetic to the challenges and demands of a doctoral student and encouraged me to excel. She taught me that the key to success is to first and foremost respect and appreciate every person as a unique individual with unique talents, wants and needs, and to celebrate and embrace diversity as she did throughout her life.

Cheryl was a woman of fidelity, integrity and passion. While her untimely death was a deep loss to both the business and academic communities, I hope that in some small way this study will honor her memory in contributing to academic knowledge and effective business practice.



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CHAPTER I: INTRODUCTION

General Statement

Between 2001 and 2017, extensive academic research considered intergenerational interaction in the workplace (Aug, Menguc, Spryopoulou, & Wang, 2016; Callahan, 2010; Day, Sibley, Scott, & Tallon, 2009; DiConsiglio, 2009; DiRomuoldo, 2006; Fishman, 2016; Karp & Sirias, 2001). Studies considered the key causes of stress and burnout in the industrial sector and how generational groups react to specific workplace stressors (Aug et al., 2016; Bland, Melton, Welle, & Bigham, 2012; Day et al., 2009; Goh, 2016). The majority of these studies examined workers in health care (Childs & Stoeber, 2012; Day et al., 2009), teaching (Bland et al., 2012; Kehr, 2004; Lovely, 2005) and legal professions (Kupperschmidt, 2006, while few studies focused on industrial sectors (Catano & Morrow Hines, 2016; Costilla, 2016; McGuire, Todnem By, & Hutching, 2007), specifically the industrial auditor profession.

This study researched a group of professional auditors who represented a certification body (CB) that registered organizations to international quality, environmental and safety standards as published by the International Standards Organization (ISO) and represented in the United States by the American National Accreditation Boards (ANAB). Professional auditors undergo rigorous training and examination before being certified to represent the CB in auditing organizations to the ISO standards.

This study proposed to examine how different generational groups of auditors responded to incidents of work stress. The study used a mixed method research approach to measure how and why industrial auditors of different generations react to stressful situations. Both quantitative testing and qualitative were used to collect data to measure generational differences to stressful situations. The study sought to determine whether reactions to stress



affected work performance and led to potential burnout. This determination was made through a comparison of the quantitative and qualitative data.

The study drew from a population of 275 affiliated industrial auditors representing the three predominant generational groups in the present workforce, including baby boomers born between 1946 and 1965, Generation X born between 1965 and 1980 and millennials, also referred to as Generation Y, born between 1981 and 2000. These auditors often work as teams for a single certification body accredited by the American National Accreditation Board (ANAB) and the International Standards Organization (ISO) to grant certification of quality, environment, and safety programs to industries worldwide. Auditors work under high stress conditions, including travel constantly, have strict deadlines and complex management challenges, and must critically evaluate clients in almost every industry. They must also undergo training, and maintain continuous education credits. They are often audited in the field by the ANAB to validate their competence and audit skills, presenting additional workplace stress.

The three generations of auditors working side-by-side potentially create stress for the auditors. Dress habits, speech, diction and communication habits, patterns of formality in addressing fellow workers by title or first name, socialization outside the workplace, and knowledge of technology were different among the three generational groups (Callahan, 2010). Coupled with these outward differentiators were differences in values and attitudes that identify distinctions between the generations (Cunaqan, Karkoulian, & El-Kassar, 2016). These outward and inward distinctions may be initial contributors to discomfort and stress in the workplace.

Based on the results of this research, later researchers may expand the concepts and



conclusions of this study to other professions and industries in which generational research is lacking and build a model for minimization and resolution of stress. This study attempted to provide a foundation for further research on the subject of stress in a specific population, the industrial auditor workforce for which little research has yet been conducted. The results of this study provided data that could be used for comparison to data from other professions in terms of response to similar stressors and levels of burnout among the same intergenerational groups. Future studies could clarify whether stressors identified in this study have the same or different effects on other professions.

Statement of the Problem

Since the early 1990s, there has been documentation of a rising level of burnout and job turnover among professional employees due to job stress (Sacks, 2016). Several studies have determined that burnout and turnover are attributable to interpersonal differences among co- workers (Noviucevic & Buckley, 2011; Sacks, 2011; Siebert, 2015; Williams, 2016). Several previous studies considered the relationship between generational groups in specific professions including physicians (Dewa, Loong, Bonata, Nguyen, & Jacobs, 2014), military health professionals (Clifford, 2014), nurses (Wang, Kunaviktikul, & Wichaikhum, 2013) and teachers (Chang, 2009), with the vast majority of research to date focusing on the teaching and medical professions.

DiRomualdo (2006) indicated that when working in high pressure, demanding work situations, different generations of workers presented distinctly different reactions to work conditions including absenteeism, illness, and depression. This may have been the result of upbringing, social norms, and differences in education and training levels or differences in work philosophies (Kennedy, 2006). Such generational differences have suggested markedly



different ways of coping with day-to-day stress. This stress, while inevitable in high growth organizations, produced varied intergenerational reactions. The general problem was that different generational groups may have presented uniquely different responses to specific workplace stress situations, which made it difficult for organizations to respond proactively to manage stress in multi-generational workplaces (Johnson & Johnson, 2010; LeBeau, 2010; McGuire, Reve, & Hutchins, 2015).

Previous studies have indicated that specific organizational interventions can be used to reduce frustration of employees of different generational groups working together, including teaming (Johnson & Johnson, 2010), equity in compensation, bonuses and privileges (LeBeau, 2010), and flexible work conditions (Deniker, Joshi, & Marticchio, 2007). While there have been numerous studies conducted on the subject of social and cultural differences between generational groups, to date research is scarce regarding stress and burnout specific to generational groups of professionals in the service industry, and more specifically among professional industrial auditors. Only one study was found which considered job stress among auditors, and that study was limited to non-certified internal auditors, based within organizations, who are not exposed to the same stressors as the professional auditors included in this study (Larson, Meier, Poznanski, & Murff, 2004).

The service industry is characterized by several distinct stressors that contribute to workplace stress and conflict. Rapid growth, long work hours, demanding travel requirements and strict deadlines for work accomplishment are inherent in the work of service professionals such as professional industrial auditors (McGuire et al., 2015). Industrial auditors may have reacted differently to such stressors and conflict, which could have exacerbated stress and directly contributed to burnout in ways that were different than reactions of professionals in



other industries such as medicine, education or law. The specific problem is that generational differences in response to workplace stress among service industry professionals as represented by industrial auditors may promote intergenerational conflict and burnout. Such burnout may result in high expense to organizations in terms of turnover, retraining and lost productivity.

DiConsiglio (2009) summed up the current problem in stating,

Welcome to the Generation Wars. For the first time in American history, three Generations are now working desk-to-desk and each brings wildly varying views on work and life into the office. The battle lines have been drawn. On one side are the baby boomers, the post-war generation born between 1946 and 1964. On the other hand, Generation X born between 1965 and 1980 make up 36% of the workforce. But the real conflict arises when the final ingredient is added to the generational stew, the much-hyped millennials, born between 1981 and 2000. Let the battle begin. (p. 24)

Purpose of the Study

The purpose of this exploratory sequential mixed methods study was to examine levels of stress and burnout in different generational groups and then to evaluate the differences between generational groups and their methods of coping with workplace stress. The study was conducted with a population of 275 professional industrial auditors residing in North America, who work for a certification body (CB) headquartered near Boston, Massachusetts, and who travel worldwide to complete their job responsibilities as full-time employees or as contractors. Three generational groups currently represented in the service industry were included in the study: baby boomers, Generation X and millennials. These generational groups showed markedly different psychological and cultural characteristics, which caused



variation in response to day-to-day stress common to industrial auditing. The study first examined the relationship between levels of stress and burnout in the three generational groups of industrial auditors as measured by the Area of Worklife Survey (Leiter & Maslach, 2000), and the Maslach Burnout Inventory-General Survey (Maslach, Jackson, Leiter, Schaufeli, & Schwab, 2000). The assessments were consolidated to determine if the different generational groups experienced different reactions to stress and burnout. The study identified differences in the reaction to stressful situations among the generational groups to identify unique responses to stress that was specific to each generation. This is further discussed in Chapter III. Of the total population of 275 available auditors, a desired sample size of at least 66 auditors as determined by a G* power analysis calculation described in Chapter III was attempted. Of the 100 survey licenses purchased by the researcher, 99 auditors responded, of which 90 auditors successfully completed the survey, thereby exceeding the minimum sample requirement.

In the second part of the study, interviews were used to gather subjective perspectives of each generation to workplace stressors such as the sacrifice of leisure time, high travel demands without compensation, and strict deadlines for work accomplishment. The details of this interview format is described in Chapter III. Interview participants were solicited from among the industrial auditors who elected to participate in the quantitative portion of the study. Five participants were selected from the baby boomer and Generation X groups and the three available participants from the millennial group, to yield a sample of 13 participants. Purposeful selection of candidates was made by screening for the participants from each generational group who completed the questionnaire.



Importance of the Study

The findings from this study could be used to reinforce the previous assertions that reaction to stress is directly related to generational upbringing, experience, and culture. The ultimate research application was to use study data to determine what contributes to burnout among industrial auditors of different generational groups and how job-related stress leading to burnout could be addressed and reduced considering generational factors. This could lead to additional studies focused on whether stress and burnout among professional auditors are common to stress and burnout among professional workers in other service occupations. The benefit of this study is to identify and describe the specific generational reactions to stress, leading to the workplace conditions that may drive burnout among these auditors so that well-planned positive action can be taken to reduce burnout and possible attrition, considering these generational differences.

Shaub, Finn, and Munter (1993) conducted a similar study of financial auditors and found significant social and cultural differences among workers of different age groups.

Shaub et al. (1993) concluded that among financial auditors, older auditors preferred formal, manual accounting methods, while younger auditors made greater use of technology in the performance of their work. Further, older auditors were willing to work longer hours and on weekends, while younger auditors preferred to work at home or to work eight hour days in the office. Both groups preferred low travel requirements. Further, factors of infrastructure such as titles, private offices versus common work areas, assigned administrative assistants, and acknowledgement of seniority were found to be important to older auditors, while younger auditors were more motivated by group activities and personal recognition for work performed. While the study by Shaub et al. (1993) suggested that work habits differed among



generational groups of financial auditors, changes in technology and cultural norms may have affected workplace stress and resultant burnout in the quarter century since the Shaub et al. (1993) study was published. Since that time, no other studies of stress among auditors has been conducted. This study reconsidered stress factors among industrial auditors and sought to both quantify and explain generational differences in reaction to stress.

Like the study by Shaub et al. (1993), this study considered the unique conditions in which industrial auditors work and the cultural and social factors of age that affected their levels of stress and burnout. Sen Gupta and Gupta (2008) indicated that due to a lack of consciousness of generational factors, organizations can falter in retaining highly qualified staff. Individuals of different generations may feel slighted or unrecognized for their contributions in such organizations resulting in frustration, stress, and ultimately attrition. This research attempts to contribute unique knowledge to the better understanding of generational differences in reaction to stress. The identification of generationally different reactions to stress may be used universally in the service industry to develop strategies for reduction of stress and burnout that may lead to attrition.

Theoretical and Conceptual Framework

Among the theories published on the modern workplace, two classical theories serve as a foundation for many modern theories of how workplace behavior evolves. These are the theories of Abraham Maslow and Douglas McGregor (Barrington, 2008; Ray & Manjaris, 2016; Schmidt, Roesler, Kusseron, & Rau, 2014). These theories present a foundation for expanded research in specific generational behaviors. The variation in generational needs was further explored in this study.

Maslow's theory of human motivation represented a common denominator for more



modern theories in industrial psychology as referenced in numerous studies on workplace motivators and stressors (Gale, 2012). Maslow's theory described five levels of basic human need that Maslow asserted must be sequentially fulfilled before the next need is achievable. These needs from lowest to highest are physiological, or basic needs for survival; safety, or security through order and law; belonging and love, or affiliation with a group; esteem or recognition and achievement; and, finally, self-actualization, or fulfillment of personal potential (Maslow, 1943). In the context of this study, a key consideration was how workers attained the psychological need for belonging and affiliation, esteem, and recognition. The different generations may have different expectations of affiliation with a group. They may identify by affiliation with others sharing similar characteristics such as gender, sexual orientation, ethnic, or racial characteristics. In this study, similarity by generational group was the key affiliation factor to be considered. In gaining affiliation, individuals may identify with others of the same age or generational group, and become uncomfortable with people of different age groups. Two recent studies considered the issues of affiliation and acceptance as important contributors to the reduction of workplace stress. Shea and Fitzsimmons (2016) considered affiliation and its direct enhancement of esteem and recognition amongst peers in the workplace to be a significant motivator for people in the workplace. Shea and Fitzsimmons (2016) considered affiliation to be critical to good working relationships and stated that this is especially relevant to younger employees who identify with teaming and group effort toward achieving recognition. Shea and Fitzsimmon's findings associated with a study of American office workers indicated that 90% of workers surveyed preferred to be affiliated with their co-workers rather than to work individually. Brandstatter, Job, and Schultz (2016) equated person-fit or lack thereof to incidents of burnout in American industry.



Another classical theory of work psychology is McGregor's theory x and theory y, which defines management and leadership styles using the classification of x and y. Theory x leadership is defined as autocratic, with vertically integrated organizations with strong structure, disciplines, and top-down management methodology. Theory y leadership is defined as interactive, with horizontally integrated organizations, which encourage employee participation, less structure, and participatory management methodology (McGregor, 1957). McGregor's theory x and theory y were crucial to this study in that some generational groups including baby boomers and early Gen Xers may be more comfortable in a structured theory x environment, whereas late Gen Xers and millennials seeking independence and creativity may be more comfortable in a less structured theory y environment and person-job fit may be expanded upon in this study in researching affiliation and acceptance as it applies to industrial auditors. This study built upon the studies of Shea and Fitzsimmons (2016) and Brandstatter et al. (2016) in further developing contrasts between the generations in their attitudes toward teaming and affiliation in the incidents of burnout among industrial auditors. Through directed questions during the qualitative phase of this study, the researcher focused on the preferences of the three generations in regard to working alone or in affiliation with coworkers and comfort level with person-job fit.

A later extension of McGregor's Theory was the theory of work adjustment (TWA) elucidated by Dawis, England, and Lofquist in 1964. The TWA outlined three conditions that define workplace satisfaction: fit, skill level, and affiliation (Dawis et al., 1964). The TWA models that workers seek out co-workers with similar characteristics. Such characteristics can include personality factors, knowledge and skill factors, and organizational affiliation factors. The TWA was pertinent to the present study in its indication that worker satisfaction is gained



through commonality with others in the workplace. For example, affiliation might be associated with union membership. A non-union employee may have difficulty assimilating into a group of union workers. In this study, a member of a generational age group may have difficulty assimilating into a group consisting of members of a different generational age group.

Another theory proposed in 2004 by Hugo Kehr is the work motivation theory (WMT). This theory is a derivative of Maslow's theory and defines motivators to individual workers based upon their work environment, taking into consideration the moral, ethical, and physical environment of the workplace (Kehr, 2004). Kehr suggested that motivation is enhanced when workers associate themselves with the workplace, are not violating their moral or ethical values, and are comfortable in their physical work environment. The WMT is important to this study in that morals and ethical values may differ between the three generations under consideration. If a worker is placed in a group that has moral and/or ethical values other than her or his own, the worker may become demoralized, depressed or, at a minimum, less productive.

These theories presented a foundation for understanding psychological motivators crucial to the behavior of people in the workplace. They encapsulate human drivers for inclusion and affiliation by defining both intrinsic and extrinsic needs and conditions. This study attempted to draw upon these theories to align with generational differences to apply workplace motivators to industrial auditors.



Overview of the Research Design

This sequential exploratory mixed method study was conducted using a sample of industrial auditors who are employees or contractors of an organization providing certification of quality, environmental and/or safety practices to a myriad of industries. These professional auditors were recruited with the support of the parent organization, known as the Certification Body (CB). The officers of the CB agreed to endorse the study, encouraged auditor participation and signed an agreement to allow the study to proceed. The CB provided a list of qualified and active auditors, which were organized by generational group. In return, the researcher provided the officers of the CB with general information and summarized findings obtained through the study prior to its final publication.

Recruitment of auditors was accomplished through a mass email invitation to the entire population of 275 auditors. During the solicitation, information was disseminated regarding the purpose and scope of the study, expectations of the participants including informed consent, time required to participate, and assurance of confidentiality of their responses. To ensure significant statistical power of the results, a minimum of 66 participants were needed. This sample size was calculated using a population of 275 auditors, an alpha of 0.05, a power of 0.80, and a large effects size (f = 0.40) (Faul, Erdfgelder, Buchner, & Lang, 2013). Ninety auditors ultimately volunteered and participated.

Participants were sent a link to the Mind Garden Internet site where they were asked to agree electronically to a statement of informed consent. Once consent was confirmed, participants were able to access and complete the survey online.

Quantitative data were collected from the responses to the Area of Worklife Survey (AWS) and the Maslach Burnout Inventory-General Survey (MBI-GS). The AWS is designed



to measure six workplace conditions: workload, control, reward, community, fairness, and values (Leiter & Maslach, 2000). The MBI-GS is designed to assess the three components of burnout syndrome: emotional exhaustion, which measures feelings of being overextended and exhausted; cynicism, which measures an indifference or a distant attitude toward one's work; and professional efficacy, which measures satisfaction with past and present accomplishments, and explicitly assesses an individual's expectations of continued effectiveness at work (Maslach et al., 1996). Based upon consultation with a methodologist from Mind Garden, the publisher of the AWS and the MBI-GS, the researcher made the decision to integrate the AWS and MBI-GS into one survey to capture both perceived workplace stress factors and resultant burnout potential associated with each generational group.

Phase 1 data was collected and collated by Mind Garden, Inc. which was contracted by the researcher to assist in the administration of the survey, data collection, and delivery of the data for analysis by the researcher. Following administration of the AWS/MBI-GS, correlational analysis of the data was performed by the researcher using SPSS to identify whether the three generational groups reported experiencing different levels of burnout and stress. Nominal data from the AWS/MBI-GS, once collected, was analyzed with determination of Cronbach's Alpha as an exploratory factor analysis. Each generational group was isolated as a statistical subgroup and Pearson's Correlational Coefficient was used to determine correlation values.

Of immediate concern was obtaining sufficient members of each generational group to constitute a statistically significant sample. To determine these samples, a one-way analysis of variance (ANOVA) was constructed. Using Cohen's f test (Cohen, 1988), effect size was



calculated, and subsequently, proper significant sample size for the three subgroups was determined. When insufficient members of a particular generation responded to the survey, the researcher directed Mind Garden, the survey administrator, to recruit additional auditors from the total population of 275 until sufficient numbers of participants in each generational group were attained. While sufficient numbers of participants in the baby boomer and Generation X groups were available, only three millennials were found to exist within the population. Therefore, the number of millennials was insufficient to include in the quantitative phase analysis.

The second phase of the study consisted of qualitative semi-structured interviews involving 13 participants representing the three generational groups. Participants in Phase 2 were selected from participants in Phase 1 and included the three millennials. An invitation to participate was communicated to the first five survey respondents, baby boomer and Generation X generational groups, and to the three millennials. This invitation was written by the researcher and communicated through Mind Garden, which issued the invitation to the email addresses of the first five individuals who responded to the Phase 1 Survey from each generational group. However, due to the limited number represented among millennials, the three available millennials were interviewed. The selected respondents were provided with a hyperlink to RSVP as to their willingness to participate. If an invitee accepted, he or she was sent an informed consent for the qualitative phase of the research study. If an invitee declined to participate in an interview, Mind Garden issued an invitation to the email address of the next consecutive participant who responded to the Phase 1 survey and continued this process until the participants from each generational group were identified and completed the informed consent for an interview. Once the 13 identified participants completed the



informed consent, Mind Garden provided the researcher with the email addresses of the participants. The researcher then contacted each participant by email and discussed the qualitative study, reviewed factors of confidentiality, and answered any questions the participants may have had. In addition, a time was scheduled for the interview, considering the availability of both the participant and the researcher.

A semi-structured interview script helped the researcher query how participants dealt with stressors and their reactions and coping mechanisms for dealing with stress. The script was designed to identify the generational group of the participant, and the work-related stressors experienced on a regular basis. The script explored attitudes and sensitivities toward affiliating with co-workers of different generational groups as well as with workers within each participant's own generational group. The responses of each generational group that were related to both experiencing and coping with stress were analyzed by performing a thematic analysis of the interview data (Braun & Clarke, 2006). This thematic analysis included a thorough familiarization with the data, a generation of initial codes that enabled the researcher to categorize responses, a search for themes, and a review of these themes and refinement of themes. Once the themes were refined, codes were assigned. These codes reflected responses to interview questions and initially reflected categories of responses. As the interview process continued, sub-coding became necessary to categorize responses of the participants. For example, codes for questions were coded as high, medium, or low stressor; and sub-codes included anxiety, depression, or anger.

Data from the quantitative component of the study enabled the researcher to identify whether the three generational groups reported different levels of workplace stress levels and associated levels of burnout. These data helped drive the qualitative interview questions, and



were combined with the interview data to explicate both the level and type of burnout and stress experienced by each generational group, and how each generational group reacted to and coped with the stressors that could have contributed to burnout. This allowed the researcher to develop conclusions about how each generational group experienced work-related stress, and how each group dealt with stress.

Because industrial auditors work at client sites worldwide and are greatly dispersed geographically, interviews were conducted using electronic communication tools. Interviews were audiotaped to assist the researcher in analyzing these reactions and then transcribed.

One participant was interviewed face-to-face in accordance with his wishes and availability to be interviewed at the annual auditor conference.

During the interviews, results of the AWS/MBI-GS for each participant's specific generational group were shared with the participants who were asked to comment on whether these results were accurate to their perception of the generational group. Upon completion of the interviews, responses were critically evaluated for generational similarities and differences using a thematic analysis approach to determine whether a trend existed among each generation with respect to generational affiliation and tendencies to burnout under specific stressors. Consideration focused on the specific causes of stress, how stress affected each generational group, and how members of each generational group cope with stress. The use of both quantitative testing and qualitative interviews was designed to cross-compare scores and interviews and validate conclusions.



Definition of Terms

The following terms are defined to assist the reader in understanding the specific meaning attributed to each term in this dissertation.

Baby boomer generation: Workers born between 1946 and 1964 (Houlihan, 2016).

Burnout: Fatigue, frustration or apathy resulting from prolonged stress, overwork or intense activity (Patrack, 2015).

Generation X: Workers born between 1965 and 1980 (Houlihan, 2016).

Generation Z: Workers born after 2000 (Houlihan, 2016).

Jonsers generation: Workers born in the latter part of the baby boomer Generation between 1959 and 1964 (Williams, 2000).

Millennial generation: Workers born between 1981 and 2000. This generation is also commonly referred to as Generation Y (Houlihan, 2016).

Stress: A specific response by the body to a stimulus, as fear or pain, that disturbs or interferes with normal physiological and psychological equilibrium (Sumner & Gallagher, 2017).

Stressor: An activity, event, or other stimulus that causes stress (Sumner & Gallagher, 2017).

Traditionalist generation: Workers born between 1932 and 1945. This generation is also commonly referred to as the "great generation" (Houlihan, 2016).

Research Questions and Hypotheses

This study addressed six questions, two quantitative and four qualitative. These questions were important to the study as they were fundamental to the understanding of differences between generational groups and their methods of coping with workplace stress.



RQ1: What between group differences in reaction to common stressors as measured by the combined AWS/MBI-GS exist between generational groups of industrial auditors?

H₁₀: No relationship exists between generational affiliation and reaction to stressors as measured by the AWS/MBI-GS.

H1: A statistically significant relationship exists between generational affiliation and reaction to stressors as measured by the AWS/MBI-GS.

RQ2: What between group differences in potential burnout resulting from stress as measured by the AWS/MBI-GS exist between generational groups of industrial auditors?

H2₀: No significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the AWS/MBI-GS.

H2₁: A significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the AWS/MBI-GS.

The qualitative research questions are as follows:

RQ3: How do participants representing the three generational groups of industrial auditors perceive work related stress?

RQ4: By what means do participants representing the three generational groups minimize stress? RQ5: Which of the perceived work related stressors are the greatest contributors to reduced work effectiveness and ultimately to burnout as reported by participants representing the three generational groups?

RQ6: How do participants representing the three generational groups perceive the reaction of other generational groups to work related stress and burnout?



Assumptions, Limitations, and Delimitations

Assumptions

All participants were employed or contracted as certified professional auditors. Certification requires that the auditor be recognized by Exemplar, a division of the American National Standards Institute/American National Accreditation Board (ANSI/ANAB), or by the International Register of Certified Auditors (IRCA). A third method of certification is through the CB who must assure that the auditor meets the rigorous requirements set forth by ANSI/ANAB or IRCA. These participant qualifications ensured that all industrial auditors had comparable professional qualifications and had been exposed to the stress associated with industrial auditing for at least two years. This established commonality of the research participants and enabled the researcher to isolate perceptions of stress based upon generational groups. The CB verified that all auditors identified on the list provided to the researcher by the CB met these qualifications.

It was assumed that the CB would render full support and assistance to the researcher in promoting and endorsing the study in return for receiving a summary of finds that could be used for improvement of the organization. Full support included allowing the researcher access to email addresses of qualified auditors, and allowing access to email addresses. It was further assumed that sufficient numbers of auditors from each of the three generational groups were represented in the general population of auditors. It was crucial that adequate samples of each group be available for surveying and interviewing. This was calculated using the one-way ANOVA previously described and discussed in more detail in Chapter III. As this research was restricted to a single CB, it was assumed that auditors associated with this one CB were representative of other auditors working through other certification bodies.



It was assumed that Mind Garden had the necessary resources and expertise to assist in the design, administration, and data collection of the survey results collected through the AWS/MBI-GS. Finally, it was assumed that auditors would respond honestly and not be influenced by what they considered to be correct or socially acceptable. As the researcher was likely to be known to the participants, the researcher reminded the participants that the best way to contribute to the success of the study was to answer honestly rather than in a way that they sensed might help the researcher or the study. Preisendorfer and Wulter (2014) indicated that respondents to surveys and tests may respond as they believe the researcher would like, or as perceived as normal or acceptable by the organization. To minimize such responses, the researcher encouraged participants in writing that they should answer honestly and assured the participants that their responses would be strictly confidential and to be used for research purposes only.

Limitations

This study was limited by the accessibility of the participants. Auditors do not work in a central office, but rather from their homes, travelling to the audit location. Auditors may be located anywhere worldwide, thereby requiring scheduling based on differences in time zones corresponding to avoidance of work or sleep hours. While the AWS/MBI-GS is self-administered and can be taken online at any time, personal interviews needed to be carefully managed for both the participants and the researcher considering varying time factors. This research was restricted to a single CB, which represented a limitation of the study in so far as generalizing the results of the study to other populations of industrial auditors and service professionals.

Each CB differs in compensation and benefits as well as in audit day requirements and



degree of administrative support. This may affect stress levels, thereby limiting the study to the constraints of this single CB.

Delimitations

The researcher defined delimitations to include the choice of objectives, the research questions, the independent and dependent variables of the study, and the specific population to be studied. This included the CB from which the participants were drawn, the specific surveys to be used, the minimum professional qualifications of the participants, the statistical methods for scoring and interpreting data, and the way these data were reported.

For the quantitative phase, the researcher selected the test instrument to be administered to the participants, the medium by which the test instrument was administered, the manner in which quantitative data was collected, collated, interpreted and reported, and the means of protection of these data. In addition, during the qualitative phase, the researcher determined the time and means by which interviews occurred, the script and questions to be asked, the length of the interview and the manner of safeguarding the transcripts and recordings of the interview. This delimitation collectively helped manage the control and progress of the study and allowed the researcher to create a Gantt chart to assess time frames for accomplishment of key deliverables during the study.

Summary

The purpose of this exploratory sequential mixed methods study was to examine levels of stress and burnout in different generational groups and then to evaluate the differences between generational groups and their methods of coping with workplace stress. Although similar studies have evaluated stress and intergenerational conflict among other demographic groups of workers (Broadstatterm et al., 2016; Shaub et al., 1993), this subject had not



previously been investigated, as it pertains to professional industrial auditors in the service industry. A sample of 90 auditors representing a population of 275 auditors from a domestic certification body was identified to participate in the study representing the three generations prevalent in today's workplace. Data collected and correlated, and follow-on data obtained through interviews, were applied to answer the research questions presented in this chapter, thereby determining the relationship between stress and generational affiliation.

The findings from this study may be used to reinforce the previous assertions that stress and reaction to stress are directly related to generational differences (Johnson & Johnson, 2010). The ultimate research outcome was to determine what contributes to burnout among industrial auditors of different generational groups. Findings may contribute to determining how job-related stress leading to burnout could be addressed and reduced, considering generational factors. This may lead to additional studies focused on whether stress and burnout among professional auditors are common to stress and burnout among professional workers in other service occupations

In Chapter II, a literature review of previous research about generational comparisons, and differences and unique characteristics of generations is presented. The purpose of the literature review is to summarize and encapsulate previous research, including scholarly articles, books, and research studies about intergenerational stress in the workplace. The literature review analyzes, critiques, and compares theories, concepts, and related research while providing a historical perspective and background of past studies of generational differences. In addition, the literature review identifies gaps in the existing literature and how this study addressed these gaps.



CHAPTER II: REVIEW OF THE LITERATURE

Literature and research about workplace stress have been extensive. Since the early 1980s, the research on this subject began with studies on the quality of workplace life (Rosow, 1981). Research evolved into consideration of stress as a cause of worker dissatisfaction (Templeton, 1994) and later focused on generational differences and conflicting values as contributors to workplace stress (Hochwarter et al., 2009; Moore, Grunberg & Krause, 2015; Snyder, 1999). This literature review will explore the pertinent research to date about work-related stress as exhibited by the three generations currently represented in the American workplace, including baby boomers (born 1946-1964), Generation X (born 1966-1980) and millennials (born 1981-2000). While this study considered stress in the service industry and the intergenerational reactions resulting from workplace stress, the literature review was expanded to consider research in all industries, as no literature specific to the stress and generational reactions in service industries has been identified.

Search Strategy

The search strategy for this literature review was to create a detailed outline of the review content. This included an introduction to workplace stress in general, its universal application to industry, its root cause, and a discussion of catalysts that both exacerbate and reduce workplace stress. Classical and modern theory of stressors, results of stress in terms of attrition and burnout, and an historical perspective of stress in industry since the early twentieth century are considered in this chapter. A comprehensive analysis of age differences as they relate to the general workplace is introduced, followed by a discussion of stress as it specifically relates to each generation currently in the workplace. Each generation is described in detail to portray its psychological and sociological characteristics, and later, to



consider different reactions to stress between the groups. Literature pertaining specifically to intergenerational responses to stress is analyzed. Finally, possible remedies to intergenerational stress are reviewed.

Various academic resources were obtained and examined, including EBSCOhost and ProQuest databases as well as literature obtained at the Brown University Library and the online library of the University of the Rockies. Extensive use of the SAGE database enabled the researcher to find relevant academic articles. Search terms included *intergenerational stress*, traits of baby boomers, Generation X, millennials, ageism in the workplace, and stress and burnout in the workplace.

Literature Review

Workplace Stress

Significant research has been published on the subject of workplace stress. Such research has focused on numerous industries, root causes and catalysts. To comprehend fully the relationship of stress in the workplace and intergenerational responses to stress, it is first necessary to examine the significant research on workplace stress in general, after which investigation of the effect of intergenerational differences on the exacerbation manifestation of and reaction to stress can be further examined.

Goh (2016) studied general stress in the United States workplace and estimated that workplace stress is the cause of 120,000 deaths per year, and that 5 to 8% of annual health care costs are associated with and may be attributable to how U.S. companies manage their workforce in terms of environment, work pressure, and management style. While people in every profession and industry may experience some degree of stress, research studies focused on stress-related syndromes are especially prevalent involving people in healthcare



professions, in information technology, and in transportation industries, such as air traffic control. For example, Day, Sibley, Scott, and Tallon (2009) performed extensive studies of Canadian air medical healthcare professionals who cared for critically ill individuals. Day et al. (2009) reported that all workers experienced job stress requiring medical intervention, and that the burnout rate among these workers exceeded 25% over a five-year period. A study of information technologists in the United States demonstrated similar results with high incidence of daily stress and resulting burnout (Galloch, Grover, & Thatcher, 2015). Maier (2011) reported results of stress and burnout among air traffic controllers who had a 40% burnout rate within five years of employment.

Rich (2016) reported that in the United States, the prevalence of stress at work is staggering. Rich's (2016) study indicated that despite numerous efforts to recognize and reduce workplace stress by more innovative organizations in the United States, workers reported great levels of stress in their work. Rich (2016) indicated that in a survey of over 5,000 employees representing diverse industries, 25% viewed their jobs as the most stressful thing in their lives, while 75% believed that they were under more occupational stress than the previous generation.

Since the mid-1950s, industrial and organizational psychologists have conducted numerous research studies on workplace stress. In 1984, Maddi and Kobassa published a compendium of works about stress and theorized that the roots of workplace stress were complex and multifaceted, but fundamentally caused by differences in attitudes, social orientation, and perceptions of individuals interacting within the workplace. This work is fundamental to the understanding of stress in that whenever humans interact, there will be differences in comprehension of reality as influenced by each individual's personality,



upbringing, and social orientation. This study researched whether age and generational differences further influenced these interactions.

Childs and Stoeber (2012) suggested that the individual concept of perfection differs among every human based upon these same personality factors. They conducted two longitudinal studies of both health care workers and teachers, which measured the concept of perfectionism as it relates to stress and burnout. Childs and Stroeber (2012) found that while most individuals seek to excel in their job tasks and perfect their work, each individual defines perfectionism in a different way. As such, the relationship between individuals of different ages may clash due to differences in generational differences of upbringing, culture, and technology, which collectively define perfectionism in each individual. The stress found in these studies that resulted from such generational factors had a direct negative impact not only on the individuals studied, but on the entire organization, on clients of the organization, and on suppliers to the organization.

Childs and Stroeber (2012) found that individual quests for self-defined perfection resulted in the specific symptoms of exhaustion, cynicism, and inefficiency within the organization. The work of Child and Stroeber (2012) is important because it demonstrated that while the individual worker may not consciously recognize that actions may in themselves promote feelings of satisfaction and self-worth, such actions may cause adverse effects on the whole organization. While the Child and Stroeber study was limited to health care workers and teachers, the principle of perceived personal needs for perfection and the effect of personal needs for perfection on the organization may well apply to any organization of workers. In addition, auditors may experience stress related to both generational factors exacerbated by additional external factors such as demanding travel requirements, strict



deadlines, and often bellicose clients.

Stress in the workplace may be devastating to the missions and functions of the organization. Alternatively, some stress may have positive influences on the organization in the form of diversity. Griffin and Clark (2011) described the negative result of stress in the workplace, defining stress as a significant occupational hazard, which causes impairment of the physical health of employees and loss of psychological well-being and performance. Griffin and Clark (2011) suggested that alongside depression and anxiety, stress is the leading cause of employee absenteeism. This aligns with earlier research by Popp and Belohlav (1982) of absenteeism among low status employees in which Popp and Belohlav (2082) found significant factors that contributed to absenteeism, high levels of turnover, and employee burnout. Popp and Belohlav (1982) estimated that in 1980, the annual cost of absenteeism in the United States was about \$8.5 billion. By 2012, the estimated cost of absenteeism had quintupled to \$42.6 billion in the United States (Aziz, Liang, & Zolfaghari, 2013). Despite the plethora of research on the subject of stress-related absenteeism, the cause of this absenteeism was speculative, and Popp and Belohlav (1982) suggested that absenteeism resulted from a combination of actual physical illness coupled with psychological stress (Popp & Belohlay, 1982), while Griffin and Clark (2011) suggested that absenteeism is believed to be commonly caused by boredom, lack of work challenge, and conflict with fellow workers (Azizi et al., 2013). While these studies demonstrated that absenteeism is on the rise in the workplace, the studies further suggested that stress itself may be a root cause of absenteeism and ultimately a strong contributor to burnout and attrition.

On the premise that absenteeism is a direct result of workplace stress (Griffin & Clark, 2011; Popp & Belohlav, 1982), the question arises as to whether positive stress can result in



reduced absenteeism. Dernovek (2008) conducted a study of 500 credit union workers in the United States using a mixed quantitative and qualitative study. Similar to the current study, the researcher surveyed the 500 participants as a population and then conducted formal directed interviews with 10% of the population. Dernovek (2008) concluded that causes of stress were directly related to poor communication among workers, lack of direction, and personality clashes with co-workers. Dernovek (2008) also introduced the concept of teaming in a control group of 100 workers who were assigned a specific task but worked as a team to address and resolve challenges. Dernovek (2008) indicated that the control group had less absenteeism, lower turnover, and higher productivity than workers outside of the group. Dernovek (2008) concluded that once engaged and enabled, workers would demonstrate greater commitment and reduced levels of burnout and absenteeism. Dernovek (2008) further concluded that communication was the fundamental factor for success or failure of teams in the workplace, and when communication is effectively used, it can significantly enhance productivity through stress reduction.

While most of literature reviewed on the topic of workplace stress has considered workplace stress in a negative connotation, several researchers have considered stress in the workplace to have positive effects on productivity and morale (Fritz & Sonnentagis, 2009; Rodiguez-Escudero, Carbonell, & Munuera-Carbonell, 2010; Wincent & Ortqvist, 2011). Wincent and Ortqvist (2011) concluded that workplace stressors can have different relationships with performance, including positive and enhanced performance. Fritz and Sonnentagis (2009) demonstrated that workers at both professional and line levels expected a certain level of stress during the workday. Fritz and Sonnentagis (2009) described responses of 200 employees of mixed levels within organizations to locally constructed surveys on stress



levels of their jobs.

Respondents indicated that they were motivated by performance requirements, delivery expectations, and challenging work assignments. Rodiguez-Escudero, Carbonell, and Munuera-Carbonell (2010) produced similar conclusions in a study of 200 workers in Spain. They indicated that while role ambiguity and role conflict were key negative stressors, pressure for performance and increasing expectations regarding output were positive stressors. Rodriguez-Escudero et al. (2010) concluded that different stressors have different relationships with overall performance. Further, they found measures of stress to be hyperbolic rather than linear. Stress, when applied to workers of varying levels, follows a U-shaped pattern. Rodriguez-Escudero et al. concluded that a controlled balance of stress was optimum to workplace performance. Wincent and Ortqvist (2011) further concluded that the positive role of stressors can enhance feelings of achievement and self-worth and maximize productivity within the workplace.

This body of research has led to somewhat conflicting findings on the negative and positive aspects of stress in the workplace. Therefore, to understand better the relationship between stress and its effect upon different generational groups, the following section of this literature review will examine specific types of workplace stress, generational norms, and reactions to these specific types of workplace stress.

Conceptual Basis of the Study

General studies in psychology and sociology have considered basic human needs and means of attaining these needs. To understand better the motivation, stress, and burnout in the workplace, a review of classic and current studies on motivation is presented after which specific theories of motivation and stress in the workplace are described.



Classic Studies on Human Motivation and Management Styles

The two theories most pertinent to explaining human motivation are the Maslow theory of human motivation (Maslow, 1943) and McGregor's theory of job performance (McGregor, 1957). These seminal works form a foundation for later theories of motivation in the workplace.

Maslow (1943) defined the five basic needs as being physiological, safety, love and belonging, esteem, and self-actualization. Maslow (1943) categorized these as deficient needs, or D-needs, which represented the levels of increasing gratification and satisfaction. Maslow (1943) theorized that fully attaining each level of need is a prerequisite for the attainment of the subsequent need. Maslow (1973) defined four sub-levels, including cognitive, altruistic, self- actualization, and self-transcendence categorized as being needs, or B-needs that arise once self- actualization is achieved. Later studies (D'Sousa & Gurin, 2016; Soni & Soni, 2016) described that attainment of each level of need was a constant psychological driver toward fulfillment. In addition, D'Sousa and Gurin (2016) considered the attainment of D-needs as fundamental to growth, and that attainment of B-needs benefit society in that B-needs lead to more solidarity, care, problem-solving, and altruism. In this study, these theories will be fundamental to the consideration of motivators among industrial auditors of intergenerational groups. This proposed study investigated whether or not it was possible to both advance and regress among Maslow's levels. For example, it may be possible for an older worker threatened with competition from younger workers to regress from B-needs to D-needs if it is perceived that his or her job is in jeopardy. The Maslow (1943) levels provided a classification method by which employees may be assessed in consideration of overall influence of stressors in the workplace.

The Maslow (1943) hierarchy of needs theory as applied to the workplace may be



augmented by the theory propounded by McGregor (1957), who classified the workplace environment into two categories, theory x and theory y. Theory x described an autocratic, vertically integrated style of management, wherein senior management assumed the role of decision-makers, and subordinates implemented management's decisions. Under this theory, there is little or no input from employees subordinate to senior management. Chain of command is formally enforced, whereby lower level employees must communicate only with their immediate supervisor in expressing their needs and feelings (Gurbuz, Sahan, & Kokswa, 2014). In comparison, theory y described a democratic, horizontally integrated style of management, wherein senior managers became the leaders of participative teams with a common goal of achieving organizational objectives (McGregor, 1957). Unlike theory x, theory y emphasized employee involvement at all levels to achieve the objectives and goals of the organization.

Worker satisfaction was of primary importance, and employees were encouraged to communicate openly and honestly. Access to management was provided through teams whose membership included heterogeneous representation of employees from various levels of seniority and expertise (Gurbuz et al., 2014).

Both theory x and theory y management are in practice in the modern workplace (Gurbuz et al., 2014). In this study, it is hypothesized that the management style of the organization will directly influence the level of employee stress. The management style of the organization will be assessed through questions to participants about the management style of the CB during the qualitative phase of this proposed study. Therefore, the Maslow (1943) and McGregor (1957) theories were fundamental to this study in that when used together, the theories can be applied to describe and explain needs and reactions to the work environment.



Theories of Motivation and Stress in the Workplace

Human motivation has been the topic of research for decades. Maslow (1943) proposed human needs to be inborn and universally present in humans, and described successive levels of needs, which became operative when previous need levels were satisfied. Lewin (1938) alternatively proposed in his field theory that various forces in the psychological environment interacted and combined to yield a final course of action. McGregor (1957) defined theories of management style. When applied to the workplace, these classic theories suggested that stress may have a direct relationship to the ever-changing work environment, and that response to stress may be directly related to level of need and to psychological forces such as age, gender, culture, and biases.

Other researchers have expanded the theory of workplace stress to propose that workers seek group identity, through commonality in educational levels and common personal characteristics in responding to stress. For example, Slade, Ribando, and Fortner (2016) described the stress caused by change and the reaction of employees to this change. Their analysis involved change due to a merger in a university environment. Slade et al. (2016) focused upon interaction of the stressors of reorganization, transfer, and realignment of a university. This quantitative study involved 500 participants who were subject to the effects of the merger, and their reaction to the stress that resulted. The researchers found that under conditions of stress, individuals formed comfort groups amongst their peers. Such groups may be based on gender, race, longevity, common interests, common education level, or age. Slade et al. concluded that under stress, individuals will form into groups in which they feel a commonality, a theory that may be important to the present study in that it suggests that humans find comfort in associating with others having common physical or emotional



characteristics during time of stress. While the study by Slade et al. was conducted in a purely academic environment, it may prove relevant to the behaviors of individuals in alternative work environments when faced with stress.

An extension of McGregor's theory was the theory of work adjustment (TWA) described by Dawis, England, and Lofquist (1964). Dawis et al. (1964) stated that workers seek out co-workers with similar characteristics. Such similarities include factors of personality, culture knowledge, and skills. Workers who do not fit within a common group may be ostracized, or at a minimum, be made to feel uncomfortable assimilating into the workplace.

Kerr (2004) proposed the work motivation theory (WMT), which further defined motivators in the work environment, considering the moral, ethical, and physical environment. This further augments the Maslow (1943) theory of motivation by providing specific motivators present in the workplace. In addition, WMT considered worker morals and ethical values, which may be a direct cause of stress in a theory x or theory y environment (McGregor, 1957). For example, a millennial employee may find it unethical to obey a directive in a theory x environment, which the employee finds ethically offensive. The WMT is an essential consideration in that morals and ethical values may differ between the three generations under consideration, and the management style in practice may directly influence stress among employees of different generational groups.

In another study, Johnston and Feeney (2015) similarly described the tendency of individuals under stress to cling or bond to others with common characteristics. Johnston and Feeney (2015) administered a survey to 113 men and 115 women who were presented with stress situations. Johnson and Feeney (2015) theorized that stress is directly associated with



the attachment theory, whereby the basic symptoms of stress are anxiety and avoidance. The other alternative reaction to stress is maladaptive coping, where the employee simply adapts to the stress situation no matter how unpleasant or disparaging. Johnston and Feeney (2015) found that the attachment theory indicated that most individuals will react to stress with anxiety and avoidance, and will protect themselves by associating or attaching themselves to others. Those who reacted with maladaptive coping tended to be older, more established employees. This suggested that age may be a factor in the individual response to stress. While reaction to stress may differ among different industries, cultures, or geographical regions, age is a common differentiator among all groups. Wrzus, Wagner, and Riediger (2016) considered age as a variable in response to change, concluding that five personality traits including neuroticism, extraversion, openness, agreeableness, and conscientiousness change as individual's age, and that this change can be measured over a period of years. As a common factor, differences in age may result in conflict when individuals from disparate age groups are faced with the same stress at work. While Wrzus et al. (2016) found differences in levels of their five personality traits by gender and level of academic achievement, age was the most common factor in predicting response to the effects of stress. Thus, there may be a measurable relationship between age and the reaction to stress, and that age difference may itself be a cause of stress.



Characteristics of Generational Groups

Several studies have considered differing reactions to stress by age group and have examined the coping mechanisms that each age group typically uses to respond to stressors (Day et al., 2009; Kupperschmidt, 2000; Lemaire, Wallace, & Jovanovic, 2013). Much of the literature has focused on the medical profession. Lemaire, Wallace, and Jovanovic (2013) highlighted the differences resulting from the entry of millennial and Generation Gen Xers to the medical profession and how stress and coping strategies were different depending on the generation of workers. Lemaire et al. (2013) considered the differences in reaction to stress and gender of two generations of medical doctors currently in practice. Differences in education, internship training, and upbringing were found to exhibit significantly different reactions to stress depending on the generation of participants. Lemaire et al. studied 1,000 Canadian physicians and observed less tolerance to stress and higher expectations of independence, time off, and freedom to practice with minimal rules or supervision among millennial physicians compared to their Generation X counterparts. While the older baby boomer generation was not included in the study by Lemaire et al., their presence may further influence behavior of younger workers. Dickson (2016) focused on Generation Xers, and how, as the middle generation, they are influenced by both younger and older workers. Dickson (2016) discovered that each generation brings its own habits, biases, and attitudes to the workplace, and that these factors can result in stress and friction when the generations interact.

To comprehend fully these interactions, each generation must be considered separately, and then stressors must be identified that typically exist during workplace interaction. Paulin and Riordon (1998) compared baby boomer and Generation X



characteristics and determined evidence of stress caused by the interaction of these generations. Similar studies reported that there is a strong association between generational interaction and stress (Byles & Loxton, 2014; Migliaccio, 2013; Tavener, Williamson, Bannister, & Sullivan, 2010).

Fisher (2016) identified the unique characteristics of the three generations in the current workplace. Fisher (2016) indicated that there was no exact definition of the behavior for each generation, as there are many complex variables to be considered within each generational group. The variable of gender is the most pronounced discriminator within each group, followed by race, religion, educational level, and economic background. However, Fisher (2016) did find general attributes that could be assigned to each of the three generational groups. These general characteristics are now considered for contrasting the psychological and sociological characteristics of these generations.

The Baby Boomer Generation

The baby boomer generation is by far the most populous of the three generational groups currently represented in the workforce. There are estimated to be 82 million workers who were born between 1946 and 1965 (Schroer, 2016). Due to the size of this group, it is often subdivided into boomer 1s, representing 33 million members born between 1946-1954, and boomer 2s, representing 49 million members born between 1955and 1964. Boomer 2s have also been referred to in some literature as Generation Jones (Schroer, 2016) to distinguish them as a subgroup with differences in values from early baby boomers. Pontell (2008) differentiated between these subgroups of baby boomers, as the earlier group enjoyed more of the post-war economic boom, while the latter group was exposed to the economic and political turmoil of the 1960s.



Hernaus and Vokic (2014) defined baby boomers and their characteristics compared to their younger associates. Hernaus and Vokic (2014) claimed to have conducted the first study of comparing the three groups to each other and found that the roles of baby boomers, Gen Xers, and Yers (millennials) are idiosyncratic for work autonomy. While study participants were limited to workers in Croatia, Hernaus and Vokic (2014) found that in a study of 1,000 workers, the members associated as baby boomers were more autonomous and less comfortable than Gen Xers or millennials with working in teams or groups. Using qualitative interviews, Hernaus and Vokic (2014) reported that baby boomers were more interested in job satisfaction through individual accomplishment than in participating in a team effort. Baby boomers were committed to the job and were willing to sacrifice personal time or immediate praise to get the job done. In a similar study, Kane (2016) found that baby boomers are dedicated to working and motivated by position, perks, and prestige. baby boomers tend to define themselves by their professional accomplishments. Exceptionally independent, they tend to be confident and self-reliant, fearless of confrontation, and extremely goal-oriented. As such, they are very competitive and equate work and position with self-worth. They are clever and strive to win (Kane, 2016).

Kane's (2016) description of baby boomers aligned with the findings of Hernaus and Vocik (2014). Baby boomers are people who tend to enjoy working alone, are very conscious of rank and position, and are fiercely competitive. Such factors of status such as the location and size of individual office space, personal recognition for work, and job titles are important symbols to baby boomers. Yet, unlike their immediate predecessors (known as the traditionalist generation), they are willing to take risks, challenge authority, and consider non-traditional ways to accomplish work provided they are rewarded for their individual



contributions (Kane, 2016). In consideration of Maslow's hierarchy of needs (Maslow, 1943), baby boomers sought the highest level of self-fulfillment, self-actualization. They grew up in a period of post-World War II economic prosperity, and therefore, had more opportunity for education than their predecessors. Yet, this presents a psychological dilemma for baby boomers. Tankersley (2012), a self- declared Xer, claimed that those of the baby boomer generation were hypocritical parasites. Unlike previous generations, they did not pass on a better life to the generations that followed them. Tankersley (2012) believed that while baby boomers challenged authority socially and politically, they were also provided with education and job opportunities by their parents, never before or after enjoyed by preceding or following generations of workers.

The Tankersley article is important in that Tankersley (2012) suggested resentment toward baby boomers felt by younger workers. Tankersley (2012) epitomized baby boomers as a generation of elitist, privileged individuals who focused on individual material gain. In contrast, in an earlier work, Owram (1997) described baby boomers as fortunate to have benefited from the post-World War II economy, but who have been instrumental teachers to succeeding generations on strategic planning, shrewd economic thinking, and tactical goal setting. Thus, while some vilify the baby boomers, others consider them to be a catalyst for change, having grown up with some privilege that older generations lacked, and also in a world of political turmoil and change. Baby boomers experienced assassinations, undeclared wars, and the threat of nuclear annihilation. These conflicting factors created a generation, which while materialistic and status conscious, was also one of diversity and constant change (Owram, 1997).



Generation Jones

As previously stated, the baby boomer generation is by far the largest of the three generations considered in this study. Pontell (2008) considered this group to be too large for meaningful analysis and divided it into two subgroups. Pontell (2008) defined the first baby boomers as having been born between 1946 and 1955, and a second group as having been born between 1956 and 1965. He coined the term Generation Jones to describe the second group (Pontell, 2008). While no academic references were found, Kane (2016) described baby boomers as work-centric, independent, goal oriented, competitive, and self-actualizing. Kane (2016) further described the adjective work-centric as extremely hard describing Generation Jones. Several articles described Jonsers as having a very different psychographic profile than earlier baby boomers. Weber (2011) differentiated early baby boomers from Jonsers, in that Jonsers did not grow up in the prosperous 1950s, but rather, experienced the more turbulent 1960s in their youth. Weber (2011) described Jonsers as more cynical, pessimistic, and less self-assured than early baby boomers. While this sub-generation has not been described in academic papers, its importance is recognized in that it may present some disparity in the further analysis and consideration of baby boomer attitudes in the current study, as they are more prevalent in the current workplace due to ongoing retirement of older members of the generation.

Baby boomer attrition. As baby boomers age and approach retirement, their needs for recognition and reward become more pronounced. Ray and Manjari (2016) discussed the psychological entitlements of the three generations and defined baby boomers as expectant of jobs that have short-term returns, as their time remaining in the active workforce is limited. When such returns are not realized, baby boomers may quickly become dissatisfied, creating



inter and intra-group clashes and friction with other members of the organization. Aging baby boomers feel that they have paid their dues and deserve respect and recognition from their peers. This expectation of entitlement can escalate to hostility throughout the organization (Chiesa et al., 2016).

Thus, baby boomers are a generation of conflicting emotion. Early baby boomers are approaching retirement and seek recognition as elder statespersons who possess maturity and experience. Jonsers, while not having as much experience as early baby boomers, see themselves as deserving of recognition and respect due to their longevity and age. These psychological entitlements, while in many cases are deserved, may directly clash with the psychological entitlements of younger generations who may consider baby boomers relics or obstacles to their own career growth (Schmidt, Roesler, Kusseron, & Rau, 2014). This study researched these baby boomer characteristics and expectations among industrial auditors to determine whether the stressors previously described in this paper exacerbated their need for respect and recognition.

Generation X

By far the smallest of the three generations considered in this study, Generation X has received comparatively little attention among academic researchers. It consists of a population of about 40 million people born between 1965 and 1980 or roughly half the size of the preceding baby boomer generation and the succeeding millennium generation (Houlihan, 2016). Little academic research exists regarding the attitudes and workplace psychology of Generation Gen Xers, although Generation Gen Xers are the subject of numerous periodical articles. As the middle generation, they are often overshadowed by the generations on either side (Canaan, Karkoulian, & Elkassar, 2016; Caudron, 1997). Generation Xers, commonly



referred to as Gen Xers, were initially dismissed as disrespectful slackers. Some referred to them as disloyal, dumb, or just plain bad (Sexton, 2016). These attributes may have been assumed due to the tendency of Gen Xers to love simplicity and independence (Coudron, 1997). Yet, the limited research available has indicated that they are profoundly independent but conflicted between their work and their personal lives (O'Bannon, 2001; Pilkington, Taylor, & Hugo, 2014). This conflict has had both positive and ill effects on Gen Xers. Pilkington Taylor, and Hugo (2014) studied a sample of 2,000 Australian professional workers regarding overall mental and physical health in comparison to an equal number of participants representing other generations. Pilkington et al. (2014) concluded that Generation Gen Xers had a higher prevalence of smoking and anxiety, higher levels of psychological distress, higher incidents of obesity, greater burdens of chronic diseases, and poorer quality of life than baby boomers and millennials. Such statistics may be explained by the fact that 40% of Gen Xers came from broken families and did not have the security or attention that existed during the previous generation (O'Bannon, 2001). Between 1965 and 1980, the divorce rate doubled worldwide, resulting in personal upheaval of many Gen Xers during their youth (O'Bannon, 2001). These factors may have contributed to their psychological makeup as a worker group. As such, Gen Xers could be perceived as disloyal, arrogant, cynical, and lazy (O'Bannon, 2001).

Dickson (2015) conducted a study on Gen Xers in the United States and concluded that they are a "stuck in the middle generation" (p. 85). Dickson (2015) acknowledged that far more research and attention had been devoted to the other generations and concluded that while Gen Xers may work hard to achieve the bottom line, they will not be swept away by talk of teamwork and corporate vision. They tend to have more of an entrepreneurial spirit as



their prominent trait and may be learly of interactive teaming. (Dickson, 2015). This may be a result of early family conflict and will be further considered in this study as it relates specifically to industrial auditors.

Ganesan and Krishnamuth (2013) conducted another of the few studies specific to Gen Xers as a group. Ganesan and Krishnamuth (2013) focused on emotional intelligence and surveyed 243 Xer managers in India, measuring four basic characteristics of emotional intelligence: 1) self- awareness, or the ability to understand one's feelings and behaviors as well as others' perception of oneself; 2) managing emotions or the understanding of one's emotions and using that understanding to turn situations to one's advantage; 3) selfmotivation, or using one's emotional system to catalyze the process and keep it going and, 4) relating well and emotional mentoring, or the exchange of information about one's feelings thoughts and ideas. Participants in the Ganesan and Krishnamuth (2013) study included assistant managers, managers, and senior managers. Ganesan and Krishnamuth (2013) reported that as a group, Gen Xers scored high in self- awareness but low on self- motivation. Gen Xers were classified as stable on managing emotions and relating well on emotional mentoring (Ganesan & Krishnamurth, 2013). Gen Xers were revealed to have a strong sense of who they are and what they want at work, but to be weak in motivating themselves to participate, compete, and team with others. This may explain why other generations perceive Gen Xers to be disloyal, cynical, arrogant, or lazy (Sexton, 2016).

An additional characteristic that distinguishers Gen Xers from other generations is the advances of technology during their early years and the generation's adoption of technology early in life. Numerous studies have indicated that Generation X was the first high-tech generation, and compared to earlier generations, learned early in life to demonstrate ease and



dexterity with computers and associated systems (Eliasa, Smith, & Barneya, 2012; Gallivan, Spitler, & Koufaris, 2005; Hearing & Ussery, 2012). In a quantitative multigenerational study, Eliasa, Smith, and Barneya (2012) found that Gen Xers were confident in their use of information technology and were prone to confine themselves to communicating with coworkers through electronic means rather than face-to-face, tending to prefer electronic meetings over traditional meetings. This study reinforced the tendency of Gen Xers to be more reclusive, favor individual work to group work, and be reluctant to participate in interactive teams. Eliasa et al. (2012) stated that "age modulates the relationship between attitude toward technology and intrinsic motivation, extrinsic motivation and to a lesser extent, overall job satisfaction" (p. 453). Villegas (2016) described Gen Xers as the transitional generation of technical communication. While they are the smallest of the generations considered in this study, Gen Xers were the first to embrace technology but have been often overlooked or seen as rude, disloyal, and maladjusted. Therefore, despite their smaller size, they may define a middle ground between the more researched baby boomers and millennials. Gen Xers represent a catalyst in researching intergenerational workplace stress and conflict in that they share both the disciplined approach to the work of baby boomers and the technology savvy of millennials.

The Millennial Generation (Generation Y)

The millennial generation (also referred to as Generation Y) consists of the second youngest generation in the workforce. While a younger generation referred to as Generation Z has begun to enter the workforce, there are no members of Generation Z currently auditing for the CB. Generation Z is therefore not considered in this study.

As baby boomers have retired, the relative numbers of millennials is beginning to



equal or surpass the number of baby boomers currently in the workplace (DeVaney, 2015). Born between 1981 and 2000, millennials are described as creative, solution-focused, socially conscious, and team oriented. In addition, they are far more racially diverse in the workplace at 47% minority compared to 37% minority among Generation X and 26% minority among baby boomers (DeVaney, 2015). Another important trait of millennials is their high level of technical dexterity. They are described as digital natives as opposed to digital immigrants (Prensky, 2014). Burstein (2013) stated that millennials demand that companies should be open to comments and criticisms, and those companies should listen to those comments and criticisms. Their traits are described as entitled, optimistic, civic minded, involved, conscious of work-life balance, impatient, and team oriented (DeVaney, 2015). Caraher (2015) described millennials as very demanding about work-life balance. They expect to be heard and have direct access to senior management, and distain the idea of having to climb the corporate ladder.

Caraher (2015) divided millennials into two distinct groups: digital freedom crusaders, who do not place much value on being in the office at specific times, and office traditionalists who value office hours and being together. Digital freedom crusaders feel more productive working at home or at a coffee shop, while traditionalists seek the company of teams of peers in the office (Devaney, 2015). Unlike baby boomers and Gen Xers, millennials often challenge authority, frequently change jobs due to lack of interest or motivation, and expect informality in their work hours and the office hierarchy (DeVaney, 2015).

By the year 2025, millennials will make up 75% of the workforce (Culiberg & Mihelic, 2016). In general, they are reported to demonstrate more individualistic traits, greater self-esteem, and a smaller need for social approval than previous generations (Tweng,



2010). Another key characteristic of millennials is their high standards of ethics. In a study of inter-generational response to unethical behavior, Culiberg and Mihelic (2016) reported that the more negatively millennials judge an ethically questionable activity, the less likely they are to perform that activity. In addition, millennials are likely to refuse to work for a company after learning that it was not socially or environmentally responsible. Issues of social fairness, gender equality, and environmental correctness are of paramount importance to millennials (Culiberg & Mihelic, 2016). The issue of social responsibility and its importance to millennials was further studied and found to be of major significance in similar Canadian (Catano & Morrow Hines, 2016) and American (Ng, Schweitzer, & Lyons, 2010) workplaces. Studies by Catano and Morrow Hines (2016) and Ng, Schweitzer, and Lyons (2010) concluded that millennial job applicants consider whether an organization is right for them, rather than whether they are right for an organization. In general, millennials are committed to corporate responsibility, and they want to work with good people in a nurturing environment, allowing for balance between life and work (Catano & Morrow Hines, 2016).

Aside from the differences in issue focus, millennials display different values regarding their work/life balance. Johnson (2015) contended that for millennials, there is no work/life balance. Work and life became one. Johnson (2015) defined the term technical equilibrium (TEQ) or the successful blending of life and work via technology. Technical equilibrium crossed the line between work and personal time. Johnson (2015) stated that most millennials check their smartphones from the time they wake up in the morning to the time they retire at night. They communicate continually, relying on texts and social media, and electronically manage almost every facet of their lives. Through TEQ, there is little distinction between work tasks and non-work tasks.



To augment the concept of TEQ, Johnson (2015) further stated that apps and social media have become crucial to the work tools of millennials. While once considered toys by older generations, they now are the means of TEQ. As such, millennials can multitask between work and play, and not feel bound to physical locality. Millennials see the virtual office as replacing the actual office, and do not feel a need to report in for a traditional nine to five day(Williams, 2014). Millennials, in general, think differently than their older associates in conceptualizing the manipulation and use of time (Botterill, Baedin, & Dun, 2015). During most of the 20th century, workers were accustomed to a 9:00 a.m. to 5:00 p.m. workday Monday through Friday. Work was done exclusively at the site of the employer. As early as 2000, millennials began to argue that they could be more productive on a flex hour schedule, working onsite when necessary, but at remote locations through available technology (Botterill et al., 2015). This caused an immediate conflict between the millennials and their older managers who were suspicious of whether workers would devote the requisite hours of labor for which they were being paid (Sennett, 2011). Time and use of time became one of the major conflicts between generations due to millennials' demands for independence, space, and personal work/life balance. Yet, as baby boomers retire and their numbers steadily decrease, the millennial population is on the rise. As previously stated, it is projected that by 2025, 75% of the global workforce will be made up of millennials (Culiberg & Mihelic, 2016), creating an inevitable need for reconsideration of the means of work accomplishment in the future.

To prepare for this inevitability, organizations are adopting flexible work cultures, building a sense of community through teamwork and providing constant feedback to workers (Todorovic & Pavicevic, 2016). These adaptations fit well with millennials but may appear



soft or touchy feely to their older co-workers (Botterill et al., 2015), thus, millennials thus present a challenge to the workplace. They are far more informal in dress and attitude than members of predecessor generations. Where baby boomers grew up in a formal suit-and-tie work environment, millennials demand a dress-down, open-toed shoes environment. They are protective of personal time, crave teaming and socialization, but also want flex time and less structured work assignments and deadlines (Zabriskie, 2016). As their numbers increase, millennials are creating new rules for the workplace, which at present, may be the source of stress among workers of the preceding generations.

Causes of Stress

Conflicting characteristics and needs of the three generations represented in the workplace may be the cause of different stressors within the generations represented in the workplace, resulting in burnout and loss of productivity to an organization. In an overview description of inter-generational differences, DiRomuoldo (2006) identified five key causes of stress between workers of different ages. These included disagreement regarding acceptable workhours, communication breakdown, employees stating that coworkers were over or underreliant on technology, employees taking co-workers from different generations less seriously than co-workers from their own generation, and employees feeling that co-workers from other generations do not respect them (DiRomuoldo, 2006). These causes of stress, coupled with individual personality differences, may contribute to negative workplace social conditions.

Ramin and Magner (1995) conducted a study of employees in the electronic retail sector in Lebanon, in which 199 workers of the three generations were surveyed and interviewed using Rahim's Organizational Conflict Inventory II (Ramin & Magner, 1995) and qualitative interviewing. Ramin and Magner (1995) found that both age and personality have



a moderating effect on relationships between employees.

A later study found that while baby boomers tended to avoid conflict with others, millennials and Gen Xers tended to face conflict actively and aggressively (Canaan, Karakoulian, & El-Kessar, 2016). Canaan, Karakoulian, and El-Kessar (2016) stressed that their study was limited to the Lebanese culture and recommended further study in more heterogeneous cultures and with a larger number of participants. The Canaan et al. (2016) study is important in that it reflects similar parameters to the present study such as reaction to generational differences and its relationship to stress and burnout, and serves as a benchmark for further research

Kacmarkek (2007) considered age and its connection to stress in the field of law by researching employees working in American law offices. Kacmarkek (2007) found that as with diversity dimensions of gender, race, ethnicity, and sexual orientation, generational diversity presents unique challenges to workers of different generations. Kacmarkek (2007) stated that members of each generation tended to identify with specific work-related values that are different from the values of members of other generations. There is potential for stress when ingrained beliefs collide on the job. Kacmarkek (2007) reinforced that baby boomer lawyers and Generation X lawyers tended to put in long hours, evenings, and weekends, whereas millennials wanted to be in by 9 and out by 6. This caused resentment among older lawyers who felt that they had paid their dues, and looked down on younger lawyers as lazy and entitled.

Thus, the literature has found generational attributes repeatable, regardless of industry or culture. It would be premature to assume that these attributes apply universally. A two study investigation of 390 employees in different industries (Group I) and 199 government



agency employees (Group II) conducted in the United Kingdom concluded that despite generational differences, employees possessing self-regulation, personal control and political skill were able to respond better to intergenerational stress and thereby significantly reduce the effects of stress in both the diverse industrial group and the government group (Hochwarter et al., 2009). This must be carefully considered as important research in that the employees of the two independent groups considered by Hochwarter et al. (2009) may serve as a positive catalyst by their presence in the possible reduction of stress. The research by Hochwarter et al. may suggest that different generations can effectively work together regardless of homogeneous or heterogeneous grouping. At a minimum, the findings of Hochwarter et al.) may be an exception to the generational generalities thus faridentified.

A similar article described rapidly escalating generational disagreement in the field of education. Lovely (2005) commented on friction among teachers and administrators, stating that older teachers had difficulty accepting their younger colleagues who came to school with nose piercings or tattoos. As Lovely (2005) stated, the older teachers considered such appearance professionally unacceptable. The younger teachers resented intrusion into their freedom of individual expression. Lovely (2005) suggested that the key to reducing teacher stress was to promote understanding through teacher workshops and teaming techniques, to be led by trained professional experts in intergenerational differences.

Another important study researched age-related attitude differences among registered nurses. Kupperschmidt (2006) indicated that generational differences were evident among health care professionals. Resentment among nurses was found to be generationally bidirectional in that younger nurses found their older colleagues to be slow, overly fussy, and out of touch with modern medical techniques. Older nurses considered younger colleagues to



be lazy, careless, and inexperienced. In both cases, patient welfare was questioned when these nurses worked side by side (Kupperschmidt, 2006). Such confrontation required the assistance of a trained mediator who assisted in resolving conflict and reducing stress.

(Kupperschmidt, 2006). As such, both Lovely (2005) and Kupperschmidt (2006) found similar stressors and attitudes among teachers and nurses respectively, and proposed a form of direct discussion or teaming to ameliorate the situation and minimize the stressors.

Ageism

King and Bryant (2017) described stress among generations in the workplace to be caused by ageism, or prejudice and discrimination of persons of a different age group. They conducted a quantitative study of 500 general labor workers of different ages using a self-constructed instrument, the Workplace Intergenerational Climate Scale (WICS). In three separate studies, King and Bryant (2017) measured ageism among workers engaged in the same occupational group, in professional versus hourly employee groups, and in diverse non-related groups. King and Bryant (2017) indicated that there was clear ageism evident in all groups, but there was strongest indication of ageism by younger employees toward older employees.

Possible causes of ageism include resentment of younger employees toward older employees viewed as stalling opportunities for advancement among younger workers, perception of lack of technical proficiency in older employees, and slow performance of tasks by older employees. In comparison, older employees demonstrated ageism by viewing younger employees as lazy, entitled, and disrespectful. While no remedies for ageism were identified in this study, WICS and the results of the study represented a useful quantitative tool for measuring ageism (King & Bryant, 2017). Yet, the preponderance of literature has



indicated that ageism is more commonly directed toward older workers by younger workers (Barrett, 2005; Barrington, 2015; Brownell & Powell, 2013; Dennis & Thomas, 2007).

In contrast, Krank (2004) cited several cases of discrimination by older employees toward younger employees. Describing reverse ageism, Krank (2004) described numerous instances of older employees acting cliquish and refusing to cooperate or interact with younger generations in a series of quantitative studies involving 500 workers of varying ages and professions.

Thus, ageism as a cause of workplace stress appears to work both ways. Older managers may stymie or refuse promotion of younger workers based on age, while younger managers may show bias toward hiring or advancing older workers. Several studies (Brownell & Powell, 2013; Dennis & Thomas, 2007; Standifer, Lester, Schultz, & Windsor, 2013) have supported the theory that age is a foundation of workplace stress from which more specific causes of stress and burnout evolve. Standifer Lester, Schultz, and Windsor (2013) referred to ageism as age similarity preference (ASP).

Standifer et al. (2013) found that ASP is a worker response to minimize uncertainty, coping with change, and dealing with complexity in the workplace. Standifer et al. reported that ASP increased with diversity of age among employees and created workplace challenges. Standifer et al. also found that ASP was more prevalent among millennials than among baby boomers or Gen Xers, indicating that younger workers were more prone to prefer association with counterparts their own age. This conflicts with Krank (2004) who indicated older workers favored their generational peers over younger workers. In this study, further research was conducted during the qualitative interviews to identify potential symptoms of ageism, and how it relates to and affects workplace stress.



Self-Efficacy

In addition to ageism, self-efficacy has been recognized as a cause of intergenerational stress in the workplace (Thompson & Gomez, 2014). Originally defined by Bandura, self-efficacy is a belief in one's ability to succeed in specific situations or tasks. Self- esteem in comparison, is a person's overall subjective emotional evaluation of her or his own worth (Bandura, 1977). Both self-efficacy and self-esteem affect workers and may differ according to generational association.

Several research studies have considered self-efficacy as it relates to workplace stress (Chiesa et al., 2016; Graves, Ruderman, Ohlott, & Weber, 2012; Lee, Joo, & Choi, 2013; Thompson & Gomez, 2014). Chiesa et al. (2016) found that lower self-efficacy was demonstrated in workers over 50 years old as compared with those under 50. Chiesa et al. measured productivity, reliability and adaptability, and reported significantly lower scores in all three of these measures among older workers as compared to younger participants. Chiesa et al. also stated that due to technological and management change in terms of current workplace practices, older workers were less able to adapt to the changes and believed that they lacked the ability to succeed in their work (Chiesa et al., 2016). Thompson and Gomez (2014) measured similar attributes and found a direct correlation between worker self-esteem and workplace stress. Thompson and Gomez (2014) reaffirmed the statement that older employees generally had low self-efficacy, while younger employees had higher self-efficacy, which provided a pathway to health and performance. Lubbers, Laughlin, and Zweig (2005) and Thompson and Gomez (2014) affirmed that the level of self- efficacy has a direct influence on health, depression, and burnout. The studies by Lubbers, Laughlin, and Zweig (2005) and Thompson and Gomez (2014) consisted of homogeneous populations in Italy and



the United States respectively. The findings will be useful in determining whether self-efficacy is applicable to participants in the proposed study. Less research was found regarding self-esteem as it applies to age. Graves, Ruderman, Ohlott, and Weber (2012) considered self-esteem among age groups and found that older employees were driven to work and found enjoyment in work. Of a sample of 366 managers, those over 40 years old were found to have less fear of negative or changing work situations and held themselves in higher regard than younger counterparts (Graves et al., 2012).

Thus, the literature has revealed somewhat conflicting perspectives of self-efficacy and self-esteem. The attributes of self-efficacy and self-esteem may be contributors to intergenerational conflict and was researched further in this study.

Self-Esteem

In a study of 284 Korean nurses, Lee, Joo, and Choi (2013) used the Rosenberg Self-Esteem Scale coupled with the Beck Depression Inventory to demonstrate a direct correlation between self-esteem and depression in the workplace. Those with low self-esteem exhibited greater instances of absenteeism, fatigue, and feelings of worthlessness, indicating a correlation between work-related stress and depression (Lee et al., 2013). Lee et al. (2015) corroborated the relationships of self-efficacy, self-esteem, and resultant levels of mental health disorders that may disrupt the workplace and may be influenced by age. Factors of self-esteem and self- efficacy were considered in this study as potential causes of workplace stressors.



Resolution of Intergenerational Stress

Le Beau (2012) proposed that the best resolution of intergenerational stress was through teaming and communication. Le Beau (2012) considered numerous workplaces and recommended converting stress into intergenerational cooperation to break down the age barriers. For example, common historical experiences such as 9/11, the Kennedy Assassination or the Space Shuttle explosion may enable employees to identify with each other because of their having experienced a common event. While this explanation of a common historical encounter is somewhat simplistic in addressing the complexities of intergenerational conflict, it may address a common human need for social association. If people have something in common, they are more likely to communicate openly. In contrast, Callahan (2010) suggested that managers must first and foremost determine the basic needs and motivators for each generation. An example Callahan (2010) offered was preference for physical work location. Baby boomers crave and value a corner office, while millennials would prefer no office and work from home. Callahan (2010) stated that people generally want the same things in the workforce. They want to be respected and remembered, they want to be consulted, and they want to make connections with other people. But generally, they want these things delivered in a different package. Baby boomers want formal meetings to communicate, while millennials want informal, direct, and immediate feedback. While Le Beau (2012) and Callahan (2010) hinted at means to resolve intergenerational stress through communication and through consideration of physical and emotional needs in the workplace, neither author provided empirical data to support his or her assertions. While the literature is plentiful regarding theories behind intergenerational conflict, it is sparse in empirical support for resolution of this stress. In this study, data were collected to measure the generational



stressors associated with physical and emotional needs as a follow-up to the works of Callahan (2010) and LeBeau (2012).

One of the few peer-reviewed studies of resolution of workplace stress was conducted in the United Kingdom by McGuire, Todnem, and Hutching (2007). McGuire et al. (2007) reinforced the idea of discovering commonality between two or more generations. In this study, five generations of workers including the traditional generation (born prior to 1946) and Generation Z (born after 2000) were considered along with baby boomers, Gen Xers, and millennials. Pairing generational needs had a positive effect in resolving generational stress. For example, both traditionalists and baby boomers value formality in dress and personal communication while Gen Xers, millennials, and Generation Z value informality and electronic communication. McGuire et al. found that conforming to the needs of the majority was effective but suggested that coaching the minority and making some concessions to their needs were also important to ameliorate these needs. In a similar discussion, Johnson and Johnson (2010) suggested a five-step approach to reducing intergenerational workplace stress. Their five steps included the following:

- 1. Look at the generational factor.
- 2. Air different generation perceptions.
- 3. Find a generally appropriate fix through common reward; and
- 4. Find commonality.
- 5. Learn from each other (p. 17).

Johnson and Johnson (2010) added the element of reward to addressing intergenerational workplace stress, noting that all employees want recognition and tangible reward for their work.



Reward

The type and manner of reward as a catalyst for positive intergenerational understanding and cooperation depends on the orientation and motivators of each generational cohort. Castella (2016) discussed in detail the evolving theory of rewards in the workplace, coining the term *meritocracy* and evaluating the modern rewards for performance. Castella (2016) presented historical research on how rewards were awarded over the previous 30 years (1986-2016) to understand the need for reward among the different generations. Castella (2016) found that prior to the mid-1990s, such rewards as promotions and raises were based more on seniority than on achievement. Castella (2016) considered such reward systems to be biased based not only on seniority but also on race, gender, and age. Castella (2016) proposed the creation of performance reward committees to circumvent bias from individual managers. Such committees should consider awarding reward to groups of employees to recognize collective achievement and to minimize resentment when individual employees are solely recognized (Castella, 2016). Castella (2016) proposed that such committees must make such awards with consideration for the values and expectations of the generational groups involved. For example, baby boomers might receive paper certificates of recognition for achievement, while millennials might be granted additional freedom within the workplace.

Furthermore, to research reward as a common intergenerational motivator to the different generational groups, the type of reward to be delivered must be considered. Henagen (2010) discussed the perception of reward by workplace groups identified by age, referencing a classic theory of social comparison processes, which stated that all workers have a basic need for positive reinforcement and recognition. Yet, the form of this reinforcement and recognition varies by age. In this regard, Henagen (2010) found evidence that baby boomers



and Gen Xers favored more tangible, long-term traditional rewards for their performance such as a certificate, monetary award, or trophy, while millennials were more motivated by immediate and positive feedback and more intangible rewards such as more personal freedom. Henagen (2010) suggested that reward may be a strong method of intergenerational motivation if properly administered. Under the Castella meritocracy model, while earlier generations might have been motivated by a turkey at Thanksgiving for recognition of good work, baby boomers want cash in pocket, while millennials want constant and consistent feedback and recognition for their positive performance (Castella, 2016). Therefore, fair and equitable distribution of rewards with consciousness to generational motivation may be a key contributor alleviating intergenerational workplace stress.

Intergenerational Teaming

Since the 1940s, worker participation teams organized for productivity have been common, especially in Japan and Scandinavia. Soon after World War II, Edwards Deming and Joseph Juran introduced the concept of *quality circles*, whereby employees in the same work group assembled during work hours to brainstorm methods to increase productivity and reduce waste. The principle of quality circles may promote bonding and reduce intergenerational conflict through establishment of common goals and common rewards for achievement.

Zillmer (2017) strongly endorsed intergenerational teaming and stated that such teams put multiple generations in one room, allowing trainers to see how their skills compared in order to promote total work productivity by teaming people with different skills. Zillmer (2017) encouraged sharing of skills between generational pairs as a discourse on approaches to teaming. For example, a baby boomer proficient at verbal communication might pair with a



millennial proficient at technological communication such as texting or instant messaging. By working in pairs, members of different generations could share knowledge, work together, and potentially eliminate previously held biases toward one another (Zillmer, 2017). Zillmer's (2017) suggestion of teaming as a method of bonding workers of different intergenerational groups by skills, sharing toward a common goal, appears straightforward and logical. However, Strom and Strom (2015) took an alternate position that intergenerational teaming could further exacerbate generational bias if not properly programed and supervised. Merely mixing generational members without trained supervision could have the opposite effect of reinforcing bias. Thus, to be successful, intergenerational teams must be supervised or coached by a trained facilitator. (Strom & Strom, 2015). Karp and Sirias (2001) and Rogers (2007) indicated that the presence of a facilitator trained in intergenerational communication skills, social psychology, and team dynamics was essential for intergenerational teams to work together effectively toward a common goal. Intergenerational teams coached by trained facilitators had greater success rates in achieving their objectives and goals than control groups lacking trained facilitators (Karp & Sirias, 2001; Rogers, 2007; Strom & Strom, 2015).

The literature on intergenerational teaming has indicated that with proper facilitation, such teams can do much to break down intergenerational bias, promote bonding, provide common objectives, and increase productivity. If meaningful rewards are provided for achievement of objectives and goals by intergenerational teams that consider the needs of all involved, significant reduction of intergenerational workplace conflict and resultant stress and burnout may result. In the proposed study, further consideration will be given to the usefulness of teaming and facilitated workshops at semi-annual auditor conferences and at teamed audits as a possible means to reduce generational stress and burnout.



Summary

This chapter has synthesized a large amount of research in the field of intergenerational stress in the workplace. Most of the published literature on intergenerational stress has focused on workers in the health care profession, specifically on nurses; and on the field of education, specifically on teachers. In addition, most of the available research on intergenerational stress has been conducted in countries other than in the United States. A gap in the literature was found to exist in the investigation of intergenerational workplace stress in the service industry. In a study by (Aug, Menguc, Spryopoulou, and Wang (2016), burnout was considered to be a major factor of attrition and turnover in service industry workers. Yet this single study pertained to the general service industry and did not account for intergenerational causes, which may have related to this burnout. Larson, Meier, Poznanski, and Murff, (2004) considered consequences of stress among internal auditors, but again, did not specifically consider age or include professional external auditors in their analysis. No study specific to the effect of stress and burnout on professional auditors in the industrial sector could be found, suggesting a gap in the literature specific to this profession.

Extensive research (Aug et al., 2016; Callahan, 2010; Day et al., 2009; DiConsiglio, 2009; DiRomuoldo, 2006; Fishman, 2016; Karp & Sirias, 2001) has been devoted to the recognition of the characteristics and preferences of the baby boomer, Generation X and millennial (Generation Y) generations, including their habits and behavioral tendencies. In addition, reaction to stressors in the workplace have been copiously documented in past research. Such reactions to stress may be the result of ageism, self-efficacy, communication breakdown, and reliance on or phobia toward technology. There may be additional stressors that have not yet been documented, which contribute to intergenerational conflict such as



fatigue due to professional demands of external auditing, including heavy travel, interface with angry or upset clients, and extensive administrative demands of scheduling and reporting. Opportunity therefore exists for further research on the effect of stress on professional auditors in the service industry. This study explored this professional group and determined whether or not intergenerational workplace stressors were a significant cause of burnout in this population.

Chapter III describes the methods and sequence by which this research study was conducted. It includes a description of the mixed method explanatory design of the study, including a review of the research questions and hypotheses, a detailed description of the combined AWS/MBI-GS instrument and its appropriateness for use in the study, the method by which it will be administered to the participants, empirical data to be collected and how these data will directly address intergenerational stress. In addition, Chapter III considers power sample analysis and justifies the sample number to be used in the quantitative phase of the study. Chapter III also defines the parameters for the proposed qualitative phase of the study, including the criterion for selection of participants, a description of the questions to be asked during interviews, the environment in which the interviews will be conducted, analysis of qualitative data, the methods by which qualitative data will be analyzed, and the method by which association of and comparison to the data collected during the quantitative phase of the study will be made. Chapter III also presents ethical, and confidentiality considerations essential to the protection of the identity of participants, their responses in both phases of the study, and the safeguarding of these data upon completion of the study.



CHAPTER III: METHOD

The purpose of this chapter is to describe the research design and procedures that were followed in conducting the study. The study utilized a mixed method explanatory sequential design (Creswell, Plano Clark, Guttmann, & Hanson, 2003) to research and identify stressors both common and unique to the three generations included in this study of professional industrial auditors. The methodological approach used commenced with administration of the AWS/MBI-GS to collect quantitative data. A sample of 90 participants of a population of 275 industrial auditors affiliated with a single certification body (CB) was electronically surveyed using the AWS/MBI-GS. Responses to the survey were collected and summarized by Mind Garden Inc., after which these data were analyzed by the researcher. Upon completion of the quantitative phase of the study, a semi-structured qualitative interview of 13 auditors representing five auditors from the baby boomer and Generation X generational groups and three auditors from the millennial generational group was conducted to test and validate the quantitative data.

The rationale for using a mixed method explanatory sequential design and the follow-up explanation model as suggested by Creswell, Plano Clark, Guttmann, and Hanson (2003) was that the design application helps connect the quantitative and qualitative data and accentuates the quantitative data utilizing in-depth qualitative analysis to validate the results. This mixed methods approach allowed the researcher to share quantitative data with the interview participants to validate intergenerational responses to suggest which stressors were most common to each generational group and what factors minimized stress with each group. Overall data analysis helped address the research questions, thereby expanding the knowledge base of intergenerational conflict and burnout.



The participants were surveyed using the Area of Worklife Survey (AWS) and the Maslach Burnout Inventory-General Survey (MBI-GS) combined by Mind Garden into one combined survey. This yielded data describing reaction to stressors in each of these generational groups. The AWS/MBI-GS has been widely utilized by industrial and organizational psychologists and researchers to evaluate and measure stress and burnout in the workplace (Loera, Converso, & Viottii, 2014; Mezaros, Adam, Szabo, & Sanaranayake, 2012; Sziget & Urban, 2014). Authors of these previous studies have reported success in the measurement of sources of stress, including workload, control, reward, community, fairness and values coupled with sources of follow-on burnout, including cynicism, emotional exhaustion, and professional efficacy as previously described in Chapter I. In this study, the responses of three generational groups as reported by the scores on the AWS/MBI-GS were compared to determine whether the generations reacted differently to the stressors presented in the test inventories. These results were validated and refined during the qualitative phase of the proposed study.

Semi-structured interviews helped validate and expand upon the quantitative data in Phase 2 of the study to identify trends in responses of each of the generational groups. Creswell et al. (2003) described the follow-up explanation model of the explanatory sequential design procedure as appropriate when qualitative data are the primary emphasis of the study but must be synthesized to reflect, highlight, substantiate, and explain individual group results obtained through quantitative means.

The qualitative portion of the study was critical, as quantitative data without follow-up questioning would merely provide statistical evidence of potential differences between groups, and would therefore be inconclusive. To evaluate the premise of this study that



typical generational stressors inherent to industrial auditors affect each generation differently resulting in different behavioral responses common to each generation, a uniform method of semi-structured interviews was designed and implemented. Sandelowski and Barroso (2000) proposed conducting semi-structured interviews using a script of questions that were non-threatening, easy to understand, and presented in non-technical language. The interview was designed to augment the data derived from the quantitative research.

During the qualitative portion of the study, the first five participants from the baby boomer and Generation X generational groups and the three participants from the millennial generational group who responded to the quantitative survey and agreed to participate in an interview were selected to participate in the qualitative study. If fewer than five participants agreed to participate from the baby boomer and Generation X generational groups, additional participants from the generational groups were invited to participate until five participants from each generational group were identified. All three millennials agreed to participate. Each interviewee was asked what level of stress and discomfort he or she felt in response to stressors common to industrial auditing, such as heavy travel demands, short deadlines, long hours, and bellicose clients. In addition, interviewees were asked how they dealt with each of these stressors, and whether affiliation with auditors of different generational groups added to stress. Differences and similarities in the responses of representatives of the three generational groups were closely monitored as a key outcome of the interviews.

All participants in both portions of the study were volunteers from a population of 275 industrial auditors associated with a single CB. At a conference conducted in August 2017, an awareness briefing was presented to the auditors informing them of the research study and its purpose. No recruitment of participants was attempted during the presentation. Auditors



were informed that they would receive an email from Mind Garden Inc. during the coming months, which would include an invitation to participate in the study, the name of the researcher, and a hyperlink to use should they decide to volunteer. The hyperlink would direct the potential participant to a synopsis of the study, and to an informed consent form that assured confidentiality for those who volunteered to participate.

In August 2018, the survey package was transmitted to the 275 potential participants. If a potential participant accepted the conditions of the informed consent and provided electronic consent to participate, he or she was directed to the AWS/MBI-GS, which could be completed at the individual's leisure but with a defined deadline date. The researcher purchased 100 surveys to allow for additional participants. While 66 participants, as determined by the G power analysis described later in this chapter, were minimally required, 90 auditors successfully completed the survey. The participants were separated into three groups corresponding to their generational affiliation. When the number of participants volunteering from each generational group differed in terms of size as determined by a disparity of more than 25%, additional efforts were made with the assistance of the senior management of the CB to recruit additional volunteer participants to gain equal or near equal numbers of participants from each generational group. However, as industrial auditors in the millennial age group were limited, equal representation from the three generational groups was not possible to achieve for the quantitative sample. The researcher contacted the CB to determine whether there was sufficient representation among the three generational groups to constitute a statistically relevant calculation. The CB indicated that there were sufficient numbers of auditors currently employed or under contract to meet the needs of this study, except for millennial auditors who were limited in number. All respondents of the millennial



group agreed to be interviewed.

In conformance with the sequential exploratory design model (Creswell et al., 2003), progression of the research was as follows:

- 1. Solicitation of at least 66 participants for quantitative phase one data collection.
- 2. Quantitative data collection using the AWS/MBI-GS survey.
- 3. Quantitative data analysis using inferential statistics to determine correlation between the three generational groups.
- Quantitative reporting of results to explicate composite scores from all three generational groups and unique responses to stressors by specific generational groups.
- 5. Solicitation of 13 participants for qualitative Phase 2 data collection, consisting of five participants from the baby boomer and Generation X group and three participants from the millennial group
- 6. Qualitative data collection using semi-structure interviews.
- 7. Qualitative data analysis using thematic analysis to evaluate the conscious perceptions of each generation of participants pertaining to key job stressors and conscious reaction to these stressors, as well as factors which may minimize these stressors.
- 8. Qualitative reporting of results to explicate perceived stressors and minimization factors of each generation and coding of results.
- 9. Analysis and interpretation of combined quantitative and qualitative data.
- 10. Application of interpreted data to address research questions.



Benz and Newman (2008) described the history, philosophy, advantages, and disadvantages of using both quantitative and qualitative methods, and suggested that research is a continuum rather than a "fake dichotomy" (p. 38). Benz and Newman (2008) considered quantitative, or positivistic research, to be controlled, empirical, and scientific; and considered qualitative, or naturalistic research, to be holistic, exploratory, and humanistic. Benz and Newman (2008) further differentiated quantitative and qualitative research to be objective versus subjective.

While quantitative research provides precise measurable controls of variables, randomization, and valid reliable measures, it lacks holistic observable situations that humans experience. Likewise, while qualitative research collects information based on observation of human experience, it lacked formal structure and statistically manipulated data, and could be considered unscientific by positivist researchers (Benz & Newman, 2008).

In this study, the researcher developed a continuum beginning with a quantitative phase during which empirical data obtained through administration of standardized surveys was collected and analyzed to address two research questions and hypotheses. The research continued with a qualitative phase during which these data obtained were tested and compared to observed interview responses to address four additional research questions. Through the use of this mixed methods research approach, both the strict empirical attributes of positivistic research and the holistic and exploratory attributes of naturalistic research were realized as a continuum.

Research Questions and Hypotheses

The study included six questions, two quantitative and four qualitative. The questions addressed the knowledge gap pertaining to the relationship of the stress conditions under



which industrial auditors work, and the degree of reaction to these stressors by auditors of the three different generational groups.

Quantitative Research Questions

RQ1: What between group differences in reaction to common stressors as measured by the combined AWS exist between generational groups of industrial auditors?

H₁₀: No relationship exists between generational affiliation and reaction to stressors as measured by the AWS

H1: A statistically significant relationship exists between generational affiliation and reaction to stressors as measured by the AWS.

RQ2: What differences in potential burnout resulting from stress as measured by the MBI-GS exist between generational groups of industrial auditors?

H2₀: No significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the MBI-GS.

H2₁: A significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the MBI-GS.

Qualitative Research Questions

RQ3: How do participants representing the three generational groups of industrial auditors perceive work related stress?

RQ4: By what means do participants representing the three generational groups minimize stress? RQ5: Which of the perceived work related stressors are the greatest contributors to reduced work effectiveness and ultimately to burnout as reported by participants representing the three generational groups?

RQ6: How do participants representing the three generational groups perceive the



reaction of other generational groups to work related stress and burnout?

Interview questions were semi-structured and exploratory in nature. Participants were encouraged to elaborate on the degree to which specific stressors affected them, for the purpose of isolating these stressors and associating them with causes of stress and burnout by generational groups. By allowing for elaboration about perceived stress and resultant burnout, additional confounding factors presented themselves, which were considered in relationship to the data collected during the quantitative phase of the study. If additional confounding factors presented themselves, the researcher asked additional follow-up questions to explore these factors further.

Population and Sample

Population

The population for this study was 275 industrial auditors affiliated with the single international certification body (CB) accredited by the American National Accreditation Board (ANAB). The industrial auditors perform audit to quality, environmental, and safety standards published by the International Standards Organization (ISO). Only auditors affiliated with this CB were invited to volunteer for the study. These auditors represented both full-time and contract personnel, and met the qualifications described in Chapter I. These qualifications included licensure by an accreditation body such as the American National Accreditation Board (ANAB), the International Registry of Certified Auditors (IRCA), or by the CB. In addition, auditors must have had at least two years of experience with the CB, and have completed training and certification in each standard that they audit through continuing education credits.

The volunteers were briefed on the purpose and methodology to be used during the



study prior to being accepted as participants in the study. The study was introduced through a letter electronically transmitted by the office manager of the CB. The existing staff of industrial auditors affiliated with the CB ranged from 24 to 82 years old.

A detailed email was delivered electronically by the CB to all 275 auditors, soliciting volunteers for participation in the study. The email included a description of expectations and more detail pertaining to the purpose of the study, and the importance of auditor participation to the successful collection of accurate data concerning the environment in which they worked and how stress affected their overall performance (Appendix A).

A minimum sample size was determined to assure statistical significance. Faul, Erdfelder, Buchnerr, and Lang (2009) described a formula for the determination of sample size in behavioral science studies and published a free G power calculation, which permitted the researcher to provide population size, desired confidence level, and confidence interval (margin of error). Faul et al. (2013) indicated that a confidence level of 95% was appropriate for most research studies. A G*power analysis of the population of 240 auditors using the Faul et al.'s (2009) G-power calculator determined that for a one-way ANOVA with three groups using an alpha of 0.05, a power of 0.80, and a large effect size (f-0.40), the minimum sample size was 66. The survey response surpassed the minimum sample size with 99 auditors responding, with 90 successfully completing the survey.

A hyperlink was included in the invitation email for individuals interested in participating. The hyperlink directed the potential participant to a website administered by Mind Garden Inc. Prior to participation, an informed consent (Appendix B) was provided for review and agreement. Those who agreed to the informed consent electronically signed the informed consent and then participated in the quantitative phase of the study. Only one



auditor declined to participate after reviewing the informed consent. All who agreed to participate by electronically signing the informed consent were administered the survey by Mind Garden Inc.

The researcher noted a slowdown in responses during the data collection, and added a drawing for nominal cash prizes for up to the first 100 auditors to participate. This offering resulted in immediate increase in participation, attaining a final participation level of 90 auditors. Upon completion of the quantitative phase of the study, participants were purposely selected from the quantitative sample group to participate in the qualitative phase of the study. Participants from each of the three generational groups were identified and selected by the researcher based upon the generational group to which each participant identified. The first five participants from each generational group responding to the quantitative study were invited to participate in an interview. However, due to the small number of millennial participants available, the three auditors representing this generation were interviewed. As the quantitative phase was conducted anonymously, the researcher did not know the identity of specific responders other than their generational group. As the test administrator, Mind Garden Inc. was able to associate the email addresses of participants sorted by generational group and willingness to participate in an interview as reflected by the supplemental question in the quantitative survey. The researcher contacted individuals associated with the first five email addresses provided by Mind Garden Inc. to invite these participants to participate in the qualitative phase of the study. Those who accepted were included in the interview process and were forwarded a qualitative informed consent to sign (Appendix C). If a participant elected not to participate in the qualitative phase of the study, the researcher contacted the individual with the next email address on the list until the required number of participants



from each of generational groups were identified for inclusion in the second phase of the study. Participants were afforded the opportunity to assign their own pseudonyms as a means of protecting their identity. All 13 participants elected to be identified by their first names.

Instrumentation

Quantitative Instrumentation

The principal testing instruments used in the study were the Area of Worklife Survey (AWS) and the Maslach Burnout Inventory-General Services (MBI-GS) combined (AWS/MBI-GS) as administered by Mind Garden Inc. The inventories were first introduced in 1981 (Maslach & Jackson, 1981) and have become highly accepted standards to assess work stress and work burnout respectively. Barker, Demerarti, and Schaufeli, (2002); Ray, Wong, White, and Heaslip, 2013; and Tomas, de los Santos, Alonso, Andres, and Fernandez (2016) have validated the use of the combined instruments in the assessment of anxiety, stress, coping, and burnout in office workers, teachers, and mental health care professionals. As a follow-up to the AWS, the MBI-GS measured degrees of emotional exhaustion, cynicism, and professional efficacy, which may further reinforce the key stressors that ultimately result in burnout.

AWS/MBI-GS History and Structure

The AWS and the MBI-GS were developed separately but are commonly used together to measure stress and burnout. The MBI was originally used with human services professionals such as nurses, physicians, teachers, lawyers, child-care workers, counselors, probation officers, social workers, and prison services personnel (Schutte, Toppinen, & Schaufeli, 2000). The MBI is now offered by Mind Garden Inc. in several forms tailored to specific industries. In this study, the General Services Survey, a specialized form of the MBI,



was used. Of the forms available, the General Services Survey was recommended as appropriate to management and business professionals (Mind Garden, 2016).

The AWS was developed in 2000 (Leiter & Maslach) as a companion tool to the MBI. It added the dimension of typical workplace stress to the dimension of burnout presented by the MBI-GS. Mind Garden Inc. recommends combining the tests to present a complete analysis of sources of stress and resultant burnout occurrence. The two instruments are congruent in that the scores on each test can be used to predict potential burnout based upon the level of stress expressed by the participant. For example, a high AWS score coupled with a high MBI-GS score may be an indication of high probability of potential burnout due to excessive job stress. If such a trend is demonstrated in a specific generational group, it may be indicative of stressors for which that generation is especially sensitive. The composite scores presented by these instruments was critical to the completion of the quantitative phase of this study, and when used together, presented a composite score of the psychological stress and corresponding burnout probability of each participant.

AWS-MBI-GS Reliability and Validity

Leiter and Maslach (2001) conducted analysis of 1,443 employees using the AWS and found that test re-test correlations indicated a strong level of consistence in all AWS scales over time. Leiter and Maslach (2001) found correlations in the .51 to .62 range, confirming that the six AWS scales were equally responsive to their respective qualities of work scales.

For the MBI-GS, Leiter and Maslach (2011) considered responses from 12,140 employees and reported reliability Cronback's alpha scores of .88 for exhaustion, .76 for cynicism, and .76 for professional efficacy. Across many samples, reliability coefficients for internal consistency and stability were found to be generally adequate for the MBI-GS studies.



Supplemental questions. In addition to the standard questions posed by the AWS/MBI- GS, additional questions were added to the survey (Appendix D) that were unique and appropriate to this proposed study to gain more detail about specific stressors, such as travel, deadlines, and stressors associated with the CB office. Additional questions were directed at these specific stressors, such as whether mandatory travel significantly added to stress levels, if the CB office personnel added to stress levels, and whether the auditor felt supported by the CB office. Mind Garden Inc. added these additional questions to the combined survey prior to distribution of the instruments. The researcher collaborated with Mind Garden Inc. as to the weighting of these additional questions in determining the total score generated by the AWS/MBI-GS. Other questions also identified the generational group to which the participant identified herself or himself and identified whether the participant was willing toparticipate in the qualitative study if invited. This allowed Mind Garden and the researcher to sort the participants electronically into generational groups and to identify potential participants for the qualitative phase of the study.

The AWS/MBI-GS is available for administration in both electronic and paper form. The electronic version was used for this study to facilitate ease of administration, scoring, and analyzing and reporting data. Participants received an invitation from the researcher sent by the test administrator and an e-mail link sent by Mind Garden Inc., which connected them to a dedicated site unique to this study. Participants then completed the survey at a time and place convenient to them. Mind Garden Inc. collected and delivered the data to the researcher for analysis. The responses to the survey was anonymous to enable the participants to answer honestly and without fear of reprisal from the researcher or the CB. The only link to the identity of the participant was the email address associated with the completion of each



survey, which was in the custody of Mind Garden Inc. and available to the researcher by request. No names were associated with the data, and the researcher initially received only individual survey data without any information regarding the identity of the participant.

Psychometrics for the AWS/MBI-GS were developed based on validity and reliability studies by Leiter and Maslach, including job conditions associated with burnout, long-term outcomes associated with burnout and discriminant validity data. The studies have correlated exhaustion, cynicism, and professional efficacy with both stress and burnout, and have reported strong validation of the instruments. (Leiter & Maslach, 2001).

Qualitative Instrumentation

Twelve purposefully selected participants were interviewed using a semi-structured interview guide. The interviews were audio recorded and then transcribed. Data were anonymized and then coded to identify essential findings of the interviews. As discussed by Hennick, Hutter, and Bailey (2012), a threefold benefit was gained by coding responses. It allowed identification of issues raised, facilitated in organizing the data, and streamlined reporting of the data. Codes may be deductive or inductive, and were collected and analyzed following the interviews. An interview script (Appendix E) guided the interview. This script helped ensure consistency and validity of the interviews. Prior to conducting interviews, the interview questionnaire was pilot-tested in the format to be used in the actual interviews. The pilot interviewes were volunteers from the office staff of the certification body (CB) who matched the sample participants in audit experience. Through the pilot testing, any questions that caused confusion or that were unclear were amended. The pilot test also aided the researcher in rehearsing the interview; practicing epoché, in coding, and transcribing the results.



Industrial auditors work at client sites worldwide and are greatly dispersed geographically. Interviews were conducted using telephone at a time mutually agreeable to the researcher and the auditor. The interviews were audio-recorded onto a 32 gigabyte DeciVibe digital voice-and-call recorder connected to the researcher's cellphone. Upon completion of the interview, the recording was played back and transcribed by the researcher.

Ethical Considerations

Several issues of ethics and confidentiality were considered in preparation for the study. The certification body (CB) agreed to sponsor the study on the condition that the research methods involved be disclosed in advance to top management and to the participants. The CB management was provided with a copy of the letter of intent and received a verbal briefing during their conference in August 2017. The CB agreed to and authorized the study as evidenced in Appendix F.

The CB was briefed on the provisions for confidentiality in the study and was assured that under no circumstances would the identities of the participants be made known. The CB management was briefed on the overall results and conclusions of the study in the form of an executive briefing upon the study's completion.

To protect the identity of participants in the quantitative study, the researcher provided Mind Garden Inc. (the test administrator) with a list of e-mail addresses provided by the CB of all auditors who were active in the company and who met the prerequisites described earlier in this chapter. As it was recognized that some email addresses could have identified the potential participant by name, the test administrator utilized the email addresses only to contact potential participants. The test administrator also provided written assurance that email addresses would not be used for any purpose other than for the administration of the



study. When the potential participant responded and completed the required informed consent agreement (Appendix E), the test administrator provided access to the AWS/MBI-GS electronically and recorded the data. Once these data were successfully collected and the survey was completed, the researcher separated the responding participants into three lists: baby boomers, Generation Gen Xers and millennials, based upon their response to their age group on the survey. From the three lists, the test administrator selected and helped the researcher to invite the first five participants from each list to participate in the qualitative phase of the study. As noted, the exception was among millennials, from which only three participants were identified. The test administrator provided the researcher with the email addresses of the participants and invited these participants to participate further in an interview and requested that they complete the qualitative informed consent agreement. All of the participants invited to participate further accepted the invitation. The identities of the participants in the qualitative study were known only to the researcher and the test administrator, and were strictly protected by means described in this chapter. As previously stated, all participants were afforded the opportunity to select pseudo names to protect their identity further and chose to be identified by their first name.

Confidentiality of Data

Data obtained through both quantitative and qualitative means has been protected from disclosure of the identity of participants. Individual responses to surveys and interviews were not disclosed unless required by law or by the chair of the University of the Rockies Institutional Review Board. As previously described, responses to the AWS/MBI-GS surveys were selected anonymously by the test administrator, and the list of email addresses of participants has been kept confidential as described in the paragraph below. During the



qualitative phase, participants' names were limited to their first names to protect their individual identity, and every precaution was taken to safeguard the identity of the participants.

Recordings and transcripts of the interviews have been maintained in a manner accessible only by the researcher. All notes, written materials, and transcripts have been maintained on a removable media storage device kept in a secure locked location in the researcher's home office. Access to the removable storage device has been password controlled. Audio-recorded material has been maintained on a password-protected equipment, which have been stored in a secure locked location in the researcher's home office. All information and data obtained in the study will be retained by the researcher for five years after completion of the study, and then all materials pertaining to the study will be physically destroyed. Research, name list keys, and interview transcripts in paper form, will be shredded, and the recording device will be erased of all interview content.

Termination of Participation

A participant was afforded the option to withdraw from the study at any time, and for any reason, without penalty and with no requirement to provide a reason for termination of participation. If a participant was in any way harmed by the research, immediate action would be taken on the part of the researcher to protect the participant by meeting with the participant and/or the CB management to mitigate the harm. While harm was unlikely due to strict protection of identity, it is remotely possible that CB management may speculate on the identity of participants.

The President of the CB has agreed to make no attempt to associate results of the study with the identity of participants. If the survey or interview caused stress to a participant due to



its subject matter, the researcher took immediate action to care for the participant by referral to the company employee assistance program or to a 1-800 mental health crisis line. During both phases of the study, no participant indicated a desire to withdraw or reported suffering any harm whatsoever.

Researcher Bias

The researcher is affiliated with the CB as a consultant to its clients and as a contract auditor. As such, it is recognized that this affiliation presents the potential for bias. To minimize the possibility of bias influencing the analysis of data, the initial statistical data collection and reporting was conducted by the test administrator. Data was collated and delivered to the researcher with no association to the identity of the participants. The researcher interpreted and analyzed these data and reported conclusions based strictly on the data provided by the test administrator.

In addition, potential bias on the part of the researcher during the qualitative phase of the study must be recognized. The researcher was sensitive to his predispositions, expectations, biases. and values. While total objectivity may be impossible, the researcher strived for balance, fairness, and completeness in data analysis and interpretation. Walcott (1994) suggested a strategy for rigorous subjectivity to ensure credibility of the interview process.

The researcher carefully and strictly adhered to the methods of data collection and to the interview script defined in this chapter. The researcher clearly stated at the outset of the study any possible beliefs, expectations, and cultural values that might have predisposed the researcher to interpret data in a particular way (Leedy & Ormrod, 2016). To assure objectivity, the researcher practiced epoché. Introduced by the Greek philosopher and skeptic



Sextus, epoché is an attitude whereby the researcher neither accepts nor rejects a person's values or assumptions but allows things to unfold. In adopting epoché, no one opinion or point of view takes precedence over any other as being more credible. This allowed for the researcher to avoid making judgements. (Moja-Stresser, 2016). In practice, the researcher made no judgements of the participant's response but encouraged the participant to elaborate on her or his feelings and rationale for responses. The researcher took care to avoid coaching or encouraging the participant to respond in a manner that could have reflected his personal feeling and opinions. The researcher recorded the participant's responses exactly as presented.

Quantitative Data Collection and Analysis

The researcher compared the responses of each generational group to the stress and burnout considerations posed by the combined AWS/MBI-GS. Huck (2012) defined this as an absolute assessment of each group's standing on the quantitative variable. The AWS and MBI-GS use Likert scales to evaluate reaction to stress and burnout using an ordinal or dichotomous scale. The ranges on the surveys represent raw scores for each participant. Samples of both instruments are contained in Appendices G and H. The handbooks for data interpretation of the AWS and the MBI-GS provide detailed instruction for analysis, interpretation, and reporting of results obtained from these instruments and were used throughout the study to ensure consistent methods of calculation, analysis, and reporting of data.

Trends were analyzed to identify similarities and differences in responses to each question by each generational group. A histogram of the responses to each stress and burnout factor by generational group was constructed and reported. The trends identified for each generational group were evaluated to identify which stressors were relevant to each group and



how these stressors applied to the research questions.

Upon completion of the administration of the AWS/MBI-GS, the test administrator provided raw data on the responses to each question by the total population. These data included measures of central tendency including mean, median, mode, variance, standard deviation, skew, and kurtosis.

Once the descriptive analyses were completed, a standard correlational matrix was constructed using Pearson's r to compare each generational response and to establish ordinal relationships between the groups for both stressors and burnout. Cronbach's alpha was calculated as a function of the number of items in the AWS/MBI-GS to determine the average covariance between items, and the variance of the total score. This provided equivalent measures of dichotomous data, thereby assuring consistency of reliable test scores, and is a technique often used in psychological research for internal estimation, hypothesis testing, and sample determination (Bonnett & Wright, 2015; Manerikar & Manerikar, 2015). Bonnett and Wright (2015) suggested that the use of Cronbach's alpha is an effective tool for the analyses of test responses among several dichotomous groups exposed to a common set of questions. This study applied Cronbach's alpha to differentiate and compare the responses of each generational group to common questions regarding stress and burnout, and to investigate further these differences during the qualitative phase of the study. Intellectus software was used to calculate the values from the raw data obtained from the test administrator.

Once the significance of means was determined, analysis of variance was used to analyze further and compare the multiple means. As suggested by Huck (2012), a one-way analysis of variance is useful to compare the responses of different groups to pinpoint variation between these groups. In using this tool, one independent variable, specifically the



generational affiliation of the participant, and the dependent variable, corresponds to the measured characteristic of the specific participant from whom these data were gathered. A sample of the AWS template is included as Appendix G, and a sample of the MBI-GS template is included as Appendix H. In the quantitative portion of the study, the independent variable was generational affiliation of the participant as determined by the generational group with which each participant associated herself or himself. The first set of dependent variables are the responses to each of the six stress factors measured by the AWS as outlined in Appendix G. Additional dependent variables are the response score for each participant to the three burnout factors measured by the MBI-GS.

Qualitative Data Collection and Analysis

Leedy and Ormrod (2016) indicated that while quantitative studies are typically presented in an objective, scientific style, qualitative studies include dialogs and participants' statements to illustrate findings. The qualitative data therefore included summation of actual dialog from the 15 interviews in the main body of the report. Upon completion of the interviews, analysis and interpretation of the data as they applied to the research questions commenced. These data included the coded responses to interview questions, which were collated and reported in a matrix by generational groups.

A thematic analysis was conducted in the collection and analysis of qualitative data.

Data collected through the qualitative interviews were analyzed to identify stress indicative of each generational group, not of individual participants. To record responses, all interviews were audio-recorded.



Validity

Quantitative Data

Several threats to validity of results were considered in the study. In any survey or psychometric instrument, participants may either misinterpret a situation, misunderstand the questions, or fail to complete the assessment. This may result in false or incomplete data being reported. In addition, factors or bias may skew the data. For example, participants may respond to the instruments based on how they think auditors should respond or how they think the researcher would like them to respond, rather than accurately assessing their own feelings regarding the situation posed. In addition, participants may be influenced by external factors such as the environment in which they complete the inventory, their current state of mind or mood, or their time constraints. To minimize these factors, the test administrator advised the participants to complete the survey at a time and place that was physically comfortable (Avsar & Tavsancil, 2017), and when they had sufficient time to complete the survey without rushing,

A second threat to validity as suggested by Huck (2012) is the possibility of using incorrect methods of calculation. In addition, miscalculation and misinterpretation of data result in faulty assumptions and conclusions. To minimize this error, the researcher strictly adhered to the protocol prescribed by the test administrator for analysis and interpretation of survey results as described in the survey handbooks.

A third threat to validity is the nature of the inventory itself. Huck (2012) stated that in Likert-type attitude inventories, the total score derived from participant responses are ordinal in nature, and responses from participants are arbitrary depending on the perspective of the individual participant to the relationship of the response options. What may constitute



stress in one individual may be different than another person, regardless of the generational group. Such secondary factors as cultural background, ethnicity, or age may further skew the data. Therefore, inferential statistical tools such as t-tests and analysis of variance may be necessary to recognize and evaluate variance and errors in the data. This will allow for focus on multiple means to measure if normal distribution is present in each of the variable groups. Huck (2012) warned that variation in each of the test groups should be considered in terms of several factors including population, the difference in correlation coefficient from zero, and the separation of statistical significance versus practical significance. These threats apply to both internal and external validity of the results.

Internal validity, as defined by Wilson (2016), refers to how well an experiment was completed, especially whether it avoided confounding variables acting at the same time. Likewise, external validity, as defined by Wilson (2016), refers to the validity of generalized inferences to other situations and to other people. Conclusions made in this study may be descriptive of and applicable to professional industrial auditors of the age groups described, but not necessarily descriptive of or applicable to individuals in other professions, or age groups or individuals in groups composed of different cultural characteristics.

Qualitative Data

The researcher conducted semi-structured, in-depth interviews of approximately 40 minutes each. As the researcher has worked as a professional industrial auditor and routinely interviews people, strengths include the ability to associate and empathize with the participants, and through interpretation of both verbal and non-verbal responses, direct the interview to attempt to minimize anxiety, mistrust. or discomfort of the participant. As suggested by Hennick et al. (2012), this was accomplished through the progression of



introductory general questions, opening questions, key questions, and closing questions. The researcher reminded the participant of the confidentiality of the interview at its outset to gain trust, and carefully listened to the participant to observe and record verbal responses and reactions. While an interview guide of questions was followed, any variations in responses by the participant were recorded and reported.

Limitations of the qualitative data included subjectivity and positionality. Perception of the researcher by the interviewee in terms of gender and attitude may have influenced the quality of the data. Since the researcher has been working as a contractor to the CB, most participants had prior acquaintance with the researcher, either as a co-auditor or through CB conferences. The researcher was introduced as a student who was interested in how different generational groups interacted and responded to stress in the workplace. The researcher at the outset expressed honesty and sincerity about the objectives of the interview. As suggested by Hennick et al. (2012), a token gift consisting of a \$25 Amazon gift certificate was given to the participant after the interview was completed in appreciation of her or his support of the study. Complicating issues, such as time zone differences and finding a comfortable time for the participant, as well as the researcher's skill to establish rapport, probe, listen, and react were perceived differently by individuals of different ages, genders, and cultures. Further, the researcher needed to vary from the interview guide to facilitate the flow of information. As the interviews were recorded using an audio device and then transcribed, it was also possible for recording or transcription errors to occur.

With one exception, the interviews were conducted using telephone. Due to the physical location of auditors, this necessitated the careful scheduling of interviews to consider time zone differences and availability of auditors. Most interviews occurred after work hours



or on weekends. A key limitation was that the researcher had no control of the physical environment of the participant or outside factors contributing to the mood and temperament of the participant. However, every effort was made to schedule and conduct the interviews at a time when the participant was most comfortable.

Trustworthiness

The trustworthiness of the qualitative phase of the study must be established. Since the onset of qualitative research in the 1980s, positivists have questioned the validity of qualitative research, while naturalists have supported their research by specific methods to validate data. These methods include credibility, transferability, dependability, and confirmability (Shenton, 2004). Credibility demonstrates internal validity, whereby observations are repeatable and sustainable through a random sample of participants.

Transferability demonstrates external validity in repeatability with similar studies.

Dependability demonstrates reliability in the method of collecting, recording, and reporting data. Confirmability demonstrates the objectivity of the researcher in conducting the study.

Shenton (2004) outlined numerous tools to attain credibility, transferability, dependability, and confirmability. These include random sampling, intuitive questioning, triangulation, or the corroboration of needs of people in comparable positions, and repeatability in the posing of questions to all participants.

To establish trustworthiness in this study, the sample was drawn selecting participants solely in the order in which they completed the quantitative survey. All questioning was to the same script for all participants in a semi-structured format. The study was repeated, and data were collected and analyzed in the exact same manner for the interviews.

Leavitt, Motulsky, Wertz, Morrow, and Ponteroto (2017) considered the most crucial



factors in trustworthiness of qualitative studies to be fidelity and utility. Leavitt et al. (2017) considered these factors essential in that there must be honest, defined research methodology in the study. In addition, the study must be useful to the field of psychology and social science and applicable to more than the immediate study. This aligns with the credibility and confirmability factors defined in the earlier writings of Shenton (2004).

Summary

This chapter has described the research methodology used in the study. Methods for conducting research were described including the use of the AWS/MBI-GS as the instrument for collecting quantitative data. The quantitative and qualitative research questions, as well has the hypotheses, were again stated for the study. In addition, a description of the participants and groupings of participants were included as well as a discussion of the methods, sampling requirements, and qualitative steps that were used to conduct the research. Theethical considerations for the protection of the participants and for the safeguarding of data and information obtained during the study were described. The discussion included the method of data collection, the use and expectations of the test administrator, and the briefing and participation of the CB were also described. The methodologies for data analysis were also defined.

In Chapter IV, the results of data collection and analysis will be reported. Missing data, participant dropout, and any other abnormalities that occurred during the survey and interview processes will be disclosed and analyzed in the context of the overall result. Results will then be addressed in response to the research questions. These will include the results of statistical analyses and hypotheses testing. In addition to the report of quantitative data, substantiating data obtained through the qualitative interviews will be reported and discussed.



CHAPTER IV: RESULTS

The purpose of this chapter is to report the results of this study, to present the data supporting each phase of the research, and to apply these results to the research questions and hypotheses. The chapter includes a discussion of the in-depth analysis of both the quantitative and qualitative data to determine the validity of the research hypotheses and to address the specific research questions.

This mixed method explanatory sequential design study was conducted in two phases. Phase I, the quantitative phase, consisted of an electronic survey of 90 participants who responded to an invitation from a population of 275 auditors. Phase II, the qualitative phase, consisted of interviews of 12 randomly selected participants from among the group who answered the quantitative survey, plus the three millennials, representing the three generational groups included in this study, baby boomers, Generation X, and millennials (Generation Y).

The chapter is organized into three sections. The first section includes a discussion of the results of the quantitative phase of the study and includes an analysis of data collected from the combined Area of Worklife Survey (AWS) and the Maslach Burnout Inventory (MBI). These quantitative results are presented individually by attribute as derived from the raw data reported by the test administrator, Mind Garden, Inc. Due to copyright restrictions, the actual questions contained in these survey tools are not presented. However, a sample of the contents of the survey tools are presented in Appendix H.

The second section of this chapter includes a discussion of the results of the qualitative phase of the study and includes an analysis of data collected from the 12 semi-structured interviews conducted by the researcher during September and October of 2018. The section



considers the responses of each generational group collected through analysis and coding of audio-recorded responses of the interview participants.

The third section of this chapter reports congruency of the quantitative and qualitative data in addressing the research questions. The discussion in this section focuses upon similarities and differences of the responses from each of the three generational groups as determined by the comparison of the data collected during the quantitative and qualitative phases. The chapter concludes with a summation of the results and an introduction to Chapter V.

Purpose of the Study

The purpose of this mixed method explanatory sequential study was to examine levels of stress and burnout in different generational groups and to evaluate the differences between generational groups and their methods of coping with workplace stress. The study was conducted with a population of 275 professional industrial auditors residing in North America, who worked for a certification body (CB) headquartered near Boston, Massachusetts, and who traveled worldwide to complete their job responsibilities as full-time employees or as contractors. Three generational groups currently represented in the service industry were included in the study: baby boomers, Generation X and millennials. The researcher questioned whether the generational groups would show markedly different psychological and cultural characteristics, which would result in variation in responses to day-to-day stress common to industrial auditing. Using both quantitative and qualitative methods, the researcher gathered participant responses to answer the six research questions considered in this study. These research questions addressed unique issues pertaining to the effect of workplace stressors on industrial auditors, and whether these stressors were likely to cause



burnout among the generational groups considered in this study. While the quantitative and qualitative phases of this study were conducted independently of each other, the researcher maintained written notes of trends in responses between the generational groups throughout the study to pinpoint similarities and differences both within and between these groups.

Pilot Study

In preparation for actual data collection, a pilot study was conducted for both the quantitative and the qualitative phases. For the quantitative phase, five individuals were asked to complete the AWS/MBI-GS. These individuals included three volunteers of a client company familiar with the audit process, the researcher's spouse and the researcher's dissertation chair. This administration of the AWS/MBI-GS was supported by the test administrator and allowed for the elimination of change to any survey questions that were confusing or ambiguous. The pilot test yielded sample data to verify conformity and compatibility with this study. Several standard questions pertaining to demographics were eliminated as they were not applicable to the study. Based upon the inputs of the five pilot study participants, the questions were updated or modified to reduce confusion in the actual survey.

For the qualitative phase, five pilot interviews were conducted using volunteer auditors from a client company. These interviews enabled the researcher to become familiar with the interview questions and typical responses, and to ensure epoché was practiced to minimize researcher bias. These pilot interviews were transcribed and coded to prepare the researcher for the actual participant interviews. No data from the quantitative or qualitative pilot studies were included in the data from the study.



Quantitative Phase

Restatement of the Quantitative Research Questions and Hypotheses

- RQ1. What between-group differences in reaction to common stressors as measured by the AWS exist between generational groups of industrial auditors?
- $\mathrm{H1}_{\scriptscriptstyle{0}}$: No relationship exists between generational affiliation and reaction to stressors as measured by the AWS
- H1: A statistically significant relationship exists between generational affiliation and reaction to stressors as measured by the AWS.
- RQ2. What differences in potential burnout resulting from stress as measured by the MBI-GS exist between generational groups of industrial auditors?
- H2_o: No significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the MBI-GS.
- H2₁: A significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the MBI-GS.

Sample

Phase 1, the quantitative phase of the study, commenced with the electronic distribution of an invitation letter to all auditors currently working for the certification body (CB) in either a full-time or contract capacity on July 31, 2018 (Appendix A). The letter was written by the researcher and distributed by the test administrator (Mind Garden) to the list provided from the CB to the test administrator during the previous week. To protect the identities of the auditors, only the email addresses were provided to the test administrator, and 275 active auditors received the letter of invitation. The researcher had previously determined that a minimum sample of 66 participants would be required to establish statistical



significance, and 100 surveys were purchased by the researcher from the test administrator to allow for additional participation beyond the minimum sample. After two weeks, a duplicate letter was emailed to the same list of auditors to reinforce the need for participants. As response to the initial invitation letter was low, the researcher introduced an incentive to participate in the form of a drawing for nominal cash prizes to be awarded at the annual national auditor conference in September 2018. The prizes ranged from \$25 for fourth place to \$100 for first place, and participation in the drawing was limited to those auditors who successfully completed the survey. Upon announcement of the incentive, participation increased from 40 participants to 99 participants. Of these 99 participants, nine attempted but failed to complete the survey correctly, yielding a final count of 90 successfully completed surveys. The 90 completed surveys included surveys from 57 baby boomers, 24 Generation Xers, six other generation participants and three millennial Generation participants. The other generation was determined by the researcher to consist of pre-baby baby boomers born prior to 1946 who were outside of the scope of this study and therefore not included in the quantitative data analysis. Likewise, the number of millennials was insufficient to represent a significant statistical sample, therefore, survey data from millennials were not included in the quantitative analysis but were included in the qualitative analysis.

Data Collection

Logistics of the data collection. The collection of data for quantitative analysis was conducted in accordance with the protocol defined in the *Area of Worklife Study Manual and Sampler Set* (5th ed.), and the *Maslach Burnout Inventory Manual* (4th ed.). On the recommendation of the test administrator, a combined AWS/MBI-GS integrated survey was used to collect data from the participants.



Each participant was required to log onto the test administrator website using a hyperlink provided in the letter of invitation. Upon entry, the participant entered their email address and a self-selected password. Entry to the survey required an exact match of the email entered by the participant and the email provided by the certification body. Upon successful entry and completion of an informed consent, the participant completed a 28-item AWS consisting of multiple choice questions, scoring responses to the six Areas of Worklife Survey Scales including Workload, Control, Reward, Community, Fairness and Values. Subsequently, participants completed a 16-item MBI-GS consisting of stress situations to which participants rated their stress and burnout level on a seven-point Likert Scale, where 0 indicated stress never occurs and 7 indicated stress occurs every day. Answers to the questions resulted in scores for the three core aspects of burnout as measured by the MBI-GS, specifically exhaustion, cynicism and professional efficacy.

Data Analysis and Results

To address the first research question and test the null hypothesis pertaining to stress, the six raw score results from the AWS reported by the test administrator including workload, control, reward, community, fairness, and values were used. To address the second research question and test the null hypothesis pertaining to differing generational incidents of burnout, the three raw scores from the MBI-GS reported by the test administrator including exhaustion, cynicism and professional efficacy were used. Tests of statistical significance were calculated for each factor using Intellectus Statistics software. To summarize the data, descriptive statistics were used. Kurtosis, sample minimum, sample maximum, skewness, standard deviation, and various *t*-tests were calculated to determine whether differences between generational groups were significant. A Mann-Whitney *U* test assessed significant differences



in scale dependent variables by a single dichotomous independent variable, in this case, generational affiliation to the six AWS factors and three MBI-GS factors. Data analysis and results are reported for each dependent variable.

Data analysis methodology. Raw data resulting from the AWS and MBI-GS combined survey were collected for each participant, and composite scores were calculated by generation and for the entire test population. The results are presented by each of the categories as measured by the combined score.

The raw score for each dependent variable was calculated by averaging subscale scores into one overall score. For the AWS, each item had a range of 5, where 1 indicated a strong mismatch between the participant and her or his work environment, and 5 indicated a strong match. For the MBI, statements had a range of 0 to 7 indicating frequency of feelings of burnout, where 0 equated to stress never occurring and 7 equated to feeling burned out every day.

On the AWS, a higher score indicated a higher stress level for that participant. Scores for baby boomers and Generation X were then combined and compared using descriptive statistics. Kurtosis was applied to measure the behavior of the distribution. Positive kurtosis signified a distribution more prone to outliers, and negative kurtosis signified a distribution less prone to outliers. An independent sample *t*-test was used to determine if there was a significant difference between the two generational groups. A significant result indicated whether the observed test statistic would be unlikely under the null hypothesis. Finally, a Mann Whitney *U* was calculated to assess the significant differences between the generational groups considering the scale-dependent variables by a single dichotomous independent variable, generational affiliation. A significant result for this test suggested that the two



groups had reliably different scores on the two dependent variables. The calculations and analysis of each AWS and MBI-GS variable are reported individually.

The raw data reported by the test administrator were entered into the Intellectus

Statistics Software database by the researcher and statistical data were generated for analysis.

The analyses are reported for AWS and MBI-GS by individual dependent variable and include interpretation of statistical significance. Table 1 summarizes the overall raw data obtained.

Analysis of Entire Auditor Population

The sample population consisted of 99 auditors. Nine auditors failed to complete the survey or elected not to sign the quantitative consent resulting in 90 completed surveys. Of these, 57 participants identified as baby boomers (63%), 24 participants identified as Generation X (27%), three participants identified as millennials (3%) and six participants identified as Other (7%). All participants classified as *other* were older than baby boomers and were not included in consideration of the research questions. Of the entire sample, 20 auditors indicated three to five years of audit experience (22%), 22 auditors indicated six to ten years of audit experience (24%), 11 auditors indicated 11-15 years of audit experience (12%), and 37 auditors indicated over 15 years of audit experience (41%). All auditors were certified and met the experience requirement to participate in the study.

Of the 90 participants, 73 responded that they did not routinely experience stress in their work (81%), and 17 responded that they do routinely experience stress in their work (19%). This surprised the researcher, and prompted additional questions during the qualitative interviews, which are discussed later in this chapter. Sixty-eight participants responded that they had never considered quitting their job (76%), and 22 participants responded that they had considered quitting due to stress (24%). This further prompted the



researcher to ask additional focused questions regarding burnout tendencies during the qualitative interviews.

The demographic data indicated a significant majority of the participants were older with more experience on-the-job. This concerned the researcher as there were a disproportionate number of baby boomers suggesting that the overall data would be skewed. This required further analysis considering each of the dependent variables of the AWS and MBI-GS by generational group. Overall data by variable is presented in Table 1.

Table 1
Summary of Data from All Participants

	Min.	Max.	Median	Mean	SD	n	Skewness	kurtosis
Exhaustion	0.00	5.20	2.00	2.08	1.281	90	0.464	-0.746
Cynicism	0.00	5.00	1.00	1.33	1.197	90	0.934	0.291
Efficacy	2.70	6.00	5.10	4.94	0.866	90	-0.531	-0.629
Workload	1.00	5.00	2.80	2.82	0.871	90	-0.149	-0.417
Control	2.00	5.00	4.00	3.87	0.669	90	-0.494	-0.181
Reward	1.00	5.00	3.65	3.43	0.915	90	-0.644	-0.066
Community	2.00	4.80	3.60	3.56	0.650	90	-0.462	-0.429
Fairness	1.30	4.80	3.20	3.18	0.698	90	-0.348	-0.114
Values	1.00	5.00	3.80	3.57	0.739	90	-1.287	2.328

These data indicate that most participants did not show overtly high levels of stress or burnout. The MBI-GS scores are on a scale of 0-7 with higher scores in exhaustion and cynicism indicating more likelihood of burnout, and a lower score in professional efficacy indicating more likelihood of burnout. Table 1 demonstrates mean scores of 2.08 for exhaustion, 1.33 for cynicism, and 4.94 for professional efficacy, indicating low levels of exhaustion and cynicism and high levels of professional efficacy throughout the population with minimal skewness and few outliers. However, AWS scores of stress indicate mid-range



levels. The AWS scores are on a scale of 1-5 where 1 indicates low stress in that variable and 5 indicates high stress. Table 1 demonstrates that in all six variables of the AWS, the mean scores for all participants approximate the median at 2.82 for workload, 3.87 for control, 3.43 for reward, 3.56 for community, 3.18 for fairness, and 3.57 for values with minimal skewness and few outliers. This demonstrates mid-range scores for all variables. These data were further sorted by generational group to refine and identify how each of the two groups with statistical significance, baby boomers, and Generation X responded to each variable.

The first area of analysis was to determine whether each of the measurable factors of the AWS and MBI-GS could rule out the null hypothesis, thereby indicating that there was a significant difference in the responses of the baby boomer and Generation X survey participants. The consolidated survey data are presented in Table 2.



Table 2
Summary of AWS/MBI-GS Survey Data

Variable	Boomers M	SD	Xers M	SD	p
Workload	2.86	.80	2.57	.97	.168
Control	3.76	.73	4.10	.51	.041
Reward	3.47	.94	3.29	.96	.429
Community	3.54	.66	3.64	.60	.507
Fairness	3.19	.79	3.20	.53	.935
Values	3.56	.80	3.62	.71	.764
Exhaustion	2.04	1.28	2.35	1.31	.324
Cynicism	1.68	1.18	1.50	1.28	.460
Efficacy	5.03	.88	4.78	.83	.227

As demonstrated by Table 2, the only factor with *p* less than or equal to 0.05, the norm in social science research for determining significance was *control*. Therefore, for all variables other than control, the null hypothesis could not be rejected without further analysis. The researcher than considered each dependent variable in reference to the two quantitative research questions to investigate further whether or not there was objective evidence to reject the null hypothesis and support the research question hypotheses.

Area of Worklife Survey variables. The six AWS variables include workload, control, reward, community, fairness and values. There were 28 total items on the survey with each item having a possible response of 1 to 5, with 1 representing a strong mismatch between the person and her or his work environment and 5 representing a strong match between the person and her or his work environment. A separate score was calculated for each variable

and then averaged by generational group. The following results were reported for each of these variables.

Workload. Workload is the most common source of stress and burnout, when job demands exceed human limits resulting in exhaustion. The workload score for each participant was calculated by averaging responses to five survey items. The results indicated a response mean range of 1.00 to 5.00 with a mean of 2.82, a standard deviation (SD) of 0.871, and kurtosis of -0.417, indicating minimal outliers for the entire population (n = 90). The mean for baby boomers was 2.86 with an SD of 0.80, and for Gen Xers, the mean was 2.57 with an SD of 0.97. The p-value (p), or the probability of obtaining the observed results if the null hypothesis is true, it was .168 indicating that the independent samples t-test for workload was not significant. After examining the mean level difference between the two groups, there was no significant effect found for workload. Therefore, the mean of workload was not significantly different between the baby boomers and Gen Xers, and the null hypothesis could not be rejected for workload. Table 3 demonstrates this mean relationship between the two generational groups.

Table 3

Two-Tailed Independent Samples t-Test for the Difference between Workload (Baby Boomers) and Workload (Generation X)

	Baby B	oomers	Generati	on X			
Variable	M	SD	M	SD	t	p	d
Workload	2.86	0.80	2.57	0.97	1.39	.168	0.32

Note. Degrees of Freedom for the *t*-statistic = 79. d represents Cohen's d.



Control. The control scale of the AWS assesses the respondent's opportunity to make choices and decisions, to solve problems, and to contribute to the fulfillment of responsibilities. The control score for each participant was calculated by averaging the responses to four survey items. The results indicated a response mean range of 2.00 to 5.00 with a mean of 3.873, an SD of 0.669, and a kurtosis of -0.181, indicating minimal outliers for the entire population (n = 90). The mean for baby boomers was 3.76 with an SD of 0.73; for Gen Xers, it was 4.10 with an SD of 0.51. The p-value of .041 indicated that the result of the independent sample t-test was significant. Therefore, the mean for control was significantly lower for baby boomers than for Gen Xers, and therefore, the null hypothesis could be rejected for control. Table 4 demonstrates the mean relationship between the two generational groups.

Table 4

Two-Tailed Independent Samples t-Test for the Difference between Control (Baby Boomers) and Control (Generation X)

	Baby B	oomers	Genera	ation X			
Variable	M	SD	M	SD	t	p	d
Control	3.76	0.73	4.10	0.51	2.08	.041	0.54

Note. Degrees of Freedom for the t-statistic = 79. d represents Cohen's d.

Reward. The reward scale of the AWS assesses the financial and social contributions on the job. A meaningful reward system acknowledges contributions to work and provides clear indications of what the organization values. The score for each participant was calculated by averaging the responses to four survey questions. The results indicated a



response mean range of 1.00 to 5.00 with a mean of 3.434, an SD of 0.915 and a kurtosis of 0.066, indicating minimal outliers for the entire population (n = 90). The mean for baby boomers was 3.47 with an SD of 0.94, and the mean for Gen Xers was 3.29 with an SD of 0.96. The p-value of 0.429 indicated that the result of the independent sample t-test was not significant. Therefore, the null hypothesis could not be rejected for reward indicating that baby boomers and Gen Xers responded similarly to survey items measuring reward. Table 5 demonstrates the mean relationship between the two generational groups.

Table 5

Two-Tailed Independent Samples t-Test for the Difference between Reward (Baby Boomers) and Reward (Generation X)

	Baby B	oomers	Gener	ation X			
Variable	M	SD	M	SD	t	p	d
Reward	3.47	0.94	3.29	0.96	0.80	.429	0.19

Note. Degrees of Freedom for the *t*-statistic = 79. *d* represents Cohen's *d*.

Community. The community scale of the AWS assesses quality of the organization's social environment. People thrive in communities characterized by support, collaboration, and positive feelings. Mismatches occur when there is no sense of positive connection with others at work. The community score for each participant was calculated by averaging the responses to five survey items. The results indicated a response mean range of 2.00 to 4.800 with a mean of 3.567, an SD of 0.65, and a kurtosis of -0.429, indicating minimal outliers for the entire population (n = 90). The mean for baby boomers was 3.54 with an SD of 0.66 and; for Gen Xers, it was 3.64 with an SD of 0.60. The p-value of .507 indicated that the result of the independent sample t-test was not significant. The mean for community was not



significantly different for baby boomers and Gen Xers, and therefore, the null hypothesis could not be rejected for Community. Table 6 demonstrates the relationship between the two generational groups.

Table 6

Two-Tailed Independent Samples t-Test for the Difference between Community (Baby Boomers) and Community (Generation X)

	Baby B	oomers	Genera	ation X			
Variable	\overline{M}	SD	M	SD	t	p	d
Community	3.54	0.66	3.64	0.60	-0.67	.507	0.17

Note. Degrees of Freedom for the *t*-statistic = 79. *d* represents Cohen's *d*.

Fairness. The fairness scale of the AWS measures the extent to which the organization has consistent and equitable rules for everyone. This includes the extent to which resources are allocated according to generally understood and consistent procedures. fairness communicates respect for the members of the organization's community. The fairness score for each participant was calculated by averaging the responses to six survey questions. The results indicated a response mean range of 1.300 to 4.800 with a mean of 3.180, an SD of 0.698 and a kurtosis of -0.114, indicating minimal outliers for the entire population (n = 90). The mean for baby boomers was 3.19 with an SD of 0.79, and the mean for Gen Xers was 3.20 with an SD of 0.53. The p-value of .935 indicated that the mean for fairness was not significantly different between the baby boomers and Gen Xers, and therefore the null hypothesis could not be rejected. Table 7 compares and illustrates the mean relationship between the two generational groups



Table 7

Two-Tailed Independent Samples t-Test for the Difference between Fairness (Baby Boomers) and Fairness (Generation X)

	Baby B	oomers	Genera	ation X			
Variable	M	SD	M	SD	t	p	d
Fairness	3.19	0.79	3.20	0.53	-0.08	.935	0.02

Note. Degrees of Freedom for the *t*-statistic = 64.18. *d* represents Cohen's *d*.

Values. The values scale of the AWS assesses the values that are important to the organization and to its members. When organizational and personal values are congruent, successes are shared. Mismatches occur when differences exist between an organization's values and the values of the staff, or if the organization does not practice its stated values. The values score for each participant was calculated by averaging the responses to four survey items. The results indicated a response mean range of 1.00 to 5.00 with a mean of 3.577, an SD of 0.739 and a kurtosis of 2.328 indicating several outliers for the entire population. The mean for baby boomers was 3.56 with an SD of 0.8,0 and the mean for Gen Xers was 3.62 with an SD of 0.71. The p-value of .764 indicated that the mean for values was not significantly different between the baby boomers and Gen Xers, and therefore, the hypothesis could not be rejected. Table 8 compares and illustrates the mean relationship between the two generational groups.



Table 8

Two-Tailed Independent Samples t-Test for the Difference between Values (Baby Boomers) and Values (Generation X)

	Baby B	oomers	Genera	ation X			
Variable	M	SD	M	SD	t	p	d
Values	3.56	0.80	3.62	0.71	0.30	.764	0.08

Note. Degrees of Freedom for the *t*-statistic = 79. *d* represents Cohen's *d*.

Discussion. The data indicated that for five of the six scales of the AWS, only the control scale demonstrated significant difference between the scores of baby boomers and the scores of Gen Xers. However, the data show subtle generational differences in each of the six scales. On a 5-point Likert response scale, a score above 3 indicates a high degree of congruence between the workplace and the respondent's preferences, and conversely, a score below 3 indicates more incongruence between the worker and the workplace.

Data for each group were compared, and this comparison demonstrated congruence in all scales except workload, where both generational groups recorded mean scores below 3, with Gen Xers indicating slightly lower mean scores than baby boomers. This may indicate that stress levels for both generations are exacerbated by inequality between the amount of work assigned and time available for completion of work.

The group mean for all other scales were congruent but to varying degrees. For control, high congruity was indicated by Gen Xers, suggesting high feelings of control while baby boomers indicated slightly lower feelings of control. For reward, both generational groups indicated congruity but just above neutral feelings of reward, with baby boomers indicating slightly higher scores. For community, both generational groups indicated



congruity, with Gen Xers indicating slightly higher feelings of community than baby boomers. For fairness, both generational groups were congruent, but equal in their indication of scores slightly above neutral. The SD of 0.79 and 0.53 in this data set for fairness may offset these scores below the point of neutrality into incongruity and could suggest a possible area of stress. For values, both generational groups were congruent, with Gen Xers recording slightly higher scores indicating more parity with the values of the certification body.

As the control scale *t*-test indicated, a statistically significant difference between the generational groups for workload, the null hypothesis can be rejected. However, for all other scales, the data indicated scores between 3 and 4, indicating weak congruence. The descriptive statistics for these scales demonstrated varied responses from the two generational groups. Therefore, the results are inconclusive as to whether the null hypothesis can be rejected. Through data obtained in qualitative interviews described later in this chapter, further conclusion regarding the significance of these scales upon intergenerational stress was possible.

Maslach Burnout Inventory variables. Burnout is a syndrome of three types of feelings: emotional exhaustion, depersonalization, and low personal accomplishment. The MBI-GS inventory measured three attributes: exhaustion, cynicism and professional efficacy. Items in the survey were written in the form of statements about personal feelings. The participants assessed their feelings and attitudes on two dimensions: frequency and intensity. The inventory consisted of 16 statements of which five measured exhaustion, five measured cynicism, and six measured professional efficacy. Together, the scales of the MBI-GS provided a three-dimensional perspective on burnout whereby a high degree of burnout was reflected in high scores on exhaustion and cynicism, and low scores on professional efficacy.



The MBI-GS assessed the three core aspects of burnout syndrome utilizing a seven-point, fully anchored response format, and each of the three aspects were measured by a separate scale. Scores ranged from 0-7, where 0 indicated that the participant never experienced burnout, and 7 indicated that the participant experienced an attribute of burnout every day. Therefore, a range of 0-7 was possible for scoring each of the three attributes. The test administrator provided the raw data for each of the 90-participants. The researcher entered these data into the Intellectus Statistics software to calculate descriptive statistical data and measures of central tendency. Scores for each of the 90 participants were averaged by the two generational groups of baby boomers and Gen Xers for the three attributes of burnout syndrome. The results were calculated utilizing the identical statistical methods used for the calculation of AWS scores, as the two test tools were combined during administration. The results for the three MBI-GS attributes are described below.

Exhaustion. The combined range for exhaustion was 0 to 5.2 with a mean of 2.082, an SD of 1.281, and a kurtosis of -0.746 for the entire participant population (n = 90). This indicates a wide range of responses among both generational groups with the mean indicating a relatively low result for this attribute. The mean for baby boomers was 2.04, an SD of 1.28, and the mean for Gen Xers was 2.35 with an SD of 1.31. After examining the mean level difference between the two groups, there was not a significant effect found for exhaustion. The independent samples t-test were not significant, suggesting similar distribution of exhaustion for the two generational groups. These data suggest that the null hypothesis could not be rejected.



Table 9

Independent Samples t-Test for the Difference between Exhaustion (Baby Boomers) and Exhaustion (Generation X)

	Baby B	oomers	Gener	ration X			
Variable	M	SD	M	SD	t	p	d
Exhaustion	2.04	1.28	2.35	1.31	-0.99	.324	0.24

Note. Drees of Freedom for the *t*-statistic = 79. d represents Cohen's d.

Cynicism. The combined range for cynicism was 0 to 5.0 with a mean of 1.333, an SD of 1.197, and a kurtosis of 0.291 for the entire participant population (n = 90) indicating a low effect of this attribute on both generational groups. The mean for baby boomers was 1.28, an SD of 1.18, and the mean for Gen Xers was 1.50, with an SD of 1.28. The independent samples t-test were not significant, suggesting similar distribution of cynicism for the two generational groups where t (79) = -0.74, p =.46. These data suggest that the null hypothesis could not be rejected.

Table 10

Independent Samples t-Test for the Difference between Cynicism (Baby Boomers) and Cynicism (Generation X)

	Baby B	oomers	Genera	ation X			
Variable	M	SD	M	SD	t	p	d
Cynicism	1.28	1.18	1.50	1.28	-0.74	.460	0.18

Note. Degrees of Freedom for the *t*-statistic = 79. d represents Cohen's d.



Professional efficacy. The combined range for professional efficacy was 2.7 to 6.0 with a mean of 4.944, an SD of 0.866 and a kurtosis of -0.629 for the entire participant population (n = -90). The mean for baby boomers was 5.03, with an SD of 0.88, and the mean for Gen Xers was 4.78, with an SD of 0.83. The independent samples t-test were not significant, suggesting similar distribution of professional efficacy for the two generational groups. These data suggest that the null hypothesis cannot be rejected for Professional Efficacy.

Table 11

Independent Samples t-Test for the Difference between Professional Efficacy (Baby Boomers) and Professional Efficacy (Generation X)

	Baby Bo	omers	Gener	ation X			
Variable	M	SD	M	SD	t	p	d
Professional Efficacy	5.03	0.88	4.78	0.83	1.22	.227	0.30

Note. Degrees of Freedom for the *t*-statistic = 79. *d* represents Cohen's *d*.

Discussion. Analysis of data from the three scales of the MBI-GS indicated no significance between the baby boomer and Gen Xer groups. Therefore, the null hypothesis to the research question regarding burnout cannot be rejected. However, the MBI-GS data do suggest slightly higher scores for exhaustion, cynicism, and perceptions of professional efficacy. Baby boomers scored slightly lower than Gen Xers for exhaustion, lower on cynicism, and higher on professional efficacy. This suggests that baby boomers were slightly less prone to burnout than Gen Xers. To validate this assumption, the researcher focused several questions on the three burnout factors during the Phase 2 qualitative interviews.



Qualitative Phase

The purpose of the qualitative phase was to explicate the differences between the individuals from the three generational groups included in this study. Participants were purposefully selected from available participants in the quantitative survey population representing baby boomers, Gen Xers, and millennials who successfully completed the combined AWS/MBI-GS survey (n = 90). This section will present descriptive data of the qualitative participants, describe and detail the analytical process including theme identification and coding processes, and integrate the qualitative data with the data obtained during the quantitative phase. The section will address how the interview data addressed the research questions.

Restatement of the Qualitative Research Questions

RQ3: How do participants representing the three generational groups of industrial auditors perceive work related stress?

RQ4: By what means do participants representing the three generational groups minimize stress?

RQ5: Which of the perceived work related stressors are the greatest contributors to reduced work effectiveness and ultimately to burnout as reported by participants representing the three generational groups?

RQ6: How do participants representing the three generational groups perceive the reaction of other generational groups to work related stress and burnout?

Sample

Sample selection for the qualitative phase of the study was criterion-based and purposeful. After completion of the pilot study and updating of the semi-structured interview



protocol, 13 participants who had answered affirmatively to the quantitative survey question regarding willingness to be interviewed were selected as participants for the qualitative phase of the study. Demographic selection was made randomly with the generational groups. Selection was based upon the order in which the participants responded to the quantitative survey. The first five baby boomers and the first five Generation X participants as reported by the test administrator were contacted by the researcher electronically and invited to participate. If a participant in the baby boomer or Generation X groups declined to participate or failed to respond to the invitation within one week, the next sequential respondent in the same generational group was invited to participate until five participants from each group were identified. As there were only three millennials in the population, all three were invited and agreed to participate in qualitative interviews. Prior to commencement of interviews, all selected participants were provided with the informed consent for qualitative research (Appendix C) for review and signature. All 13 participants promptly returned the completed informed consent to the researcher by return e-mail. At this point, the identities of the participants became known to the researcher.

Of the 13 participants identified, all met the study criteria as described in Chapter III. This was ascertained by reviewing participant responses to questions on audit experience and auditor certification status as reported in the quantitative survey and validated by the CB training department verbally.

Due to a technical malfunction of the recording device, one participant interview of the Generation X group (Steve) was lost prior to transcription. The researcher recognized from the remaining four interviews with Generation X participants that saturation had been reached as no new information was being presented. Further, Steve was very close to the upper age



limit for Generation X participants and considered himself *in the cusp* between the two generational groups. Steve's interview was not included in the qualitative analysis.

Data Collection

Data collection followed the steps described in Chapter III. Each participant was afforded the opportunity to identify a time convenient for her or him for the interview, and to select a pseudonym. All but one interview were conducted by telephone. One interview was conducted in person at the CB auditor conference in September 2018. Several participants from all generational groups were uncomfortable being assigned and referred to by a pseudonym. The researcher therefore addressed them by their real names during the interview and then replaced their real names with pseudonyms during the transcription. The researcher created a log containing the participants' real names and corresponding pseudonyms. Participants were invited to choose their own pseudonym. Those who chose not to do so were assigned a pseudonym by the researcher and informed of their pseudonym after the interview.

As the researcher knew nine of the 13 participants as acquaintances, epoché was used prior to data collection through the noting of the researcher's assumptions about the participants and overall generational assumptions in handwritten notes. During the interview process, the researcher made a conscious effort to avoid suggesting or introducing these assumptions to the participants. None of the participants were close working partners or collaborators with the researcher, so although the researcher knew some of the participants professionally, the likelihood of undue influence was minimized by the distance of the relationship between the researcher and the participants. The only exception was Steve who had worked closely with the researcher on several projects as a colleague. As previously stated, Steve's interview was not included in the qualitative results.



In-depth, semi-structured interviews were conducted with participants after rapport was established. The researcher informed the participant when the recording device was turned on, maintained a friendly and professional tone throughout the interview, and reassured participants of the confidentiality of the interview. The interview protocol in Appendix E was followed for all interviews. Several initial interview questions, which were designed by the researcher, were asked to be ice breakers to create rapport at the start of the interview.

Following the completion of each interview, the participant was verbally thanked for her or his time and participation. The interviews were transcribed verbatim, and hard copy transcriptions were generated by the researcher.

Upon completion of the qualitative interviews, participants were e-mailed \$25

Amazon gift cards in appreciation for their time and involvement in the study. One participant requested that his gift be donated to a charity of his choice in lieu of the gift card. The researcher accommodated this request.

Participant Demographics

A total of 13 participants of the 44 who indicated willingness to participate in qualitative interviews in response to a directed question on the quantitative survey were selected (29.5%). As previously stated, these participants were purposefully selected based upon their order of response to the quantitative survey as reported by the test administrator. Four of the initial invitees either declined to be interviewed or did not respond to the invitation within one week of issuance, after which the next respondent within the generational group was invited. Twelve of the 13 participants were interviewed by telephone at a time mutually convenient to the participant and researcher. One participant, Dave, was interviewed face-to-face at the CB auditor conference. The interview times ranged from 37-



50 minutes. Two of the participants were full-time employees of the CB, including Kris, who was a resident staff member for the CB as well as an auditor, and, Jeff, who was a full-time auditor employed by the CB. The remaining 11 participants were contract auditors not employed directly by the CB. As previously stated, one participant, Steve, was not included due to technical problems with the recorder. Six of the remaining participants were female (50%), and six were male (50%). Of the 12 participants, four identified themselves as baby boomers (33.3%), five identified themselves as Generation Xers (41.7%), and three identified themselves as millennials (25%). All participants were certified by either the American National Accreditation Board in the United States or by the International Register of Certified Auditors in the United Kingdom. The number of years of field experience ranged from two to 27. All the auditors were American or Canadian citizens and were fluent in the English language. One participant, Valerie, was a native French speaker but was fluent in English. The initial conversation and introduction to Valerie's interview was conducted in French to put Valerie at ease. However, the formal questioning was conducted and recorded in English.

Pilot Interviews

As previously noted, pilot interviews were conducted prior to the actual live interviews. Five volunteers from a client company were interviewed using the interview script (Appendix E). Prior to the pilot interviews, the researcher hand listed his preconceived expectations to interview responses including his prediction of typical responses from generational groups. This enabled the researcher to identify biases and preconceived notions. To ensure objectivity and minimization of bias, these listings and notes were useful in using epoché throughout the interview process.

During the pilot interviews, the researcher became aware of his biases in that he felt



excited and jubilant when a participant expressed a response that was in with the researcher's expectations but felt disappointment and anxiety when a response conflicted with his expectations. These feelings were noted next to the response in the transcriptions of the pilot interviews and served to minimize and manage such reactions during the live interviews. As a result, the researcher was more objective and better able to apply epoché during the actual interviews. The pilot interviews enabled the researcher to remain open-minded and prevented the suggestion of expectations upon participants during the live interviews.

Immersion in the Data

Immersion in the data was critical to address the qualitative research questions.

Immersion was attained by collecting and transcribing the data, reading and reviewing the transcripts multiple times, creating codes and constructing a codebook, reviewing recordings of interviews, and taking notes during the interviews. By continuously reviewing, comparing, and synthesizing the responses of each of the 12 participants, essences were determined through these comparisons.

The interviews were conducted over an eight-week period during September and October 2018. After each interview was completed and transcribed, the researcher reviewed the transcription and listened several times to the recording. At the completion of the eight-week period, the researcher again reviewed the transcriptions and listened to all the recordings. The transcriptions were electronically imported into MAXQDA-18 at which time variables between generational groups were identified and coded within the software.

Disparities and commonalities were identified and recorded as described later in this chapter.



Listening Analysis

The process for data analysis for qualitative research was introduced in Chapter III. Following the data collection, the researcher listened to each recorded interview five times. The first time was during transcription, which was a careful annotation of every word spoken into a Microsoft Word document. This transcription included pauses and glottal stops, such as "umm," "you know," "basically," and other such expressions. Every word was transcribed verbatim, and no comments, notes, or inferences were made to ensure that the text was an exact and pure representation of the interview without bias or interpretation.

The second listening was a quality verification that the transcription was identical to the words spoken during the interviews. Again, there was no annotation of notes or comments. The sole purpose of the second listening was to ensure that the transcript was an exact reflection of the interview without prejudice.

The third listening was also completed without note taking but merely to re-experience the interview in the mind of the researcher as to the perspective, perceptions, and expressions of each participant. As previously stated, epoché was used to maintain objectivity. During epoché, the researcher's perceptions, biases, and expectations were apparent. The researcher felt elated when an expected generational response was received, and was disappointed when a contrary response was received. Through epoché and the experience gained during the pilot interviews, the researcher could remain objective and channel questions toward refining the participant's response and determining the true meaning of the participant's perspective. A second feeling of the researcher was anxiety during the first two interviews despite extensive practice during the pilot study. This was partly due to mechanical problems with the recording device, and partly due to unfamiliarity with the participants. It was vital to the



researcher to utilize epoché at such times and throughout the qualitative interview process to understand the researcher's expectations and biases toward the generational groups and to consciously place those expectations and biases aside during coding and theme recognition.

The fourth listening was conducted to analyze and compare participant answers to questions to establish trends both within the generational groups and collectively. This was done in a Microsoft Word database notebook, with each interview question listed and the responses of all 12 participants included by generational group. Answers were either written as direct quotes or paraphrased. The researcher applied comments and notes using different colors to highlight emerging themes. Similarities and differences were highlighted and categorized for subsequent coding.

The fifth listening was conducted for phraseology. Phrases were isolated within the interviews, and commonality of responses were identified. At this point, the researcher purchased the qualitative research analysis software MAXQDA-18 to assist in the sorting and inventorying of common phrases as well as intonations, euphemisms, and slang expressions used within the specific generational groups. These verbal cues were useful in assessing the level of anxiety of participants to specific questions.

Upon completion of the fifth listening, the interviews were downloaded from the listening device to a removable data storage device, after which the listening device was returned to its manufacturer and immediately destroyed. Both the removable data storage device and the hard-copy transcripts were then stored in a lock box in the researcher's home office.



Code Identification

The next step in the analysis was to code the transcriptions. The researcher initially wrote notes in the margins of the hard copy transitions and highlighted in yellow keywords and phrases. Such words as "stressed out," "frustrated," "burned out," and "exhausted" were common throughout the interviews and were highlighted first. Then, these key words were expanded into phrases such as "I get frustrated when," "I'm often exhausted after travel," or "I get burned out working with other auditors." These key words and phrases were listed out by hand and expanded upon based upon the specific responses of the participants. Both open and selective coding were used in inventorying the interview data. The following section describes these coding processes.

Open coding. Open coding is the naming and categorizing of phenomena through a close examination of the data by line, sentence or paragraph of transcription. The researcher used open coding to categorize different discrete incidents first, then the ideas and events obtained through the interview process. A codebook was used to record these codes and categories. The AWS/MBI-GS combined survey was utilized to measure generational group differences in quantitative response to stress and burnout behavior in Phase I. As described in Chapters I and III, the components of stress are workload, control, reward, community, fairness and values; and the components of burnout are exhaustion, cynicism, and efficacy. These components of stress and burnout were used as a guideline for the interview questions. Open coding was used to broadly categorize the responses to the interview questions stratified by the generational groups.

At the outset of each interview, each participant was asked about her or his experience as an auditor and to which generational group the person belonged. Each participant was



twice asked questions pertaining to responses of her or his generational group to stress and burnout results identified by the quantitative survey and whether the participant's feelings agreed with the group's response. In addition, directed questions related to the six AWS and three MBI-GS attributes were asked to compare each participant's post-survey response to the survey norm for her or his generational group. At this point, responses were grouped generationally to identify similarities and differences between group participants. The responses were then classified as intentions or actions. For example, intentions were expressed in phrases such as "I would like to quit right now" or "I should have told that boss off," whereas actions were expressed as "I stopped the audit after he stressed me out" or "I told that boss off." These responses were then recorded on sets of different colored index cards corresponding to the three generational groups and separated into intention and action stacks. This process was repeated manually several times until several code words were identified and then grouped into categories. Once categories were defined, the researcher could formulate common responses by generational group, and identify abnormal or outlier responses within these groups. The researcher classified these responses as themes and considered the commonality and differences of the themes as they applied to each of the three generational groups. During this process, it became apparent that some members of the different generational groups reacted more overtly than others in the form of reactions to stressors. These differences are further discussed later in this chapter.

For example, in response to the question "what kind of things stress you out regarding your job as an ISO auditor," six of the twelve participants referenced travel to be most stressful. From these responses, code words "travel," "air travel," "traveling on Sunday nights," "missing flights," delays," and "airport/airline hassles" were collected and then



synthesized as "stress due to travel factors." In a similar manner, other stressors such as aggressive clients, inexperienced or inept team members, and administrative burden were collected and consolidated by categories and themes.

In collecting these data and assigning codes, the researcher realized that as an auditor, he had definite biases and preconceived ideas as to how each generational group would respond to the qualitative questions. He rigorously applied epoché and carefully recorded exact words and phrases as spoken by the participants without exception or alteration, and used the MAXQDA-18 software program to collate and categorize these data. During the open coding process, the research merely collected and categorized response data without further analysis or interpretation.

Selective coding. After the open-coding data were collected, the researcher commenced the selective coding process. Selective coding integrated the categories and themes defined during open coding into substantive interrelated sets of nodes used to analyze different generational group responses through comparing these responses to the interview questions. A core category, root cause of stress, accounted for much of the variation in patterns of behavior between the generational groups. Other categories were then related to the core category.

For example, to the core question "Can you describe your most stressful experience", subcategories of selective coding responses included "stress due to travel factors," "stress due to intergenerational conflict," "stress due to conflict with clients," "stress due to conflict with policies," "stress due to conflict between workload and available time." These subcategories were then inventoried and compared by generational group to establish tendencies of each of the generational groups to a distinct type of stressor.



In addition to these categories, the researcher measured outlying responses that were unusual or unexpected. There responses were recorded as exceptions in transcriptions and in the codebook for further analysis as possible exceptions to the common generational responses.

At this point, the researcher noticed distinct trends in the responses of the three generational groups and commenced analysis of these trends to address the research questions and to determine whether there was parity and alignment between the data collected during Phase I and Phase II of the study to synthesize the collective data and to objectively respond to the research questions. Table 12 compares the number of occurrences of stressors recorded during qualitative interviewing by each of the generational groups.

Table 12

Prevalent Stressors by Number of Occurrences per Generational Group

Stressor	Baby Boomers	Generation X	Millennials
Heavy travel	15	13	8
Working overtime	7	19	10
Client clashes	6	15	15
Auditor clashes	14	27	17
Auditor expertise	2	20	9
Technology level	0	14	10
Disrespect	0	1	9
Physical conditions	6	7	3
Pay and benefits	4	1	1

Correlation of Data to Research Questions

- The 23 questions contained in the interview script (Appendix E) were designed to address the qualitative research questions. The following outlines the specific qualitative research questions and the interview items associated with that research question.
- RQ 3: How do participants representing the three generational groups of industrial auditors perceive work related stress?
 - Item 3. What kinds of things cause you stress regarding your job as an ISO auditor?
- Item 4. Can you describe the most stressful situation you have experienced as an ISO auditor?
- Item 6. Have you ever felt overwhelmed by the level of stress associated with your job?
 - Item 9. Do you feel that you have a good work/life balance?
- Item 13. Do you think that stress affects the quality of your work either positively or negatively?
- RQ 4: By what means do participants representing the three generational groups minimize stress?
 - Item 14. If you feel stressed during work, do you share your feelings with others?
- Item 16. If confronted with a high stress situation, how do you respond to and deal with that situation?
- RQ 5: Which of the perceived work related stressors are the greatest contributors to reduced work effectiveness and ultimately to burnout as reported by participants representing the three generational groups?
 - Question 7. If you had the wherewithal to do so, would you quit your job and do



something else?

Question 8. Have you ever felt uncomfortable with the amount of work you have to do for which you are compensated?

Question 10. Do you feel stress from the amount of long-distance travel required of your job?

Question 12. Have you ever felt burned out as an auditor?

Question 22. Have you ever felt that you were on the verge of burning out because of the demands of your job as an ISO auditor?

RQ 6: How do participants representing the three generational groups perceive the reaction of other generational groups to work related stress and burnout?

Question 11. If you are working with a team of auditors, would you prefer to work solely with auditors your own age or with auditors of different ages, or does it matter to you?

Question 15. Do you believe that auditors of different ages respond differently to the same stressors at work?

The remaining questions in the interview script were additional items designed to verify the generational group and the background of the participant (Questions 1 and 2), to identify parity between the quantitative survey and the qualitative responses (Questions 5, 19 and 20), and to allow the participant to verbalize internally induced possible stressors generated by the CB (Questions 17 and 18). Question 23 was an open-ended question to allow the participant the opportunity to add any additional concerns or experiences that he or she felt were relevant and applicable to the subject of stress in the workplace.

The data collected in response to each of the qualitative research questions were then clustered by the applicable questions and coded within the clusters to identify similarities and



differences in the responses of the three generational groups. Once clustered, the coded data were analyzed to identify generational trends

Data Management

The qualitative research analysis software MAXQDA-18 was used to assist the researcher in analyzing the data. The researcher uploaded the transcriptions of the 12 completed interviews into the software as electronic word files. Electronic word files were assigned unique filenames using the pseudonym of the participants, and the transcriptions were separated into sub-files representing the appropriate generational group of each of the participants.

All colloquialisms, glottal stops, and slang expressions were retained in each transcript exactly as spoken during the interview. The use of pseudonyms protected the confidentiality of the interview and the identities of the participants, while allowing for efficient collection and collation of the interview data. These data were then coded in MAXQDA-18 in nodes descriptive of each interview response grouped together by generational groups. The software enabled the researcher to categorize and count coded responses to common questions posed during interview questions by generational group.

The MAXQDA-18 software allowed the researcher to arrange and rearrange categories by frequency of response both within the generational groups and with the entire population. This facilitated manipulation of the data to tailor the responses to several test situations including typical, atypical, and spurious responses to each of the key interview questions. The researcher then color coded these typical, atypical, and spurious responses within the generational groups to determine possible trends. The resultant generational responses were then applied to the qualitative research questions.



Answering Phase II Research Questions

Upon completion of coding and MAXQDA-18 assisted clustering, the researcher compared the responses within the three generational groups to identify trends. Similarities and differences in each cluster were color coded and recorded in a logbook. The researcher noticed several common responses within each group and several distinct differences. The following describes these distinct responses as they associate with the qualitative research questions.

Research Question 3 (RQ3) Analysis Results

How do participants representing the three generational groups of industrial auditors perceive work related stress?

Baby boomers. In four of the five interviews, baby boomers expressed conflict between time and the need for their work to be submitted on-time and of high quality. For example, in response to the question of what causes greatest stress, baby boomer responses included,

It's not so much the audits themselves. It's the time. The pressure to give the client the audit report both accurately and on-time. Time dedication contributes to stress levels not only on the work level but on the personal standpoint. Even so, it's my responsibility because it is my belief that the work should be done before the next week starts. I'm very dedicated to my job and to what I do. (Jim)

The biggest stress is the crunch of time that you have to do the audit and write as report. Between preparing for the audit, doing it, flying home and sending in the report correctly I lose personal time having to do all of this paperwork. (Kris)

The biggest stress has to be time-consumption and that sort of thing. As you know,



you don't get paid for audit preparation or writing reports and that makes pain. I want to do my job right but I have to invest a lot of time in auditing and it's the least profitable thing that I do. That really bugs me. (Jean)

One of the five baby boomers, Michelle was the only participant in this generational group to express a different primary stress source. As a former attorney, Michelle expressed more stress from direct confrontation with clients than with time. She stated,

I was on an ISO 14001 audit in Ohio and I asked the organization for evidence and they had a cheat sheet for their environmental outputs, and I asked them to show me the real one. They threw it down. They appeared to be liars and they got in touch with their corporate attorney and said it was proprietary and it was none of my business and filed a couple of complaints on me. I know my audit was solid but they tried to tear down my work. The registrar ended up transferring me. Every time I drive by that company it still pisses the hell out of me.

The common trend evident in the baby boomer responses regarding their perception of stress were factors that hampered their desire to carry out their work with accuracy and efficiency. The researcher followed up with a directed question regarding the importance of accuracy and efficiency in performing their responsibilities. All five baby boomers responded affirmatively to the question and stated that taking pride in their work was a key priority.

Generation X. Of the four Generation X participants, one of the four indicated that time was a key stress factor. For example, Randy stated that he had just returned from a three-week trip from which he was physically and emotionally exhausted. However, three of the four auditors expressed client confrontation to be their biggest stressor as determined through the following statements: "I get stressed when customers at audits either argue with



me or tell me to "f" off! That really gets me upset and I just want to walk away from the audit and go home." (Randy)

It was one time when a top manager, I believe it was the president of the organization who stood up across the table in front of everyone and said "F U" to me. I was totally taken by surprise and my blood started to boil but I kept my cool. Then I calmly told him that that was inappropriate behavior and proceeded to stop the audit. I did not meet his anger. (Dave)

I do recall a confrontation with the client where he disagreed about the findings. You know you are correct but if the client doesn't want to hear it and is disagreeing with you than the conversation with the customer can be stressful. (Dan).

The fourth Generation X participant indicated audit team behavior as the greatest stressor. Valerie stated,

So there were three of us auditing three standards and during the opening meeting one of the auditors showed up late. There were at least 30 people in the opening meeting and I thought that was stressful because we were beginning to look not great. And the other stressful part was I was auditing the international embassy and we didn't look good in front of people from all different kinds of cultures.

The trend among Generation X perceptions of key stressors focused on confrontation, conflict with customers and professional team appearance.

Millennial generation. The three millennial generation participants perceived time to be a source of stress, especially travel time for which auditors are not paid. However, two of the three participants indicated stress due to treatment from clients and peers associated with their age and or gender. For example, Carol stated,



I think that the biggest stress comes from teammates. If I'm the lead, some people compete with me for control of the audit and physically got in my face. That made me look bad and ridiculous in front of the client. I believe this is because of my age and because I'm a woman. Some older male auditors and male clients don't listen to me or take me seriously. That stresses me a lot.

Likewise, Jeff stated,

Wow. So recently I was doing a lead audit for an organization who makes earthquake bearings based on preventive maintenance. They were not controlling their documentation at all. It was slightly upsetting. The president questioned my knowledge and it got uncomfortable and awkward. He questioned if I had the right to write him up. He was really talking down to me. I was uncomfortable through the entire audit because of that. It was definitely because of my age and it really stressed me out.

The third participant, Carolyn, indicated that her biggest stressor was travel, especially air travel. She additionally commented about a perceived stress situation arising from the behavior of her teammate. Carolyn stated,

I was auditing with a teammate at a pretty high profile client and I was the lead and he physically got up and came within inches of a high-ranking individual in this organization, and got physically and aggressively in their face. He thought that they should do their job and it was an awkward situation.

Millennials perceived more stress from interaction with teammates as well as on age and gender. At the outset, the researcher expected that due to their youthful age, they would be more resilient to travel demands. This proved to be an erroneous expectation. As



illustrated by these responses, millennials were more stressed by perceived lack of respect relating to their age and or gender. All millennial participants indicated that they were most stressed by clients not taking them seriously because of their age. For example, when asked about common stressors, Carol, a 25 year-old female auditor stated,

I get stressed because people don't take me seriously. It's because of my age and because I'm a woman. Some older male auditors and male clients don't listen to me or take me seriously. That stresses me a lot. I joke with them but it really upsets me.

Table 13
Summary of Responses to Research Question 3

Generational Group	Primary Perceive Stressor	Secondary Stressor
Baby boomer	Limited time vs. deadlines	Client confrontation
Generation X	Client confrontation	Internal team behavior
Millennial generation	Being talked down to	Travel without pay

Research Question 4 (RQ4) Analysis Results

By what means do participants representing the three generational groups minimize stress?

Baby boomers. In response to the questions pertaining to ways auditors minimize stress, baby boomers responded unanimously that they would take overt action in response to stressful situations. To the question "If confronted with a high-stress situation, how do you respond," four of the five baby boomers indicated that they would "take a deep breath" and take a break. For example, Kris, a 61-year old female auditor, stated,



I don't get too stressed out about stressful situations because I'm used to dealing with it. I will at all times remain professional even if the client lose their cool. Oftentimes, I'll just take a break and then repeat the chapter and verse what the standards and procedures say and how they have violated the rules. If they still respond in a hostile way, I'll stop the audit and call the office for direction.

Likewise, "Dale," a 63-year old male auditor, elaborated on his way to defuse stress stating,

I don't know, sometimes better than others. Sometimes I want to just stop, take a deep breath and kick the donkey, considering the source. I don't handle stupid very well, and I might just do or say anything. But in the end, I probably walk away, take a breather and then make a strong and firm statement supporting my professional decision.

Michelle, a 64-year old female auditor, responded,

Well, if you mean my immediate reaction during an audit, I go outside. I take a break. Yeah, I walk it off. I walk it off. I tell myself it's only a job ha ha ha because I find more often than not it is just an experience that because I'm having a very difficult time. Making it understood what it is I need to see and I do it to myself. And if I didn't...and if I can recalibrate if I can walk away, walk it off, go outside, get some fresh air, recalibrate. I can come back to the exact situation with a different perspective. I've dealt with my own reaction.

Only one auditor, Jim, a 69-year old male auditor presented a different reaction. He stated,

OK. I would take charge and go ahead and try to calm the client down. I would use

my experience to settle the situation. So, why we are making the move that we are. I



want to be able to settle the situation myself rather than having to go to the office over something that occurred. I'd rather deal with it myself.

In response to the question pertaining to relieving stress by sharing feelings with others, four of the five baby boomers responded affirmatively. For example, Michelle stated, I share my feelings with my significant other. He has the same career and I believe that he understands. It does help. Yes, it does help. If I didn't talk it out with him the stress would cut me out of my tree. It gives us a chance to joke. Ha ha ha ha.

Again, contrary to the other baby boomers, Jim, dissented and denied sharing his feelings with others. He stated, "I don't share my work life or stress that I feel with others. Um, sometimes my wife gets concerned about me and I don't want to see her concerned."

Generation X. Generation X participants expressed a collaborative approach in dealing with stress. For example, Dan, a 45-year old male auditor, stated,

When I am confronted with a stressful situation, I tend to reach out to the office to discuss the situation. I think that more heads are better to clearly understand the conflict causing stress. If things are out of balance I'll certainly reach out to them.

Dave, a 43-year old male auditor, stated,

I've been trained in conflict management. I deescalate the situation but each situation is unique. I try to be constructive and make sure all parties are comfortable and act appropriately. I'll maneuver the conversation to a reasonable area of discourse.

Similarly, Valerie, a 46-year old female auditor indicated that she feels stress from interaction with clients but will continuously work to immediately resolve stressful situations. She stated:

I think that at closing meetings things can get pretty heated and stressful. I think it is



fine that people challenge but I think it's important that we have all the information on the spot and that we come to the correct conclusions. I work hard to avoid confrontation and promote understanding. I think it is important to explain why things are important and what value-added things count, but at the end of the day, if everybody understands each other than it reduces the stress.

All four Generation X auditors found stress relief by discussing the situation with their spouse. They indicated that such conversation is important to relieving stress and pressure and enabling them to regain composure. Dave responded to the question regarding sharing of feelings about stress by stating, "Yes. Well, I share everything with my wife obviously. Um, she's not familiar with what I do or sometimes I will talk to other people about it. Yeah, talking about it definitely reduces stress."

Likewise, Valerie stated,

I think yes. I would talk to my spouse about it. He is a calm person and he is very down to earth so yes. I would also talk to my mother because we share everything and she can tell when I'm stressed out.

Randy indicated that he would share stressful situations with his wife but did not elaborate further.

Millennial generation. The three millennial participants expressed similar responses to the question of how they alleviated stress. Jeff again reflected that he would immediately stop an audit but again was sensitive to issues of disrespect because of his youthful age. He stated,

Well, for example, for a specific situation as the lead auditor, if the client does something uncalled for, I will cancel the audit and walk away. If I feel disrespected, I



will cancel the audit. I'm not going to take disrespect from anyone just because I am young.

Similarly, Carol stated, "Stress in audits affect me negatively. I've worked hard to get where I am and I won't take any disrespect just because I'm young and because I'm a woman. I'll confront a client before I take that. No way!"

All three millennial participants indicated that they would share their feelings about stress with others. They indicated that sharing these feelings with family or friends is a key stress reliever. Carolyn stated, "There are some people that I trust and I'm close to. I share everything that is bothering me with them. If I have a crappy day at work, they will listen to me." Jeff stated, "Well sure. I talk to my girlfriend and my other friends about it. It's a way to let off some steam." Likewise, "Carol" stated, "Yeah. I'd talk to my sisters and my parents and I have five sisters so...over and over, and, yes I confide in them whenever I'm feeling stressed."

Table 14
Summary of Responses to Research Question 4

Generational Group	Primary Minimizer	Secondary Minimizer
Baby boomer	Take a break/Walk away	Confront the stress source
Generation X	Collaborate to resolve	Seek assistance from office
Millennial Generation	Cancel audit/walk away	Confront the stress source

Research Question 5 (RQ5) Analysis Results

Which of the perceived work related stressors are the greatest contributors to reduced work effectiveness and ultimately to burnout as reported by participants representing the three



generational groups?

Baby boomers. Baby boomers indicated mixed response to questions regarding perceived work-related stressors which result in reduced work effectiveness and ultimately burnout. As a group, baby boomers indicated that they feel they work harder than other generations and are more conscientious about their work, yet more prone to burnout. Dale best expressed this in his comment in regard to feelings of burning out:

Umm, well, us baby boomers I think work ourselves to death, 24/7, and we'll just come back and take more. Uh...we typically don't have a good work/life balance. We typically work all the time, OK? And some of these millennials, you hear jokes about millennials all the time and the millennials think that we're king of screwed up a little bit, but the millennials will tell you to just hang it in your ear. And uhh, we're done with ya. Maybe the millennials could take a little bit of a lesson from uh the Boomers. millennials will just back off whereas boomers will fight.

Regarding burnout, when asked if she had ever felt burned out as an auditor, Michelle responded:

Yes, Yes! Umm.... Yah if work is all I'm doing. I can manage the work. If my life is what I'm doing I can manage the life. But if my life kicks out of balance between additional requirements of work and my personal life then it throws work just a little bit out of balance then I am out of it. I feel like, the hell with it.

Likewise, Dale stated,

Sometimes stress pushes you over the edge. Uhh, you get so locked up that you can't perform. So it really just depends on what the situation is...what's going on. Sometime the work and the travel catch up with ya and you just want to quit.



Jean had recently converted from full-time auditing to contract auditing. She expressed her feelings of burnout when auditing full-time but relief as a contractor. She responded to the question of burnout:

Yeah, I felt that way all the time when I was a full-timer. I often wanted to quit and just play the clarinet for a living. I felt that I was spending too much time on auditing. But now that I'm a contractor I don't feel so much burnout anymore.

Neither Jim nor Kris indicated that they felt burned out. Kris indicated that she worked out and "burned off steam" on the treadmill which helped her avoid burnout. Jim simply responded, "not at this time."

Generation X. Of the four Generation X participants, only Randy indicated that he had feelings of burnout. To the question "Have you ever felt on the verge of burnout, he replied,

Yes. It was on one of the...I don't know, eight weeks straight and I never went home. By the end of that I hadn't seen my wife in eight weeks and when I got into bed, it wasn't comfortable being in the bed with somebody else, and it didn't even seem like my own bed, so everything at home was kinda foreign and I went to Jerry, the general manager the next morning and said this has got to stop. Something's gotta change or I'm gonna change. I felt totally burned out and isolated at that point.

Two of the remaining three Generation Xers simply responded "no" to the question. Dan, while expressing no feelings of burnout, did indicate that he was particularly troubled by situations in which he could not do his work efficiently. He stated,

Uhh... You know, I deal with higher-stress situations as best I can and kind of... there's only so many hours in a day. If you cram 10 hours of work into an 8 hour day



you know that you're cutting corners to get it done and you do the best you can and hope that things even out in the end and that becomes the exception rather than the rule. I hate it when that happens. That really tears me up.

As a group, Generation Xers expressed tolerance for working with members of other generational groups. Only Randy responded conditionally in stating that "people within Generation X may become impatient and intolerant of the older generation." He felt that the older generation might take a bit longer to process information, and Generation Xers have to "help them along."

All the Generation Xers stated that they liked their work and would not quit to do something else. All four indicated that they enjoyed a positive work-life balance. Dave repeatedly expressed his drive to "get the work done accurately on time," but repeatedly expressed dissatisfaction with the amount of compensation he received for his work.

Millennial generation. All of the millennial auditors expressed satisfaction with their jobs and would not quit if offered the opportunity to do so. Two of the auditors expressed their greatest stressor to be feelings of condescension from older auditors and clients. The third millennial auditor expressed frustration with the heavy travel load required of him, including several back-to-back cross country and international trips.

On the question of burnout, all three millennial participants indicated that they never have feelings of burnout in their jobs. Jeff expressed some residual feelings of hostility being talked down to because of his youthful age. He stated,

Well, if I get stressed it could affect my work for a long time. Like I said about that guy who talked down to me. Something like that really gets to me and if anything gets to me it's that kind of stuff.



All three millennial participants indicated that work-life balance was crucial to them. As a group, they indicated that they enjoy their time off and like working from home. Carolyn expressed these feelings clearly. She stated,

I'm willing to work very hard and I value my time off, which helps me minimize stress. Work/life balance is important to me. I think right now work/life balance is OK because I don't have a family or a lot of responsibility. But I do like having time to myself besides working all the time. It's important to have a life outside of work.

Table 15
Summary of Responses to Research Question 5

Generational Group	Primary Contributor	Secondary Contributor
Baby Boomer	Working too hard/No rest	Poor work/life balance
Generation X	Excessive travel	Time available vs. tasks
Millennial generation	Being talked down to	Poor work/life balance

Research Question 6 (RQ6) Analysis Results

How do participants representing the three generational groups perceive the reaction of other generational groups to work related stress and burnout?

Baby boomers. Amongst baby boomers, there was definite feelings that auditors of older ages work longer and harder than auditors of younger generations. They expressed a strong loyalty to their work and to its quality. For example, Kris stated:

Well, I have a prejudice against a certain age group. I don't think that they have as much at stake and I don't think that they take their job as seriously as I think it should be taken and so I think that millennials probably do not suffer the pain that those of us that grew up having to work in order to have anything did.



Another baby boomer auditor felt that baby boomers handle time vs. work better than younger generations. Jean stated,

I think that because we are older, baby boomers tend to manage time better. We don't have a lot of time so we tend to know when to take ourselves out of a situation whereas the younger generations tend to be more emotional about it. We know how to manage the time, the other generations don't.

The most direct response to comparison with other generations was from "Dale" who stated,

We baby boomers work ourselves to death, 24/7 and we'll just come back and take more. We typically don't have a good work-life balance. We typically work all the time. And some of these millennials you hear jokes about all the time. The millennials think that we're kind of screwed up a little bit, but the millennials will tell you to just hang it in your ear. Maybe the millennials could take a little bit of a lesson from the boomers. Millennials will just back off whereas Boomers will fight.

The remaining two baby boomers did not feel that there was a significant difference in the intergenerational reaction to stress.

Generation X. Most Generation X auditors reflected heavily on the older generation lacking technology savvy while the younger generation have to control their words and emotions. Dave stated,

People within Generation X are impatient and intolerant of the older generation. They see the older generation taking longer to process information and they jump to a level of impatience. Younger people are frustrating because they are green and we have to help them along and that slows us down.



All of the Generation X auditors focused their comments on performance versus time. They were anxious to accomplish their work within the prescribed time limit and were frustrated with the slow pace of other generational groups. As Valerie stated,

Look, it's all about getting the work done right and on time. Older auditors think they have so much experience but take forever getting their reports done. Younger auditors want to get things done when they feel like it and are unconscious of time constraints. When I'm the lead, I care about meeting the deadline and they don't.

Randy expressed impatience with the older generation "taking longer to process information" but did not comment on the younger generation. Of the four Generation X auditors, only Dan felt that there was no significant difference in the manner in which different generations respond to stress.

Millennial generation. The three millennial auditors referred to older auditors as a group and did not differentiate between baby boomers and Generation X. Two of the three indicated that older auditors are cranky and project anger to their fellow auditors and to the client. Jeff expressed frustration that older people and their lack of understanding of technology. He stated,

Older people are really slow writing their report and that slows me down. Some people don't know how to use computers and are really slow getting their reports done. Older people a lot of times aren't as fast on a computer, and that really slows me down and frustrates them.

Carol expressed concern with older generation's tolerance and their likelihood to generate stressful situations. She stated,

I think older auditors are socially different. I try to get with people who feel the same



way as we do. Some of the olders are a little cranky under stress and they take it out on the client. That gets the clients angry, and if I'm the lead auditor it falls into my lap to have to deal with it.

The third millennial Participant, Carolyn, did not believe that there were significant differences between reaction to stress among the generations, and stated that she enjoyed working with people of different ages as she often learns from the experience of older colleagues.

Table 16
Summary of Responses to Research Question 6

Generational Group	Primary perception of other	Secondary perception of
	groups	other groups
Baby boomer	Younger groups don't work	Younger groups are less
	as hard as boomers	dedicated to their work
Generation X	Older generation is less technologically savvy	Older generation works slower and slows the team
Millennial generation	Older generations don't work fast and cause delays	Older generations are condescending

Convergence of Quantitative and Qualitative Data

Due to the small number of millennial participants available for the study, they were not included in the quantitative calculation. As a result, their inputs were only considered in the qualitative data. This limited the convergence of quantitative and qualitative data to the



baby boomer and Generation X participants.

Of the nine quantitative measures, only one measure, control, showed a significant difference between the baby boomer and Generation X participants. This aligns with the qualitative results in which baby boomer and Generation X participants demonstrated more convergent responses than did millennial participants.

A comprehensive analysis of convergent and divergent trends between the quantitative and qualitative data is presented in Chapter V.

Summary

This chapter has presented the results of the quantitative survey and qualitative interviews. The quantitative data were collected by surveying 90 industrial auditors representing the baby boomer generation and Generation X. Due to the small number of millennial auditors available in the population, the researcher was unable to include them in quantitative data collection and analysis. The Area of Worklife Survey and Maslach Burnout Inventory were combined, and administration was conducted through an independent survey company. The results were determined and presented using Intellectus software and reported calculations of the six Area of Worklife measures and three Maslach measures. All inputs were confidential, and data were not identified with individual participants.

The qualitative data were collected through confidential interviews with 12 volunteer participants representing the three generational groups. The interviews were administered by the researcher and were recorded using audio recording equipment. The audio recordings were transcribed, coded, and managed with MAXQDA-18 software to collate and categorize responses. The results were reported by generational groups. The chapter concluded with a brief statement of convergence between the quantitative and qualitative data.



Due to an insufficient number of available millennial participants, the quantitative study was limited to baby boomer and Generation X participants. The quantitative results indicated parity between baby boomer and Generation X in all stress and burnout variables except the control variable. The qualitative results indicated more significant differences in stressors between the three generational groups.

Chapter V will use collected data to address the research questions and will present conclusions of the study, including a further analysis of the data to support the conclusions.



CHAPTER V: DISCUSSION

Age-diverse employees are faced with different types of occupational stress and different symptoms of burnout when carrying out their work. Therefore, the role of age in job design and implementation of work should never be ignored (Rozman, Grikewich, & Polona, 2019). Johnson, Sood, Jenkins, and Sood (2019) noted a distinct relationship between the ages of employees and their likelihood to experience stress and burnout under typical workplace conditions and found that stress and subsequent burnout can be prevented through age-appropriate mediation techniques, confirming Brandstatter, Job, and Shultze's (2016) findings that management must be aware of and proactive toward the incongruence of each generational group and to design person-job fit using methods appropriate to the culture of each generational group in the workplace. The specific problem is that many organizations do not consider age differences in designing work environments, assigning project requirements, and rewarding employees considering generational wants and needs (Day et al., 2009). This mixed method explanatory sequential design study examined the three generational groups currently represented in the workplace: baby boomers, Generation X, and millennials (Generation Y). The study considered a population of 275 industrial auditors employed by or contracted with a certification body of international standards operating throughout North America, and included both the combined AWS/MBI-GS survey as well as qualitative interviews to measure stressors specific to these auditors in the performance of their work.

The purpose of this chapter is to present the findings and conclusions of the data analysis reported in Chapter IV. These findings and conclusions are focused on the relationship between the three generational groups currently represented in the workplace, their reaction to specific occupational stressors related to their jobs as industrial auditors, the



effect that these stressors have on their job performance, and the likelihood of the stressors to result in burnout. The foundation for this research was based on the premise that stressors unique to the industrial auditors would have different effects on auditors of different generational groups due to cultural differences and norms specific to each group (Callahan, 2010). The expectation was that the data would be positively correlated to different stressors associated with work/life balance. It was also expected that different generations would demonstrate different tolerances when exposed to identical stressors as determined by survey and interview. The results of the quantitative phase of the study affirmed some variation between the generational groups, but to a lesser extent than had been originally expected by the researcher. The results of the qualitative phase interviews demonstrated more pronounced different reactions to stressors with the inclusion of the millennial generation participants who were not included in the quantitative calculations due to their minimal representation in the sample. Therefore, this research should be interpreted cautiously especially in regard to the millennial generation responses due to the small number of millennials sampled.

Chapter V contains an interpretation of the quantitative and qualitative findings and discusses the pertinent results from the data results presented in Chapter IV. Limitations of the study are discussed including limitations to validity, generalizability, and trustworthiness of the results, personal biases, and preconceived ideas and values of the researcher, and possible influence of the researcher on the participants. Implications for theory and research in comparison to similar published research studies are discussed. Recommendations for further research based on the findings of the current study are included. Finally, the chapter concludes with a summary of the principal information presented and discussed throughout this research study.



Interpretation of the Findings: Quantitative Findings

The quantitative portion of this research study focused on six measurable variables defined by the Areas of Worklife Survey (AWS) and the three measurable variables defined by the Maslach Burnout Inventory-General Survey (MBI-GS). These instruments were administered in combined form as recommended by the publisher as a powerful tool for assessing the workplace context and the attributes that might be driving stress and burnout (Maslach et al., 2016). To avoid bias and to protect the identity of the participants, the administration of the survey was contracted by the researcher to a test administrator, Mind Garden Inc. The test administrator provided the researcher with the raw data, which identified individual scores by generational group and consolidated scores for the entire test population. These data were then analyzed by the researcher for measures of central tendency, skewing, and kurtosis using the Intellectus Statistical Software Package. The results of these data calculations were presented in Chapter IV. Due to the low number of millennials available in the population of auditors, the millennial generational group was statistically too small to be included in the quantitative portion of the research study. The quantitative findings should be and were interpreted cautiously and may not be generalizable to all auditors due to the limitation of the sample.

Quantitative Results: Generational Analysis by Variable

A detailed analysis of each of the AWS and MBI-GS variables was completed to determine the answers to the research questions. The following results were found.

Workload. The mean score for baby boomers was 2.856, and the mean score for Generation X was 2.567, yielding a mean difference of 0.289. An independent t test for the difference between baby boomer Workload and Generation X workload where t (79) =1.39, p



= .168 suggests that the mean of workload was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Control. The mean score for baby boomers was 3.76, and the mean score for Generation X was 4.10, yielding a mean difference of 0.34. This suggests that control is a greater stressor among Generation X than among baby boomers. An independent t test for the difference between baby boomer control and Generation X Control where t (79) =1.49, p = 2.26 suggests that the mean for control was significantly different between the two generations. Therefore, the null hypothesis was rejected for this variable.

Reward. The mean score for baby boomers was 3.47, and the mean score for Generation X was 3.29, yielding a mean difference of 0.18. This suggests that reward is a greater stressor among baby boomers than among Generation X. An independent t-test for the difference between baby boomer reward and Generation X reward where t (79) =-0.67, p = .429 suggests that the mean for reward was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Community. The mean score for baby boomers was 3.54, and the mean score for Generation X was 3.64, yielding a mean difference of .10. This suggests that community is a slightly greater stressor among Generation X than among baby boomers. An independent t-test for the difference between baby boomer community and Generation X community where t= (79) =-0.67, p = .507 suggests that the mean for community was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Fairness. The mean score for baby boomers was 3.19, and the mean score for Generation X was 3.20, yielding a mean difference of .01. This suggests that fairness is a virtually equal stressor to among the two generational groups. An independent t test for the difference between baby boomer fairness and Generation X fairness where t (79) =-0.08, p = .935 indicates that the mean for Fairness was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Values. The mean score for baby boomers was 3.56, and the mean score for Generation X was 3.62, yielding a mean difference of .06. This suggests that values create slightly more stress to Generation X than to baby boomers. An independent t test for the difference between baby boomer values and Generation X values where t (79) =-0.30, p = .764 indicates that the mean for values was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Exhaustion. The mean score for baby boomers was 2.04, and the mean score for Generation X was 2.35, demonstrating a mean difference of .31. Generation X indicates a higher level of exhaustion than baby boomers contributing to burnout. An independent t test for the difference between baby boomer exhaustion and Generation X exhaustion where t (79) = .0.99, p = .324 indicates that the mean for exhaustion was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Cynicism. The mean score for baby boomers was 1.28, and the mean score for Generation X was 1.50, demonstrating a mean difference of .22. Generation X indicates a slightly higher level of cynicism than baby boomers contributing to burnout. An independent t test for the difference between baby boomer cynicism and Generation X cynicism where t (79) =-.74, p = .460 indicates that the mean for cynicism was not significantly different



between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Professional efficacy. The mean score for baby boomers was 5.03, and the mean score for Generation X was 4.78, demonstrating a mean difference of .22. As expected by the researcher, baby boomers had a higher level of professional efficacy than Generation X. An independent t test for the difference between baby boomer professional efficacy and Generation X professional efficacy where t (79) =1.22, p = .227 indicates that the mean of professional efficacy was not significantly different between the two generations. Therefore, the null hypothesis could not be rejected for this variable.

Research Question 1 Conclusion

RQ1: What between group differences in reaction to common stressors as measured by the combined AWS/MBI-GS exist between generational groups of industrial auditors?

H₁₀: No relationship exists between generational affiliation and reaction to stressors as measured by the AWS/MBI-GS.

H1: A statistically significant relationship exists between generational affiliation and reaction to stressors as measured by the AWS/MBI-GS.

The first area of analysis was to determine if a correlation existed between baby boomer and Generation X participants as measured by the responses to the AWS/MBI-GS. Correlation analysis indicated that there was a significant difference in the responses of the two generational groups only in the variable of control. In all other variables, the *p* value was greater than 0.05, indicating that the null hypothesis could not be rejected. Therefore, the conclusion is to reject the null hypothesis solely due to the significant differences in measures of control.



This surprised the researcher who expected to see significant variation in all of the AWS/MBI-GS variables between baby boomer and Generation X groups. In other studies, more significant differences were found between these and other generational groups.

Kalarava, Bediova, and Rasticoa (2016) conducted a study of European nurses using a similar quantitative approach. A study of 844 respondents comparing baby boomers and Generation X participants indicated work ethics caused stress to respondents and to co-workers. While a different series of test instruments were used, Kalarava et al. (2016) reported more stress resulting from the ways the different generations communicated. In a similar study, Zabel et al. (2017) found significant differences in the work ethics and generational differences of Generation Xers in comparison to baby boomers, whereby Generation Xers were more dedicated to the completing the immediate work task and less concerned about work hours and spatial needs than baby boomers, causing job stress between the generational groups.

This study found far less stress variation between baby boomers and Generation X participants than the studies above, specifically in the variables, where both generational groups exhibited approximately the same results with the sole exception of the control variable.

Research Question 2 Conclusion

RQ2: What between group differences in potential burnout resulting from stress as measured by the AWS/MBI-GS exist between generational groups of industrial auditors?

H2₀: No significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the AWS/MBI-GS.

H2₁: A significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the AWS/MBI-GS.



As stated in Chapter I, burnout is the long-term result of stressors affecting industrial auditors of all generational groups. In addition to the variables of exhaustion, cynicism, and professional efficacy, a tailored question was included in the survey as to whether participants at any time considered quitting their job due to job stress and burnout.

Of all participants who completed the survey, 26.67% responded that they had considered quitting their job due to burnout, and 73.33% responded that they had never considered quitting their job due to burnout. Of the 24 responding positively to the question, 37.5% identified themselves as baby boomers, and 62.5% identified themselves as Generation Xers. This would align with the previously presented statistical analysis of the MBI-GS survey results. In the burnout categories of exhaustion and cynicism, Generation X participants demonstrated a higher mean score, indicating a higher tendency toward burnout. Generation X participants also showed a lower score in professional efficacy, indicating a higher tendency toward burnout than baby boomers. However, the statistical results obtained from the survey did not indicate statistical significance, as no *p* score was equal to or less than 0.35, the statistical threshold for significance (Huck, 2012). Therefore, the null hypothesis was accepted based upon the results as measured by the AWS/MBI-GS, meaning that no significant relationship exists between generational affiliation and potential burnout resulting from stress as measured by the AWS/MBI-GS.

This conclusion concurs with a recent study by Rozman, Grinkevich, and Tominc (2019) who conducted research in Slovenia of factory workers of two groups: under age 50 and between ages 50 and 65. Rozman et al. (2019) concluded that reported stress and burnout were significantly higher among younger employees and resulted in negative productivity and work satisfaction.



Another recent study by Yasuaki, Eiji, Hanley, Kazuko, and Takahiko (2018) was more aligned to this study and used the MBI-GS to measure burnout among Japanese rural physicians. Yasuki et al. (2018) studied a significantly larger sample population (n = 1898) and considered six age groups ranging from under age 29 to over age 70. Yasuki et al. (2018) found that physicians over age 50 demonstrated less burnout responses then their younger colleagues. The present study conclusions concur with the findings of Yasuki et al. (2018).

Limitations

There were several limitations to the quantitative phase of this study. As previously noted, there were too few millennial participants (three) who responded to the survey to be statistically relevant, so their data were not included in the quantitative data analysis. This limited the results and prevented the researcher from making conclusions about the quantitative research question. In addition, there were no other studies identified that specifically addressed stress and burnout among industrial auditors or similar workers. Most prior research focused on the medical community and were conducted outside of North America. Therefore, differences in culture and ethics limited the researcher's ability to compare fully the present research findings to similar studies. Finally, data obtained from the AWS/MBI-GS showed that most of the participants in the study were baby boomers or older. The study would have benefited by more representation of younger generational groups.

Interpretation of Findings: Qualitative Findings

The qualitative phase of this research focused on the perceptions of contract and full-time professional industrial auditors regarding stress and burnout, means of coping with stressors, and observations of how other generations react to stress. The assumption was that baby boomer auditors would be less reactive to stress due to their level of maturity and



experience level. Millennial auditors would be more prone to stressors due to their youthful age and experience level, and Generation X auditors would be mixed in their response to stress. The qualitative findings were based on a small sample size, and therefore should be and were interpreted cautiously and may not be generalized to the entire population of all industrial auditors.

Analysis of these qualitative data indicated that major stressors for all generational groups included time versus deadlines, travel requirements, client confrontation, and competence of and interaction with co-auditors. Secondary stressors included pay, lack of timely response from the CB, heavy post-audit workload, and last minute rescheduling of audits by clients. These major and secondary stressors aligned with the findings of a previous study of auditors (Larson et al., 2004) and of stress factors described by Hernaus et al. (2014). Participants generally expressed the belief that the nature of industrial auditing led to time demands, personal conflict with clients and other auditors, and decreased work/life balance. This belief is consistent with DiRomuolodo's (2006) theory that suggested that personnel of different generations will react predictably to work induced stressors, and to Fishman's (2016) discussion of specific stressors and their effects on the American workforce. These researchers found that when subjected to different stressors, different age groups will respond differently to these stressors repeatedly.

Each participant interviewed presented unique perspectives of their role as an industrial auditor and how stress affected them personally. However, each generational group presented repeatable trends, which were coded and recorded during the interview process.

With the exception of the stressor of "being ignored and talked down to" as expressed by millennials, these stressors were not unexpected by the researcher based on the findings of



other studies of intergenerational behavior (DeVarey, 2015; Dickson, 2015; Gibson et al., 2010; Houlihan, 2016; Moore et al. 2015). Such stressors as time versus workload balance, excessive travel, teaming, and competence of fellow workers were found to be present in these studies. These stressors may be common to all industries and cultures. However, this study uniquely identified how these stressors specifically apply to and affected industrial auditors, therefore, all conclusions of this study must be limited to this professional group.

In every case, auditors expressed the desire to do a good job and to be rewarded for their good work. However, these factors were perceived differently by each of the generational groups. As described in Chapter IV, baby boomers associated good work with longer work hours, sacrifice of personal time to complete work tasks, and organizational loyalty. They expressed less aversion to stressors such as heavy travel and additional time to complete reports. In comparison, Generation X associated good work with efficiency and quality. Their focus was getting tasks completed on time and without error. They indicated more aversion to working overtime and to travel, and expressed more value on personal time and work/life balance. Millennials were more emphatic in their disdain for long-distance travel and placed the most value on work/life balance. They clearly objected to working overtime and to excessive travel. Millennials were especially conscious of being disrespected by older colleagues and clients, which all three participants expressed as their biggest source of stress. The researcher expected these qualitative results, which align with numerous previous studies of intergenerational differences and interactions (Bland, 2012; Chiese et al., 2016; Gale, 2012; Hochwarter et al., 2009; Houlihan, 2016; Johnston et al., 2015; Novicevic, 2001; Palferman, 2011; Rich, 2016).



Qualitative Research Questions

To fully address the qualitative research questions, it was necessary to review the codes to determine the most frequent responses of each generational group. The researcher considered the trends of responses and then sorted these responses by generational group.

Once these qualitative data were compiled, the researcher could apply the results to the four qualitative research questions. The qualitative research questions were as follows:

RQ3: How do participants representing the three generational groups of industrial auditors perceive work related stress?

RQ4: By what means do participants representing the three generational groups minimize stress?

RQ5: Which of the perceived work related stressors are the greatest contributors to reduced work effectiveness and ultimately to burnout as reported by participants representing the three generational groups?

RQ6: How do participants representing the three generational groups perceive the reaction of other generational groups to work related stress and burnout?

The conclusions to the qualitative research questions are discussed below.

Research Question 3 conclusion. All 12 interview participants represented in the qualitative sample indicated that they felt some stress in their job as industrial auditors. However, each generational group weighted stress perception differently.

The data presented in Chapter IV demonstrated that baby boomers are more sensitive to physical stressors, such as heavy travel or uncomfortable working conditions, while Generation X and millennial participants are more sensitive to technical conditions, such as level of technology knowledge of older auditors, competence and expertise of teammates and



resultant clashes within the auditor teams. As expected by the researcher, millennials were especially sensitive to stress resulting from disrespect from clients and teammates due to their youthful age. Both Generation X and millennial participants were more sensitive to stressors involving work/life balance. While all three generational groups indicated aversion to heavy travel, Generation X and millennial participants indicated more stress due to overtime demands and strict deadlines than did baby boomers. These data reflect the number of times the participants mentioned a stressor contributing to overall stress during interview as determined by coding. The researcher considered the disproportionate number of participants between generational groups in determining the relative significance of each stressor. The researcher concluded that in response to Research Question 3, baby boomers perceived stress to be more physical in nature, such as heavy travel, which caused fatigue. Generation X participants perceived stress to be more related to hindrance of efficiency due to technical abilities of intergenerational teammates as well as audit competence in both audit style and technical competence of teammates. Millennials also perceived stress to be caused by the technical abilities of auditors of different generations but also reported strong sensitivity to feelings of being disrespected due age and in one case gender.

Research Question 4 conclusion. This research question addressed the means by which industrial auditors relieved stress. The responses to this question demonstrated differences between the generational groups.

The data presented in Chapter IV demonstrated that baby boomers and Generation X participants were more likely to alleviate the stressful situation by either taking a break or negotiating a solution, or a combination of both relievers, whereas millennials were more likely to attempt to exert their authority as auditors to alleviate the stressful situation. This



may indicate less confidence in millennial auditors in their ability to negotiate, and lack of confidence of their authority as lead auditors. No baby boomer participants indicated that they would abandon the audit and leave due to stress, while Generation X and millennial participants demonstrated a tendency to abandon the audit under stress. Generation X participants often indicated calling the office of the CB for guidance as to how to proceed, while both the baby boomers and millennials indicated that they would not. These data indicate that as auditors age and mature, their methods of dealing with and relieving stress change. This concurs with a study by Cheng, Kogan, and Chio (2012), which found that as workers age, their life experiences change the way the workers alleviate stress. The study by Cheng et al. (2012) concluded that employers must recognize different mechanisms for stress relief among different worker age groups and provide training on optimal methods for alleviating stress in high pressure work situations. Similar training may provide more uniform approaches to stress relief among industrial auditors.

The data presented in Chapter IV indicated variation in the method by which auditors alleviated stress. These data suggest that older auditors are more likely to attempt to resolve the stressor by dealing with its source, while younger auditors are more likely to quit the audit or attempt to exert authority over the source. The conclusion of the researcher is that choice of stress alleviators change with and reflect maturity and experience.

Research Question 5 conclusion. Research Question 5 addressed perceived workout stressor contributing the most to reduced work effectiveness and ultimately to burnout. To answer this question, the researcher considered interview questions pertaining to exhaustion, work/life balance, and job satisfaction.

In response to these questions, all generational groups indicated that excess workload



with insufficient time to complete work caused the most stress and anxiety leading to burnout. However, the degree to which this imbalance affected auditors varied between the groups. Baby boomers and Generation X participants indicated factors of exhaustion such as long distance travel, travel delays, and amount of work versus allotted time to complete it as key factors leading to burnout, while millennials more often indicated infringement on personal time as the key factor. This would indicate that millennials are more conscious and protective of personal time than participants of other generations.

This concurs with the findings of Childs and Stoeber (2012) who reported that baby boomers were more prone to accept more pressure to complete work than were younger generations, within confined deadlines despite demands of personal time. Table 18 describes coded responses to interview questions pertaining to reduced work effectiveness and burnout.

The data presented in Chapter IV indicated that baby boomers and Generation X participants were more prone toward burnout due to the extra time spent completing work on their own time and indicated that there was insufficient time in an audit day to complete their reports, necessitating working overtime. Their emphasis was on personal exhaustion experienced because of their workload. Millennials were prone toward burnout due to infringement on their personal time resulting from the demands of their work. While all generational groups indicated that the greatest factor contributing to personal exhaustion was workload, baby boomers were willing to contribute personal time to on-time work completion whereas millennials were not. Generation X participants were mixed in their responses to questions of burnout factors. These data concur with the findings of Childs et al. (2012). The researcher, therefore, concluded that the greatest contributor to reduced work effectiveness was excess workload, however, variation was indicated in reaction to the workload factor by



each generational group.

Research Question 6 conclusion. Research Question 6 pertained to generational perception of causes of stress among different generational groups. The prevalent responses during interviews indicated that older generations experienced stress due to the inexperience and decreased level of knowledge of younger auditors, while younger auditors experienced stress due to decreased knowledge and savvy of older auditors. Baby boomers and Generation X participants indicated that they were often frustrated that younger auditors resisted working long hours to complete work, and in one case, referred to younger auditors as lazy and lacking in work ethics. In contrast, younger auditors referred to their older colleagues as workaholics who need to get a life. This concurs with a study by Weeks and Schuffert (2019) who observed bias between generational groups in their perception of what constitutes meaningful work. Baby boomers and some Generation Xers considered meaningful work to be associated with individual contributions contributing to the overall success of the organization, while some Generation Xers and most millennials considered meaningful work to be associated with self-gratification. The data presented in Chapter IV described the coded responses to interview questions pertaining to perceptions of intergenerational stress.

The data indicated that both baby boomers and Generation Xers perceived other generations as less motivated than themselves in devotion to work. Likewise, Generation Xers and millennials perceived other generations as less technically savvy and being the cause of slowdown necessitating unwelcome overtime to complete tasks. As previously stated in Chapter II, this may indicate rationale for members of some generational groups to refer to other generational groups as disrespectful, disloyal or just plain bad (Caanan et al., 2016; Sexton, 2016). The researcher concluded that perception of stressors by members of other



generational groups created bias and ill feelings, and contributed to the stress level of each generation.

Qualitative Summary

In summary, the qualitative findings suggested that while all auditors were conscious of factors contributing to stress and burnout, each generational group showed variation in perceptions of which stressors were most pronounced both among their generation and among other generations. Baby boomer responses demonstrated their willingness to work hard and long hours to complete their assignments despite the resulting stress and sacrifice of personal time, and expressed contempt toward younger generations for lacking this perceived dedication. They were critical of some Generation Xers and most millennials as being lazy, self-serving and unappreciative of their experience level and expertise as auditors. In contrast, some Generation Xers and most millennials were critical of baby boomers as being technically inept and a hindrance to the efficient and timely accomplishment of work.

Millennials additionally expressed high stress reaction to incidents of disrespect due to their age, and in one case, gender.

The common response from most participants was that exhaustion was a key factor contributing to burnout. However, each generational group described the cause of exhaustion differently. For example, baby boomers accepted exhaustion as a result of having to put in long hours in travel, report completion, and in meeting deadlines. Millennials accepted exhaustion as a result of infringement on work/life balance and expressed resentment at having to accept long hours in travel, report completion, and in meeting deadlines. As expected by the researcher, Generation Xers were mixed in their responses which may depend on where in the age spectrum the Generation Xer falls.



The researcher concluded that exhaustion is the key contributor to factors of generational stress and burnout, and that each generational group attributes exhaustion to different causes. While each generational group identified exhaustion as the primary cause of burnout, their definition of exhaustion and its effect on their work/life balance were perceived differently.

Limitations

The researcher was careful to use epoché in conducting and interpreting qualitative interviews. However, as the researcher is an industrial auditor, it is difficult to preclude some degree of bias in directing the interviews and interpreting the interview data. In addition, due to the limited number of millennial participants and disproportionate number of baby boomers, it is difficult to assume that these results would have been the same had the generational groups been more equally represented among participants.

Consolidated Findings

The consideration of the congruency of the quantitative and qualitative findings is limited because of the lack of an adequate number of millennial participants for representation in the quantitative phase. Therefore, comparison of the two phases of the study must be limited to baby boomer and Generation X participants. In most cases, responses of these generational groups were very similar. As described in Chapter IV, of the nine ASW/MBI-GS factors, only the control factor demonstrated statistically significant differences between baby boomers and Generation Xers.

An expectation of this research study was that congruence would exist between the quantitative and qualitative results, and mutually demonstrate how stress and resultant burnout affected the three major generational groups currently in the workplace. The data obtained



through both phases of the study were with few exceptions found to be essentially congruent to each other. As described in Chapter III, the control factor measures how much control an auditor has over their job, where a lower score indicates a higher feeling of control, and a higher score indicates a lower feeling of control. On a scale of 1 through 5 on the AWS, baby boomers' average score was 3.76, whereas Generation X's average score was 4.10. This indicated that baby boomers were feeling more individual control over their work than Generation X participants. All other quantitative factors indicated no statistically significant results between the two generational groups. Likewise, the qualitative interviews aligned with the quantitative scores in that Generation X participants indicated more likelihood of contacting the CB office for advice and direction, sharing feelings of stress with others, and in abandoning audits under severe stress as opposed to attempting to negotiating solutions.

While not statistically significant, there was some congruity in the area of exhaustion, which was found to be a key indicator of burnout. On a scale of 0 through 6 on the MBI-GS, baby boomers averaged 2.04, and Generation X averaged 2.38, indicating that Generation Xers felt slightly more exhaustion than baby boomers. These findings were not statistically significant, but they do align with qualitative questions on excessive workload and sacrifice of personal time leading to exhaustion.

Limitations of the Study

Several limitations of this study may have impacted the validity, trustworthiness, or generalizability of the results. Due to the nature of the population of professional industrial auditors in which many are engaged in second careers, there were more baby boomer auditors represented. Likewise, the number of younger auditors was relatively few. This age imbalance may not be indicative of other industries and tended to limit this study, most



especially in the necessity to exclude millennials in the quantitative statistics due to their small number.

Another limitation of the study was the involvement of the researcher as a practicing professional auditor, which may have impacted the interpretation of the results, as the researcher is immersed in internal auditing. While epoché was rigorously practiced throughout both phases of the study, some personal bias may have emerged during analysis of both the quantitative and qualitative data, thereby affecting the objectivity of the results.

This study was limited to one certification body (CB) and to professional certified industrial auditors. Therefore, the population sampled may or may not be indicative of the industrial auditor community as a whole, or of the effects of stress and burnout on generational groups in other industries. This is especially true of the qualitative phase, where a small sample was used, which may not represent the audit community as a whole.

In addition, a potential deficiency of this study was the accuracy of both the quantitative and qualitative data. While every effort was taken to preserve the integrity of the data, participants may not have responded truthfully due to factors such as their moods at the time of participation, the phrasing of questions in both phases, and the desire to provide the researcher with answers they perceived were expected by the researcher.

Implications for Theory and Research

The conceptual framework for this study was predicated on studies of stress among financial auditors, as no prior study could be found that addressed professional industrial auditors. The literature found several studies of stress and burnout conducted internationally, but only one conducted in the North America. Larson and Murff (2006) utilized quantitative sampling to measure stress and burnout and reported that environmental job stressors, such as



politics and reward, were more stress producing than workload stressors such as time and pressure.

This study findings conflicted with the Larson and Murff's (2006) study, in that time and work pressure as measured by the ABS and discovered during interviews were more prevalent in auditor responses than reward factors such as pay. Larson and Murff (2006) did not consider differences in generational group but rather a single group of auditors working in a large banking facility. Therefore, this study's findings refute Larson and Murff's (2006) study in terms of causes of stress among auditors. In comparison, this study concurred with Masihabada, Rajaei, Kolouhi, and Parsian, (2015) and Abuaddous, Bataineh, and Alabood (2018) in concluding that all auditors are negatively affected by stress, with time and workload as the primary causes of stress.

Implications for Practice

Most professional industrial auditors work part-time as contractors and perform other professional tasks independently as trainers and consultants. The results of this study provide professional practicing auditors information that empirically identifies causes of stress and burnout among different generational groups. The importance of understanding these causes with respect to teammates and to their own professional demeanors and styles could benefit these auditors in understanding and working to reduce and minimize these stressors, especially when working with auditors of other generational groups. This study may also benefit audit clients and the staff of the certification body in the understanding of stress among auditors of different ages, to help minimize stress during audits.

In this study, insufficient quantitative and qualitative data precluded making a definitive conclusion about stress and burnout. Millennial auditors were under-represented,



and there was a strong majority of baby boomers, thereby limiting the study sample. Stress and burnout among professional industrial auditors therefore require closer examination and present opportunities for future study in industrial auditing or related industries.

Recommendations for Further Research

This study was limited to professional industrial auditors and to the staff of a single certification body. The findings of the study are therefore limited and descriptive only of this sample population. Further research is recommended in extending the scope of the study of intergenerational response to stress and burnout to a larger population. Through such organizations as the International Register of Certified Auditors and the American National Accreditation Board, auditors representing several certification bodies could be invited to participate in a similar study, which would significantly increase the number of auditors from which to draw samples.

It is also recommended that the methodology of the study be applied to other worker groups, especially to groups of workers in fields other than medicine and education, for which many studies have been conducted. In addition, further study of the reactions to workplace stressors among millennial workers would be beneficial, as this generational group was underrepresented in this study.

Finally, it is recommended that further study be conducted focused on differences in reaction to workplace stressors based on gender and/or culture. These factors were not considered in this study.



Conclusion

This chapter has presented a discussion of the results of this study and compared these results to earlier studies on intergenerational stress and burnout in the workplace. It has considered theories of the causes of stress and burnout in the workout, intergenerational needs and characteristics, and worker response to workplace stressors. This mixed method explanatory design study considered the causes of stress and burnout among three generational groups of professional industrial auditors, working with a certification body of international standards in North America, utilizing the Area of Worklife Survey, the Maslach Burnout Inventory-General survey, and semi-structured open-ended interview to determine auditors' perception of factors contributing to stress and burnout.

Previous studies have considered stress and burnout among medical professions (Goh, 2016), educational professions (Chang et al., 2009) and the general workforce (Auh et al., 2016), but studies that have considered stress among auditors have been limited to financial auditing, with most addressing non-North American worker populations. This study was limited to professional industrial auditors in North America, including those residing in Canada and the United States, and considered generational affiliation as the independent variable in assessing cause of stress and burnout.

Findings from the study led the researcher to believe there is some variation in relationship between generational groups and stress and burnout. However, of the six stress and three burnout factors evaluated in the study using the combined Area of Worklife Survey/Maslach Burnout Inventory-General Series, only the control factor from the Area of Worklife Survey showed significantly different values between baby boomers and Generation X participants. Interview data yielded more pronounced variation between generational



groups in response to work/life balance, ways to alleviate stress, and intergenerational relationships causing stress. In summary, baby boomers were focused on completing tasks fully, even at the expense of personal time. Generation Xers were focused on completing work on time with high quality without having to sacrifice personal time, and millennials were more focused on protecting personal time even at the expense of work completion.

The results of this study should be expanded in future studies of professional industrial auditors to include a larger population of auditors representing multiple certification bodies, and to auditors beyond North America to consider cultural trends worldwide. A larger sample of Generation X and millennial auditors would provide more significant statistical data than could be obtained due to the limitations of this study.



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Appendix A: Letter of Invitation to Participate

July 31, 2018

Dear Professional Auditor,

As you may know, I am a doctoral student currently completing my Ph.D. studies. As an integral part of my degree requirements, I am conducting a research study entitled Intergenerational Reaction to Workplace Stress among Industrial Auditors. I would like to invite you to participate in the study.

Your participation is completely voluntary.

The study consists of two phases. During the first phase, auditors will complete a survey administered by an independent survey organization called Mind Garden Inc. The survey instruments are the Area of Worklife Survey and the Maslach Burnout Inventory. The survey takes less than 30 minutes to complete and will be conducted online. Your participation is anonymous during this phase of the study and only your email address will be known to the survey organization and to no one else. During the second phase, fifteen auditors will be further interviewed. The fifteen auditors will represent the three generational groups being researched, baby boomers, Generation X and millennials. The interview will be conducted by phone at a convenient time and will take approximately one hour to complete. Your identity will be known only to me and you will select a pseudonym to protect your identity

The study presents no known risks and presents no benefits other than your contribution to academic research through participating in the study. You may withdraw from either phase of the study at any time, for any reason and without explanation or penalty. In conformance with academic requirements, you will be asked to electronically sign an Informed Consent Agreement which explains the study, your involvement and your ability to withdraw at any time as well as my name and contact information and the name and contact information of my Dissertation Chair. Two separate Informed Consent Agreements will be initiated for the two separate phases of the study. If you have questions regarding your participation in the study, or you wish to verify the authenticity of the study, please contact my Dissertation Chair, Dr. Peggy Sundstrom at peggy.sundstrom@________, or the University of the Rockies Institutional Review Board Chair at IRB@Rockies.edu.

Please consider participating in this research. I believe that you will find it to be interesting and enjoyable. To participate in the first phase, please press the link below which will connect to Mind Garden Inc. and direct you to the informed consent form and subsequently to the survey.



Thank you so very much for your participation, your contribution to academic research and for assisting me in my studies.

Sincerely, Ron Kurtzman

To participate, please press the link below https://transform.mindgarden.com/rsvp/26412



Appendix B: Informed Consent for Quantitative Research Study

You are invited to participate in a research project conducted by Ronald D. Kurtzman, who is a doctoral student at the University of the Rockies.

You are invited to participate in a research study about stress and burnout which auditors may experience in performing their jobs, and possible conflict between individuals of different generations resulting from stressful situations.

You will be asked to complete a survey questions that will take less than 30 minutes of your time. The survey is called the Area of Worklife Survey/Maslach Burnout Inventory and the survey will be administered to you online.

There are no known risks or discomforts associated with your participation in this study, nor are there any identifiable benefits to you for participating. By participating in the research project, you will be directly contributing to original academic research which may identify key stress issues among auditors.

If you decide to participate in this research study, please understand that your participation is voluntary. You have the right to withdraw your consent or withdraw your participation at any time, for any reason, without penalty for doing so. To do so, you need only notify the researcher. You also have the right to refuse to answer any question(s) for any reason with no penalty.

In addition, your individual privacy will be maintained in all publications or presentations resulting from this study. Your responses will be collected by Mind Garden, Inc., an independent test agency that adheres to the highest standards of ethical research practices. Your name will not be used in the final research document, and only Mind Garden Inc. and the researcher---not your employer--- will have access to your name and e-mail address. Information you provide about your identity will be stored on a removable media storage device and on paper records that will be safeguarded in a locked file cabinet in the researcher's home office for a period of five (5) years following completion of the study and then destroyed by erasing electronic files and shredding paper files.

If you have any questions regarding this project	ct, you may contact the researcher at
or at	f you have questions regarding your rights as
research participant or any concerns regarding	this project, you may contact the researcher's
advisor, Dr. Peggy Sundstrom at	., or you may report
concerns confidentially if you wish-to the Cha	irperson of the University of the Rockies
Institutional Review Board by emailing IRB@	rockies.edu

I understand the above information and voluntarily consent to participate in the research. I further attest that I am at least 21 years of age.



, .	PT, you agree that you understand articipate in this study.	the contents of this informed consent
Name	Signature	Date
IRB Approval Nun	nber: IRB R1-18-053-0 IRB Expir	ation Date: 6 July 2019



Appendix C: Informed Consent for Qualitative Research Study

You are invited to participate in a research project conducted by Ronald D. Kurtzman, who is a doctoral student at the University of the Rockies.

You are invited to participate in a research study about stress and burnout auditors may experience in performing their jobs.

You will be asked to participate in a 60 minute with the researcher. During this interview, you will be asked questions about your feelings about stress and burnout and how you react to these factors in your job as an auditor. The interview will be conducted by telephone at a time mutually convenient to you and the researcher. The interview will not cause you to incur any financial expense.

There are no known risks or discomforts associated with this study. By participating in the research project, you will be directly contributing to original academic research which may identify key stress situations issues among auditors.

If you decide to participate in this research study, please understand that your participation is voluntary and that you have the right to withdraw your consent or discontinue participation at any time, for any reason, and without penalty for doing so. To do so, you need only notify the researcher. You also have the right to refuse to answer any question(s) for any reason with no penalty.

In addition, your individual privacy will be maintained in all publications or presentations resulting from this study. Your responses will be recorded and transcribed by the researcher but the interview will be completely confidential. Your name will not be used in the final research document, and only the researcher and, if necessary, the Chair of the University of the Rockies Institutional Review Board will have knowledge of your identity. All information, including recordings of the interview, interview notes and interview transcriptions will be safeguarded in a locked file cabinet in the researcher's home office for a period of five (5) years following completion of the study and will then destroyed by shredding. Removable media storage devices, audio tapes used to record the interview and store electronic files associated with your interview will similarly be secured in a locked file cabinet in the researcher's home office, and then erased five (5) years following completion of the study. The physical storage devices will then be destroyed.

If you have any questions regarding this project	et, you may contact the researcher at
or at . I	f you have questions regarding your rights as
research participant or any concerns regarding	this project, you may contact the researcher's
advisor, Dr. Peggy Sundstrom, at	, or you may report
concerns-confidentially, if you wish-to the Cha	airperson of the University of the Rockies
Institutional Review Board by emailing IRB@	rockies.edu.

I understand the above information and voluntarily consent to participate in the research. I further attest that I am at least 21 years of age.



I further understand that that the interview will be audio taped and agree to the recording of my responses.

By clicking ACCEPT, you confirm that you understand and agree to the contents of this informed consent.

NAME	Signature	Date

IRB Approval Number: IRB R1-18-053-0 IRB Expiration Date: 6 July 2019



Appendix D: Maslach Burnout Inventory General Survey Supplementary Questions

- 1. Which generational work group corresponds to your age?
 - a. Baby boomer (Born between 1946-1964)
 - b. Generational X (Born between 1965-1980)
 - c. Millennial (born between 1981-2000)
 - d. Other (born prior to 1946 or after 2000)
- 2. For how long have you worked as an ISO auditor?
 - a. 1-5 years
 - b. 6-10 years
 - c. 11-15 years
 - d. Longer than 15 years
- 3. Do you ever feel overly stressed in performing your job as an ISO auditor?
 - a. Yes
 - b. No
- 4. Have you ever considered quitting your job as an ISO auditor because of job stress?
 - a. Yes
 - b. No
- 5. Would you be willing to volunteer to participate in a follow-on 45 minute interview with the researcher to further discuss job stress?
 - a. Yes
 - b. No



Appendix E: Interview Script

Thank you for agreeing to participate in this study. The purpose of this study is to conduct research on the perception and reaction to various workplace stressors experienced by auditors working on behalf of National Quality Assurance. This interview is going to be recorded for the purpose of collecting data regarding generational group response to the stressors experienced by auditors. This interview is confidential and your identity and responses will not be disclosed to anyone. The recording, notes and transcripts of this interview will be protected in a locked box at the researcher's home for five years following completion of the study and then destroyed. You may opt to discontinue your participation at any time for any reason during this interview without penalty for doing so.

- 1. Please tell me which generational group of workers most closely corresponds to you.
 - a. Baby boomer
 - b. Generation X
 - c. Millennial or Generation Y
 - d. Other
- 2. Tell me a little bit about yourself.
- 3. What kinds of things cause you stress regarding your job as an ISO auditor?
- 4. Can you describe the most stressful situation you have experienced as an ISO auditor?
- 5. The survey you took indicates that most people in your generational group experience a (low, medium, high as appropriate) stress level associated with their job as a professional auditor. Do you feel the same way? Why or why not?
- 6. Have you ever felt overwhelmed by the level of stress associated with your job? If so, please describe.
- 7. If you had the wherewithal to do so, would you quit your job and do something else? What would you rather do for a living? If so, what would you rather do for a living?
- 8. Have you ever felt uncomfortable with the amount of work you have to do for which you are compensated? If so, please describe.
- 9. Do you feel that you have a good work/life balance? Why or why not? Is work/life balance important to you?
- 10. Do you feel stress from the amount of long-distance travel required of your job? Why or why not?
- 11. If you are working with a team of auditors, would you prefer to work solely with



auditors your own age or with auditors of different ages, or does it matter to you?

- 12. Have you ever felt burned out as an auditor? If so, please describe.
- 13. Do you think that stress affects the quality of your work either positively or negatively? If so, please describe.
- 14. If you feel stressed during work, do you share your feelings with others? If so, who and does it help? If not, why not?
- 15. Do you believe that auditors of different ages respond differently to the same stresses at work? If so, how? If not, why not?
- 16. If confronted with a high stress situation, how do you respond to and deal with that situation?
- 17. In general, can you think of ways that your registrar could reduce stress for auditors? If so, please describe.
- 18. Do you frequently interface with the NQA Office? If so, do you find that interface to be stressful or non-stressful?
- 19. The Area of Worklife Survey results for your generational group of _____ indicated that ____ is/are common causes of stress in your generation. Do you agree that these are the greatest causes of stress for you? If so, why? If not, why not.

The Maslach Burnout Inventory results for your generational group of
indicated that the most cause of burnout in your generation is
. Do you agree that these are the most probable issues that could cause
you to burnout in your job?

- 1. Let's discuss a specific episode or specific episodes that caused you to feel stress and/or burnout. Can you please describe this situation and what factors brought about immediate or long term stress to you?
- 2. Have you ever felt that you were on the verge of burning out because of the demands of your job as an ISO auditor?
- 3. Is there anything else that you would like to tell me about stress in your job?



This concludes my questions. If y	ou have any specific questions about the study
please contact, the researcher at	or the researcher's advisor, Dr. Peggy
Sundstrom at	or the Chairperson of the University of
the Rockies Institutional Review Board a	t IRB@rockies.edu.

Thank you very much for your participation in the study. Your responses will contribute to academic research and understanding of stress and burnout among professional auditors.



Appendix F: Organizational Permission Form

Appendix 1- Organizational Permission Form UNIVERSITY Institutional Review Board Handbool of the ROCKIES Appendix N: Organizational Permission Form Revised 10/16/15
Name of Student: Ronald D. Kurtzman
Title of Dissertation:
International Conflict as it Relates to Stress and Burnout in the Service Industry
Name of Organization or Entity: National Quality Assurance, Inc.
Type of Organization or Entity: Certification Body
Organizational Address: 289 Great Road, Suite 105, Acton MA 01720
Please check all permissions that apply: Permission to solicit subjects on property or through the organization (e.g., lists of members and contact information, subscribers, listserv, etc.)
Permission to collect data through organization, whether in person, by phone, or electronically
Permission to use organizational name
Permission to access organizational data and/or documents not in the public domain
Name of Authorizing Person: Kevin Beard
Job Title: President
Signature: Date: 8///7- Electrofile Signature not Accepted Date: (valid for 2 years)



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Areas of Worklife Survey (AWS)

The six sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below. Sample Items:

I do not have time to do the work that must be done.

I have control over how I do my work.

I receive recognition from others for my work.

Members of my work group communicate openly.

Resources are allocated fairly here.

My values and the Organization's values are alike.

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Sincerely

Robert Most Mind Garden, Inc.

www.mindgarden.com

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Appendix H: Maslach Burnout Inventory General Series Permission and License

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To Whom It May Concern,

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Maslach Burnout Inventory forms: Human Services Survey, Human Services Survey for Medical Personnel, Educators Survey, General Survey, or General Survey for Students.

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below. Sample Items:

MBI - Human Services Survey - MBI-HSS:

I feel emotionally drained from my work.

I have accomplished many worthwhile things in this job.

I don't really care what happens to some recipients.

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MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP):

I feel emotionally drained from my work.

I have accomplished many worthwhile things in this job.

I don't really care what happens to some patients.

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MBI - Educators Survey - MBI-ES:

I feel emotionally drained from my work.

I have accomplished many worthwhile things in this job.

I don't really care what happens to some students.

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Cont'd on next page



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MBI - General Survey - MBI-GS:
I feel emotionally drained from my work.
In my opinion, I am good at my job.
I doubt the significance of my work.
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MBI - General Survey for Students - MBI-GS (\$):
I feel emotionally drained by my studies,
In my opinion, I am a good student,
I doubt the significance of my studies.
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Descriptive Statistics

Descriptive statistics are typically used to describe or summarize the data. It is used as an exploratory method to examine the variables of interest, potentially before conducting inferential statistics on them. They provide summaries of the data and are used to answer descriptive research questions.

kurtosis: The measure of the tail behavior of a distribution. Positive kurtosis signifies a distribution is more prone to outliers, and negative kurtosis implies a distribution is less prone to outliers.

Mean (M): The average value of a scale variable.

Percentage (%): The percentage of the frequency or count of a nominal or ordinal category.

Sample Minimum (Min): The smallest numeric value in a given sample.

Sample Maximum (Max): The largest numeric value in a given sample.

Sample Size (n): The frequency or count of a nominal or ordinal category.

Skewness: The measure of asymmetry in the distribution of a variable. Positive skewness indicates a long right tail, while negative skewness indicates a long left tail.

Standard Deviation (SD): The spread of the data around the mean of a scale variable.

Standard Error of the Mean (SE_M) : The estimate of how far the sample mean is likely to differ from the actual population mean.

Independent Samples *t***-Test**

The independent samples *t*-test is used to determine if there is a significant difference between two groups (e.g., men vs. women) on a scale-level dependent variable. This test uses the difference between the average scores of the two groups to compute the *t* statistic, which is used with the *df* to compute the *p*-value (i.e., significance level). A significant result indicates the observed test statistic would be unlikely under the null hypothesis. The independent samples *t*-test carries the assumptions of independence of observations, normality, and equality (or homogeneity) of variance.

Cohen's *d***:** Effect size for the *t*-test; determines the strength of the differences between the matched scores. The larger the effect size, the greater the differences in the matched scores.

Degrees of Freedom (*df*): Refers to the number of values used to compute a statistic. The *df* is determined by the number of observations in the sample and equal the number of observations - 1; used with *t* to compute the *p*-value.

Levene's Test: Test to assess if the assumption of equality of variance is met; if significance is found, the groups differ in their spread of the dependent variable scores; this may differ from the output found from other statistical packages (such as SPSS), as Intellectus StatisticsTM uses the median instead of the mean for calculations; the median tends to provide a more-robust choice that can account for non-normality.



Mean (M): The average value of a scale-level variable.

Normality: Refers to the distribution of the data. The assumption is that the data follows the bell-shaped curve.

p-value: The probability of obtaining the observed results if the null hypothesis is true. A result is usually considered statistically significant if the p-value is $\leq .05$.

Shapiro-Wilk Test: A test to assess if the assumption of normality is met. If statistical significance is found in this test, the data is *not* normally distributed.

Standard Deviation (SD): The spread of the data around the mean of a scale-level variable.

t-Test Statistic (*t*): Used with the *df* to determine the *p* value.

Mann Whitney *U*

The Mann-Whitney U is a non-parametric test used to assess for significant differences in a scale or ordinal dependent variable by a single dichotomous independent variable. It is the non-parametric equivalent of the independent sample t-test. The test uses the mean ranks of the scores in each group to compute the U statistic, which in turn is used to compute the p-value (i.e., significance level). A significant result for this test suggests that the two groups have reliably different scores on the dependent variable. The Mann-Whitney U test assumes that the observations are independent of each other and that the dependent variable has a scale or ordinal level of measurement.

Mean Rank: The average rank of the data for that group once the data is sorted and ranked.

Non-Parametric Test: A type of statistical test that does not require the data to follow a particular distribution; typically used when assumptions of a parametric test are violated or when the data do not fit the level of measurement required by a parametric test.

p-value: The probability of obtaining the observed results if the null hypothesis (no relationship between the independent variable(s) and dependent variable) is true; in most social science research, a result is considered statistically significant if this value is $\leq .05$.

U-Test Statistic (U): Used to compute the p value.

Source: Intelligus Software (2017)

