

**JOB STRESS IN DISASTER CASE MANAGERS WORKING WITH
HURRICANE IKE RECOVERY**

A Thesis

by

MEGAN HAJECATE FORMAN

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE

August 2010

Major Subject: Agricultural Leadership, Education, and Communications

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Approved by:

Chair of Committee, Scott Cummings

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ABSTRACT

Job Stress in Disaster Case Managers Working with Hurricane Ike Recovery. (August 2010)

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Chair of Advisory Committee: Dr. Scott Cummings

Hurricane Ike struck the coast of Texas on September 13, 2008. The Federal Emergency Management Agency (FEMA), a branch of the United States Department of Homeland Security, implemented a Disaster Case Management Pilot (DCM-P) project to help residents of the impacted areas recover from the devastation caused by the hurricane. Disaster case managers employed by the three larger recipient organizations selected for the project by FEMA served as the link between the victims and the desired resources. The purpose of this study was to evaluate stress levels of the disaster case managers employed through the ten smaller faith-based organizations that make up one of the larger recipient organizations providing case management services to victims.

Questionnaires based on the Job Stress Survey developed by Spielberger and Vagg were mailed to 145 disaster case managers employed by the faith-based recipient organization. Of the 145 questionnaires mailed out, 89 were completed and mailed back for data analysis. Based on answers selected by the respondents, frequency and severity scores for each of the thirty stressors identified through the instrument were calculated.

Based on severity and frequency scores for the stressors, scores were calculated for the job stress index and two subscales, the job pressure index and the lack of support index.

Findings showed that both the most severe and the most frequently experienced stressors were caused by aspects of the job itself that related to job pressure.

Furthermore, many of the same items that were rated as having the highest severity of stress were also the most frequently experienced stressors.

DEDICATION

To Marsha Hajecate Forman and Dorothy A. Hajecate

And in memory of

Thomas Hajecate and James D. Forman

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First and foremost I would like to acknowledge Billy R. McKim for the time and effort he put into my graduate education. Without your unique but constant words of encouragement (and some conning), I would have never even attempted a thesis. I learned more about the world of academia and life in general from you than I ever did from any class. You have been there for me in many aspects, as my boss, my peer, and most importantly, as one of my best friends. I know that you will be incredibly successful wherever you end up. Thank you for everything!

To my family especially Mom, Nana, Brooke, and David, thank you for your unfailing support, even when it wasn't always clear what exactly I was doing or studying. I know at times it seemed like I would end up being a student forever but nevertheless you encouraged me and let me find my own way. You have been and continue to be my role models. Through good and bad, you have all taught me to keep going and for that I am incredibly appreciative.

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CHAPTER I

INTRODUCTION

Background and Impacts

The Hurricane Ike Impact Report presented by FEMA in December 2008 described the chaos that ensued when hurricane Ike struck the coast of Texas:

On Saturday, Sept. 13, 2008, Hurricane Ike made landfall over Galveston, Texas, around 2 a.m., with maximum sustained winds nearing 110 mph (175km/h) and some higher gusts. At the time, Ike was an extremely large category 2 hurricane with hurricane-force winds extending outward up to 120 miles (195 km) from the center and tropical storm-force winds extending outward up to 275 miles (445km). At its biggest, Ike would have covered most of Texas (p. 1).

According to the Hurricane Ike impact report by FEMA (2008), this disaster impacted four primary aspects of victims' lives including their social environment, built environment, economic environment, and natural environment. Social environment impacts include long-term strains on access to health care, child care, public education. Hospitals in Houston and Galveston were severely damaged causing problems not only for residents who would ordinarily use services, but also for the influx of patients whose medical problems such as Post-Traumatic Stress Disorder, depression, and smoke inhalation were caused by the hurricane itself. Authors of the FEMA report (2008) stated, "The impacts of Hurricane Ike have had compounded effects on individuals with

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disabilities, the elderly and others with special needs who rely on support to live independently within the community,” (p. 2).

Built environment impacts consist of human-made structures including bridges, roads, buildings, and other infrastructure. In addition to the need for \$2.4 million for erosion waterway dredging and other port, coastline, and navigable waterway infrastructure repairs, \$3.4 billion of total housing damages was incurred by cities affected by the hurricane, according to the FEMA report (2008). Furthermore, damages to water and wastewater plants as well as to government buildings were in excess of \$1.7 billion. The State of Texas estimated a need for \$131.8 million to repair damage to transportation systems (FEMA, 2008).

At the time of the Hurricane Ike Impact report, overall impact was still being assessed, “but preliminary estimates suggest[ed] Ike may become one of the costliest hurricanes on record,” (FEMA, 2008, p. 3). Economic impacts included disruptions in the workforce, especially by the 2.7 million workers living in affected counties. Replacement of machinery, computers, fencing, and farm equipment contributed to the overall economic impact as well as the loss of the land inundated by saltwater. The natural processes for repair to the land affected could take two to three years to restore the fertility the land previously held. Industries affected by Hurricane Ike included petrochemical, agriculture and forestry, and tourism.

Finally, the natural environment of the areas affected by Hurricane Ike was also inhibited. “Saltwater intrusion from Ike’s surge has left large swaths of the upper Texas

Gulf Coast in ecological upheaval, including wetlands and other natural habitats,” according to the impact report’s authors (2008, p. 3). Although natural processes will likely eventually repair damages, there will still be disruptions in the natural areas until repair is achieved.

Social Work and Case Management

The idea of helping the less fortunate has existed for hundreds or even thousands of years. However, social work as a field of study and profession has only evolved since the 20th century. A social worker serves as a resource for clients connecting the clients with goods, services, or financial means that the client may otherwise not be able to reach. According the National Association of Social Workers, “People choose careers in the social work profession because they believe they can make a significant impact in the lives of others through individual and group assistance,”(The National Association of Social Workers, 2010). Modern day social workers’ typical clientele consists of individuals and families that are part of a minority or special needs population, including but not limited to those with mental disabilities, physical disabilities, low socio economic status, children, and the elderly. Although specific duties of social workers may vary based on the populations that they serve, the job description in general remains the same. Social workers act as a buffer between the populations they service and the surrounding environment. Clients may come to social workers based on some instance of mistreatment or unfairness or because they currently cannot satisfy all of their financial responsibilities. Other times, especially in cases of abuse, the client may not have sought out the assistance on their own, and may have been recommended to the social worker

by an outside or related party. Upon meeting with clients, social workers collect information about the client's situation in order to determine what their client's unsatisfied needs are. The social worker then takes an active role in connecting the client with resources that meet their needs.

The Case Management Society of America defines case management as “a collaborative process of assessment, planning, facilitation and advocacy for options and services to meet an individual's health needs through communication and available resources to promote quality cost-effective outcomes” (1985). Case management has evolved as a type of social work that typically does not include direct service. A case manager may not actually hand resources over to clients in person, but might instead connect the client with a resource provider that may be able to satisfy his or her needs. This allows the client to take a more active role in their ‘action plan’ by making phone calls or meeting with others. A case manager is not only responsible for connecting clients with resource providers but also for ensuring that once the client has attained the appropriate resources, he or she uses these resources in a timely and cost-effective manner.

Disaster Case Management Pilot Project

Due to the damages caused by Hurricane Ike, the Federal Emergency Management Agency (FEMA), a sector of the United States Government's Department of Homeland Security, began to render aid to Hurricane Ike victims through a federally funded project for Disaster Case Management (DCM). The Disaster Case Management-

Pilot (DCM-P) project's organizational structure is illustrated in Figure 1. Three organizations, referred to as recipient organizations, were contracted by FEMA and HHSC to perform case management services beginning on May 8th, 2009 and to facilitate the recovery process. In the FEMA DCM-P Program Guidance document (2009) distributed to applicants to the project, disaster case management is defined as:

...a partnership between the case manager and the client in the development of a Disaster Recovery Plan. The process involves assessing needs based on the verified, disaster-related causes; developing a goal-oriented plan that outlines all of the steps necessary to achieve recovery; organizing and coordinating the information on available resources that match the disaster-caused needs; monitoring progress towards reaching the stated goals and; when necessary, providing advocacy for the client. (p. 1).

Each of the organizations selected for the project was required to provide recovery services, primarily disaster case management, to an assigned portion of the area affected by Hurricane Ike. All three of the organizations selected for the project were unique in structure. One of the three recipient organizations funded to perform case management duties was a large faith-based organization that had previously assisted with natural disaster recovery in other locations. This faith-based organization was made up of ten, smaller faith-based organizations (Figure 2). Many of these organizations served specific religious or ethnic populations. Due to the diverse nature of this organization's structure, the case managers employed by the faith-based organization described served as the population for this study.

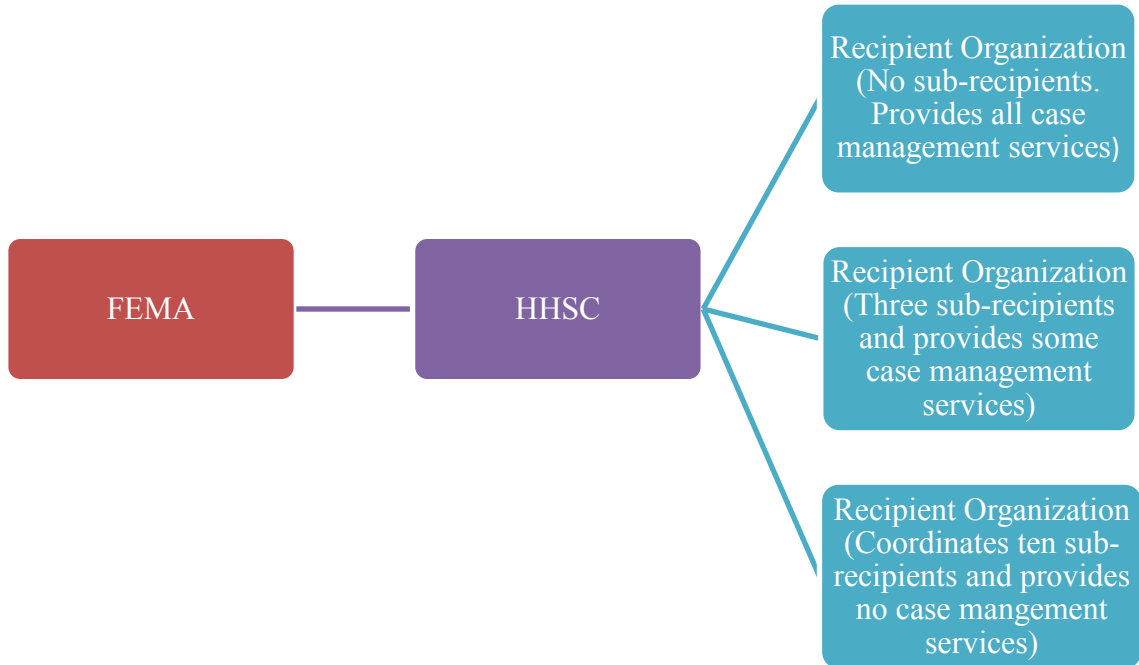


Figure 1. Disaster Case Management Pilot (DCM-P) project organizational hierarchy.

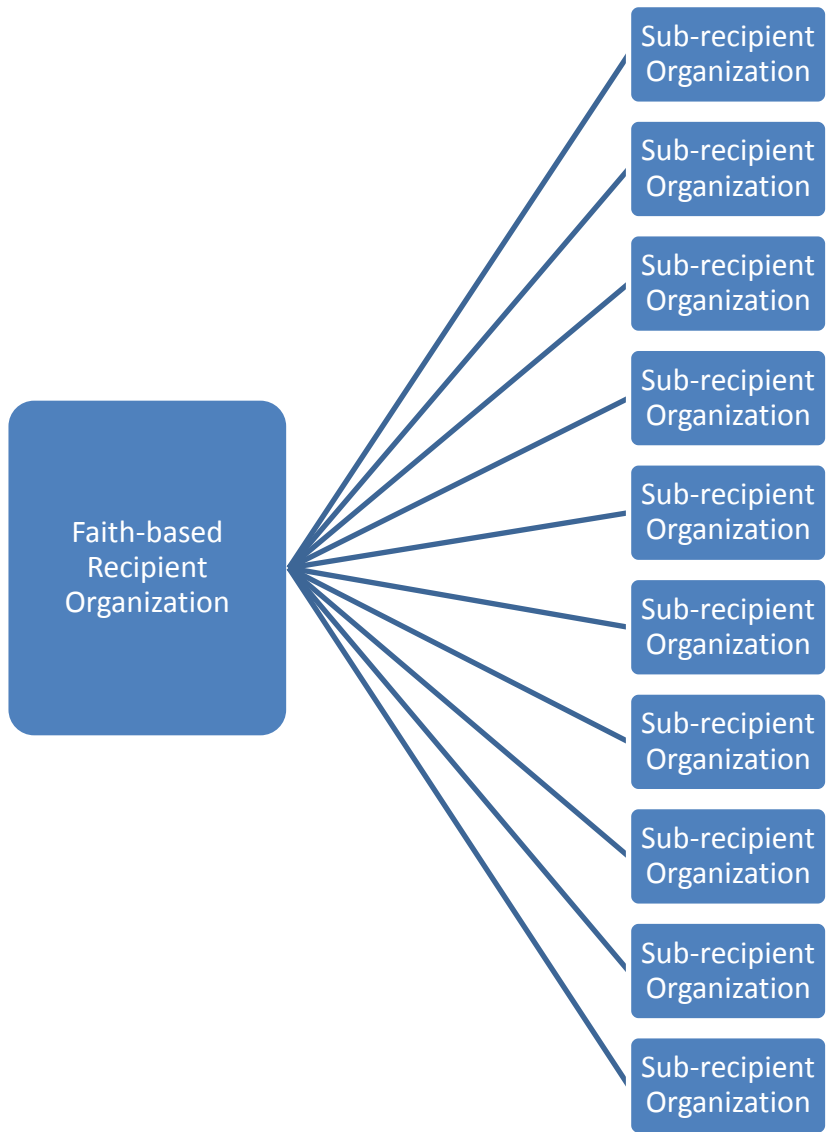


Figure 2. Organizational structure of organization selected for DCM Job Stress Study.

Texas AgriLife Extension Service

The Texas AgriLife Extension Service was contracted by the Health and Human Services Commission (HHSC) to provide an evaluation team for the Disaster Case Management Pilot (DCM-P) project. While on the surface a direct connection between the goals of Texas AgriLife Extension and the goals of the DCM-P project may not be apparent, a correlation exists between the role of Texas AgriLife Extension in the DCM-P project and the mission of the organization as a whole. Through the evaluation of recovery efforts in this project, Texas AgriLife Extension may be able to increase the quality of life of Texans through observations and recommendations which will be taken into account to develop future disaster recovery efforts.

Purpose of the Study

Case managers often spend many hours directly interacting with their client from the opening of the client's case until the client has 'fully recovered' or achieved the same standard of living that the client maintained pre disaster. Due to this lengthy interaction with clients that have experienced sometimes traumatic events, it is important to address the well being of the case manager, as well as, the client. The purpose of this study was to determine job stress among case managers working for the faith-based organization involved in the Hurricane Ike Disaster Case Management project. Although this study is not an official part of the Texas AgriLife Extension Service's evaluation effort, it is nonetheless a valuable addition. Job stress levels among case managers will

be determined through the administration of the Job Stress Survey (JSS) developed by Spielberger and Vagg in 1991. The JSS was utilized to evaluate the stress level and frequency of work related events in case managers. Through analysis of the data, the researcher was able to determine not only stress levels, but also how factors such as experience level, race, gender etc. that may or may not affect stress levels.

Limitations of the Study

With any study, there are always aspects of the study that could be altered to make the study better. This study is no different. Had this study have been conducted with case managers from all three recipient organizations rather than just one, results would have been applicable to a larger population. The method for collection of the questionnaires in this study may have affected the quality or number of responses based on a fear of repercussions from supervisors. Data also could have been adjusted to make results more comparative to the normative data used as a baseline for the commercial Job Stress Survey.

Research Objectives

Literature regarding occupation induced stress is extensive and varied. Although job stress has been studied in many facets and fields, disaster case management has been researched very little. To contribute information to the knowledge base of researchers and consumers of research about stress in the disaster case management profession, the following objectives guided this study:

1. Describe the characteristics of disaster case managers.
2. Describe the level and category of job stress perceived by disaster case managers.
3. Identify the stressors that are most frequently and least frequently experienced among disaster case managers with high stress.
4. Rank the factors that cause the highest and lowest levels of stress in disaster case managers.

CHAPTER II

REVIEW OF LITERATURE

Stress

According to the American Institute of Stress (2010), there is not one specific definition of stress that is widely accepted. Stress can refer to any number of different situations and holds a different meaning for researchers across disciplines. The definition of stress commonly used today is derived from what many dictionaries define as distress. For the purpose of this study, stress will be defined as “a condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize” and/or “physical, mental, or emotional strain or tension”(1991). Furthermore, causes and consequences are different for each person. Studies have been conducted to study stress inflicted by relationships (Maguire, 2010), parenting (Bronte-Tinkew, Horowitz, & Carrano, 2010), family (Diamond, 1991), major events (i.e., Post Traumatic Stress disorder) (Katz, 2002), culture (Warren-Findlow, 2010), health problems (Pederson & Zachariae, 2010), school (Ratanasiripong, Sverduk, Hayashino, & Prince, 2010), and work (Vagg & Spielberger, 1998b), among others. However, according to a study conducted by Northwestern National Life, “one in three say job stress is the single greatest stress in their lives” (1991). Responses to stress can be physical, physiological or emotional and have effects of efficiency and productivity .

Why do researchers study stress? It could be argued that stress is studied because of the psychological and other effects on workers and the financial impact on businesses.

Cooper & Dewe (2004) however, stated that “the most important reason for studying stress is that we have a moral responsibility to those whose lives we research” (p. 118). Furthermore, a social scientist’s responsibility is not only to research stress but also to take what is discovered and disseminate that information to those that need it most, so that one day the participants in these studies can reap the benefits of their involvement through the implementation of stress reduction strategies.

Occupational Stress and Burnout

In a study by the United States Bureau of National Affairs, 40% of job turnover was identified to be the result of stress. Additionally, research has shown that workers with high stress are more than two times as likely to be absent from work five or more days per year. According the Northwestern National Life study, “One in three Americans seriously thought about quitting work in 1990 because of job stress, and one in three expects to “burn out” on the job in the near future” (1991). With this stress epidemic sweeping the United States, researchers have been focused on identifying sources of and evaluating occupational stress for more than 30 years. Ganster and Schaubroeck (1991) wrote, “The belief that stress, and in particular, work stress, is a causal agent in physical and mental disorders as well as organizational outcomes such as absenteeism and reduced productivity has gained widespread acceptance” (p. 235).

Through a review of the literature, the authors revealed that information related to occupational stress began to appear in the 1950s and 1960s, although 75 studies at the Institute for Social Research at the University of Michigan since 1948 contained

information relevant to mental health (Cooper & Dewe, 2004). Since this time, many attempts have been made by researchers to identify which aspects of an occupation or attributes of the workplace contribute most significantly to job related stress. Cartwright and Cooper (1997) identified six primary ‘stressors’, including factors intrinsic to the job itself (workload and work hours), roles in the organization (role ambiguity, conflict, or overload), relationships at work (abrasive personalities and mismatched leadership styles), career development issues (job insecurity, lack of opportunity for advancement, or perceived unearned advancement of others), organizational factors (structure, culture, or political climate), and the home-work interface (division of time, emotional interference, or behavioral interference).

Burnout has been established as a term to describe “a very extreme form of occupational stress... which has been found to have severe consequences for individuals and their organizations” (Cooper, Dewe, & O’Driscoll, 2001, p. 262). The term burnout was first introduced in a paper by Bradley about probation officers (Cooper, et al., 2001, p. 79). Freudenberger expanded on Bradley’s work through his studies of “the extreme psychological strain often experienced by workers in the human service professions, such as nurses, police officers, social workers, and schoolteachers” (Cooper, et al., 2001, p. 79). Although stress and burnout are not synonymous and have been measured with different scales by different instruments (Cooper, Sloan, & Williams, 1998; Hackman & Oldham, 1975; Insel & Moos, 1974; Ivancevich & Matteson, 1976; Karasek, Schwartz, & Peiper, 1983; Murphy & Hurrell, 1987; Osipow & Spokane, 1987; Spielberger,

Gorsuch, & Lushene, 1970), for the purpose of this study, literature indicating burnout will be used as an argument for the measurement of stress.

The literature related to occupational stress is extensive, hence, a list of related literature is included in Appendix A. However, only the most recent and relevant literature will be discussed, to include seminal works.

Stressors

The Northwestern National Life study indicated that when respondents were asked what factors contributed the most to workplace stress, “more than half ... cite either too much work or working with the public. However, the research also suggests a strong correlation between workplace stress and an employee’s lack of control over how the job is done” (1991, p. 9). Furthermore, Maslach, Schaufeli, and Leiter (Maslach, Schaufeli, & Leiter) suggested that burnout “is a prolonged response to chronic emotional and interpersonal stressors on the job and is defined by the three dimensions of exhaustion, cynicism, and inefficacy” (p. 397). In the annual review of job burnout literature, the authors examine three situational factors that contribute to job burnout: job characteristics, occupational characteristics and organizational characteristics. The researchers indicated that burnout is a response to job characteristics for example, quantitative job demands. Stressors such as experienced workload and time pressure contribute to the exhaustion dimension of burnout (Maslach, et al., 2001, p. 407).

The most frequently studied qualitative job demands are role conflict and role ambiguity. According to Cooper and Dewe (2004), “role conflict and role ambiguity

came to dominate the early history of work stress....despite well over a decade of persistent and growing criticism, they were and probably still are, the most frequently measured causes of work stress” (p. 87). Maslach et al. reported that “role conflict occurs when conflicting demands at the job have to be met, whereas role ambiguity occurs when there is a lack of adequate information to do the job well” (p. 407). Lack of support was identified as another job characteristic contributing to burnout, with lack of support from supervisors having a larger impact than lack of support from coworkers. Finally, the annual review identified a third set of characteristics contributing to burnout. This third set focuses on information and control. Maslach et al. (Maslach, et al.) reported that “lack of feedback is consistently related to all three dimensions of burnout” (p. 407). Employees with a lack of participation in decision making or employees with a lack of autonomy experience a higher risk of burnout, although lack of autonomy showed a weaker relationship with burnout.

The safety and health effects of long working hours and overtime on employees has grown and is continuing to grow as an area of research (Grosch, Caruso, Rosa, & Sauter, 2006, p. 943). In their 2006 study, Grosch, Caruso, Rosa, and Sauter conducted descriptive analyses for five groups of employees in the United States. The groups of employees were identified based on the total hours worked per week, which ranged from 1 to 34 hours per week in part- time positions, to more than 70 hours per week in higher overtime workers. The researchers procured data from the 2002 General Social Survey funded by the National Science Foundation and administered through the National Opinion Research Center. The five groups of employees were compared based on

organizational characteristics, demographic variables, and psychosocial working conditions.

Through analyses of data pertaining to psychosocial working conditions, seven conditions “showed a progressive worsening with increasing hours of work....These conditions included: too much work, not enough staff, not enough time, working very fast, conflicting demands, difficulty taking time off, and few hours of relaxation” (Grosch, et al., 2006, p. 947). Conversely, the opportunity to develop special abilities, participation in decision making, and positive management-employee relations improved as the number of hours worked increased. Three conditions (supervisor concern, enough information to get the job done, and co-worker support) were not significantly affected by additional hours worked (Grosch, et al., 2006, p. 947). Although an increase in hours worked negatively affected several of the conditions in the psychosocial environment dimension, some positive changes also correlated with the increased work time. Overtime employees showed consistently elevated levels of job-family interference, feelings of being “used up” at the end of the day, and job stress. Results from the study by Grosch et. al. suggested that “hours of work may have properties similar to other types of environmental exposures in that a consistent relationship exists between the amount of exposure (or overtime) and the magnitude of the response” (p. 950).

Initially, role overload was described as the result of an employee having more tasks to perform than is possible for him or her to complete within required time constraints. In this scenario, employees were forced to decide which task to complete

and which to postpone, which may cause stress that “tax[es] individuals beyond the limits of their ability” (Cooper & Dewe, 2004, p. 89). In 1970, Kahn split role overload into two distinctive groups, qualitative overload and quantitative overload. Qualitative overload occurs when a workers is pushed beyond the level of his or her skills or abilities as opposed to quantitative overload in which workers are given more tasks than time to complete them. However, role underload, a situation in which the employee has far less to do than the parameters of the work day allot for can inflict stress as well by making the job uninteresting or boring (Cooper & Dewe, 2004).

In a study of 117 employees of a southern U.S. hospital supply company, congruence between sources of stressors and social support as well as gender roles were examined to identify whether these might serve as moderators by reducing confusion (Beehr, Farmer, Glazer, Gudanowski, & Nair, 2010). Social support can affect strain, identified as adverse effects on workers’ health and welfare, directly for example, by calming the person. Social support can also indirectly affect strain if the social support establishes a buffer, weakening the relationship between stressors, identified as characteristics of the work environment, and strains (Beehr, Farmer, et al., 2010). The study showed that source congruence served as a buffer, suggesting that when the source of the stressor offers social support, he or she is better able to ease the employee’s reaction to said stressor. This may be because, in this study, the stressor offered the social support and thus, was better able to understand the source of the strain (Beehr, Farmer, et al., 2010). The researchers also examined the effect of gender roles as a moderator between stressors and strain and found that participants with a more feminine

gender role, as predicted, had a more positive reaction to social support than employees with a more masculine gender role (Beehr, Farmer, et al., 2010, p. 228).

Rhoades and Eisenberger (2002) reviewed more than 60 studies that examined employees' perceived organizational support (POS). Employees who believed their organizations support them were confident in the organizations' abilities to assist them to effectively perform job-related tasks and deal with stressful situations (Rhoades & Eisenberger, 2002, p. 698). Through a meta-analysis of previous literature, Rhoades and Eisenberg (2002) identified three types of organizational treatment related to an employee's POS. Fairness of treatment, which is established through the fairness of resource distribution among employees, was most strongly related to POS. The second type of organizational treatment related to POS was supervisor support. Finally, favorableness of rewards and job conditions, the third type of organizational support, exhibited a moderate relationship with POS when the researchers controlled for the other two types of support. Favorableness of rewards and job conditions did, however, have a significant relationship with POS when considered alone (Rhoades & Eisenberger, 2002, p. 707).

High Stress Jobs

In at least the job stress aspect, not all jobs are created equal. Several specific job settings have been identified by researchers as more stressful than the norm. In a study in Michigan on occupation and suicide, Stack (2001) reviewed data from national mortality file tapes from 21 states. Through the use of bivariate logistic regression models, Stack (2001) discovered that individuals in 15 occupations had either significantly lower or

significantly higher risk for suicide than the rest of the working-age population (p. 384). In the multivariate results only eight occupations emerged as having significantly lower or higher risk for suicide. Stack (2001) reported “Occupational stress may also account for high suicide in health-related occupations. Persons in these occupations and in the related occupation of social work are client dependent. Social workers were also found to have an elevated suicide risk,”(p. 393). Further studies have been conducted specifically targeting social workers and case managers to evaluate the levels and effects of occupational stress. A 2009 study conducted by Kim and Lee focused on a random sample of 211 California state- registered social workers specifically within the health or mental care settings. The study found that social workers typically perceive that their job roles cause high levels of stress (Kim & Lee, 2009).

Stress in social work

Employees involved in any type of human services, such as social work, are considered to have a higher than average risk of burnout. Söderfeldt, Söderfeldt, and Warg (1995) identified reasons that social work may be considered an at-risk occupation for burnout:

Social work is strongly client related, and practitioners are involved in complex social situations. Also, evaluation criteria of the work are mostly unclear, and role conflicts are abundant. Social workers encounter uncertainty and limited resources to meet high demands (p. 638).

In a study conducted by Söderfeldt, et al. (1995), through a literature review of MEDLINE, Psychological Abstracts, and Sociological Abstracts, the authors revealed 18 studies that reported findings about burnout in social workers despite social work’s

already established label as a particularly high-stress profession. The researchers also discovered that the few articles that were found suggested that social work was not an occupation with a higher than average burnout risk. However, the selected articles did not use high quality approaches to methodology to establish these findings (Söderfeldt, et al., 1995).

The study of job satisfaction in social work is not unique to workers in the United States. The British public sector, for example, is struggling with a potential staff shortage due to a combination of the loss of interest in working in this sector by young people, and the fact that almost a third of its workforce is over the age of 50. The staff currently working in the public sector has cited stress as the biggest single factor influencing their decisions to leave (Coffey, Dugdill, & Tattersall, 2004, p. 735). In a 2004 study of two social service departments in England, Coffey et al. used a “problem diagnosis tool” to attempt to understand the stressors that the staff were experiencing (p. 735).

The researchers used a three-fold method of data collection to follow the principles of triangulation. The initial step was to collect background information “to clarify the scope of the project” (Coffey, et al., 2004, p. 738). In the second tier, the researchers interviewed a sample of female staff. These interviews identified issues that the staff believed to be negatively affecting their health or working lives. The final stage of the process used the responses from the prior interviews with the female staff to

design a questionnaire to serve as a “needs assessment” instrument (Coffey, et al., 2004, p. 738). In conclusion, Coffey et al. (2004) wrote:

The main findings from this unique large-scale study reveal that: mental well-being (GHQ-12) is poorer than previous studies have indicated; job satisfaction is considerably lower than previously reported; and organizational constraints, which have not previously been reported in social service departments, are higher than the published norm in other sectors” (2004, p. 744).

In 2005, Siebert conducted a study of 1,000 actively practicing social workers in North Carolina. The focus of the study was to assess burnout in social workers, which has become common “because of the feelings of fatigue and disengagement that are descriptive of burnout resonate with many caregiving professionals” (Siebert, 2005, p. 25). The questionnaire was designed to measure burnout and the personal and occupational variables that influence social workers at risk of burnout. Although many other studies have measured worker’s perceptions of occupational stress or burnout (Barone, Caddy, Katell, Roselione, & Hamilton, 1988; Chemers, Hays, Rhodewalt, & Wysocki, 1985; Hackman & Oldham, 1975; Insel & Moos, 1974; Ivancevich, Matteson, & Dorin, 1990; Osipow & Spokane, 1987; Spielberger, et al., 1970; Spielberger & Reheiser, 1994), Siebert’s (2005) questionnaire included objective measures for items such as how many clients were seen each week, quantity of hours worked per week; and percentage of time spent on paperwork. Through findings from the study, Siebert (2005) showed that “burnout was positively associated with the number of hours worked and the percentage of time spent on paperwork, and it was negatively associated with the number of vacation days taken the previous year” (p. 37). From the study of the social

workers in North Carolina, Siebert (2005) concluded that “social workers are more likely to experience burnout than not, and this could have negative consequences for their clients, as well as the social work profession” (p. 41).

In 2008, the United Kingdom formed the Social Work Task Force to evaluate the social work profession in order to make suggestions for a reform program. The task force administered the survey to 1153 social workers and managers in 2009. Caseload levels were difficult to identify because to some social workers, a whole family constitutes one case whereas other social workers surveyed may count each individual as a case. However, approximately half of the social workers indicated that they worked more hours than contracted for (Baginsky et al., 2010). When participants were asked to identify the factor that impacts their professional life the most, caseload was the second most frequently selected answer.

In a review of the literature focused on stress and burnout in social work, Lloyd, King, and Chenoweth (2002) attempted to answer two questions: The first question was whether social workers experienced higher stress levels than other health professionals. The second question sought to identify the factors that cause stress and burnout in social workers (Lloyd, King, & Chenoweth, 2002). According to the authors, “there is a strong perception in the profession that stress is a problem and that it is particularly associated with role ambiguity, discrepancies between ideals and work outcomes and personal vulnerability characteristics of people who enter the profession” (Lloyd, et al., 2002, p. 261).

Only two intrinsic sources of stress are indicated through the literature; however, several organizational factors are also identified including, role conflict, role ambiguity, challenge of the job, and job autonomy. The authors suggested that one contributing factor is that “the social services have been identified as stressful for social workers as they find themselves with fewer resources to meet the needs of clients with multiple social issues” (Lloyd, et al., 2002, p. 262). Risk factors for stress and burnout identified in the study conducted by Lloyd et al. were low work autonomy, role ambiguity, lack of challenge on the job, low professional self-esteem, and difficulties providing services to clients. The authors suggested that “increased knowledge in this area could greatly influence the job effectiveness and satisfaction of social workers” (Lloyd, et al., 2002).

Chenot, Benton, & Kim (2009) surveyed social workers from 11 public child welfare services organizations in California. A goal of the research was to study the effects of support from both supervisors and colleagues on employee retention. Findings revealed that “supervisor support had a stronger effect than peer support on intent to stay in the agency, and supervisor support predicted intent to stay in the field” (Chenot, et al., 2009, p. 142). Furthermore, the importance of supervisor support was evident through participants regardless of the amount of time participants had been in the field. Although peer support was indicated by participants only as a predictor of retention in the agency, supervisor support predicted retention in the field as well as within the agency.

Stress in disaster case managers

Unlike the abundant literature related to occupational stress in general and the substantial studies of job stress in the social work profession, literature about stress in

disaster case management is extremely limited. In fact, literature about disaster case managers in general or simply case managers is at a minimum. An extensive search for disaster case management related studies was performed by both the researcher and a research specialist and library coordinator at a major land grant university. Although the lack of information hindered the review of the literature, the need for studies focused on stress in disaster case managers was made evident through the process. The following study of disaster case managers working with Hurricane Katrina provided what may serve as a somewhat reflective population for the case managers in this study due to the many similarities present in experiences, especially work related, of participants

After Hurricane Katrina struck the Gulf Coast of the United States in Summer 2005, FEMA rendered aid through a program referred to as KAT, or Katrina Aid Today. Prior to the conclusion of the KAT program, researchers from the Center for Social Work Research at the University of Texas at Austin addressed the need to focus on how disaster work affects the case managers involved in it (Lein, Bell, Beausoleil, Montez, & Borah, 2007). The researchers surveyed disaster case managers and case manager supervisors from two faith-based organizations, Lutheran Disaster Relief (LDR) and Catholic Charities USA (CCUSA), which provided case management services to victims of Hurricane Katrina. The Job Satisfaction Scale and Professional Quality of Life Scale (ProQOL) were used to measure job satisfaction, compassion fatigue, compassion satisfaction, and burnout. In addition, the researchers developed a third scale to measure intention to leave. Additionally, respondents provided information about workplace and demographic characteristics, personal beliefs, client barriers, and stress management

techniques. The researchers also used a telephone survey to collect information about Hurricane Katrina experiences, caseload, successes and challenges, and cultural differences between themselves and clients (Lein, et al., 2007).

Demographic data revealed that ethnic backgrounds of respondents were approximately evenly split between African American and European Americans with a strong female representation. Of the participants, 39% held a bachelor's degree and 39% had obtained a master's degree (Lein, et al., 2007). Findings from this study showed that although Hurricane Katrina case managers employed by LDR and CCUSA indicated higher scores than the norm for compassion satisfaction; scores were also higher than the norm for burnout and compassion fatigue (Lein, et al., 2007). The researchers also discovered higher satisfaction scores than the norm on almost all subscales such as coworkers, nature of the work, supervision, and communications with both organizations.

Prevalent stress management techniques cited by the disaster case managers included discussing issues with coworkers, spending time with family, prayer, talking to a supervisor, physical activity, and sleeping. Participants indicated that factors including less compassion fatigue, holding a master's, the belief that sufficient resources are available to meet the needs of survivors and spirituality were related to higher job satisfaction. Greater intention to leave was linked to factors such as European American ethnicity, less agreement that community resources were adequate, less satisfaction with operating conditions for example, agency rules, paperwork, workload, organizational

communication, and coworkers. Other related factors included greater burnout, less agreement that spirituality or survivor status were assets to work, and being single or divorced. Client motivation and lack of resources were key factors in cases labeled as challenging.

Participants were asked to make suggestion for the improvement of the KAT program. In ranked order, suggestions for improvement included “increase and improve distribution of resources; improve training and preparation of case managers, reduce the amount and type of paperwork...and increase the number of staff and improve the training and support of staff” (Lein, et al., 2007, p. iii). Identification of challenges, keys to success, and suggestions varied based on whether respondents were survivors or non survivors working in hurricane-damaged and non-damaged worksites. Respondents working in damaged area were significantly more likely to be survivors and vice versa. Case managers working in damaged areas and survivors were more likely to be African American, have more children, report less burnout and compassion fatigue, and report greater compassion satisfaction than non-survivors and case managers working in non-damaged areas. When asked to identify keys to a successful case, survivors and case managers in damaged areas indicated resources while non-survivors and case managers in non-damaged areas selected employment and transportation. Differences between groups in identifying challenges were similar with survivors and participants in damaged areas citing housing as the biggest challenge as opposed to client motivation which was selected by non-survivors in non-damaged areas (Lein, et al., 2007).

Development of the Job Stress Survey

The need for the development of the Job Stress Survey arose because other measures of job stress failed to either address perceived severity of stressors or confused severity of stressors with frequency of occurrence (Vagg & Spielberger, 1998b, p. 298). The basis for the JSS came from the notion that “ideally, job stress measures should evaluate both the perceived severity of specific sources of stress in the workplace and how often each work-related stressor is experienced by the respondent during a specified period of time”(Vagg & Spielberger, 1998b, p. 298). Measurement of both frequency and severity is pertinent because although some events may cause participants to incur a severe amount of stress, those events may rarely or even never occur, reducing their overall impact (Vagg & Spielberger, 1998b).

Spielberger and his colleagues’ first target population included law enforcement agents. Through the 60-item Police Stress Survey (PSS), Spielberger and Vagg (1998b) identified administrative and organizational pressures and physical and psychological strain as the main factors of stress in law enforcement professionals. Following the Police Stress survey, Spielberger and Vagg (1998a) shifted their focus and created the Teacher Stress Survey (TSS) to measure occupational stress in teachers. The TSS consisted of 39 of the 60 items, or stressors, from the PSS that were deemed equally applicable to law enforcement agents and teachers. While the constructs remained the same, some wording was substituted to make the survey more context- specific, e.g. “non- police tasks” to “non-teacher tasks.” In addition to the 39 mutually applicable

items adapted from the PSS, 21 items were reviewed by an advisory committee of high school teachers and added to the TSS, making it a 60-item questionnaire.

Spielberger and Vagg (1998b) developed the Job Stress Survey (JSS) based on the PSS and TSS as a way to measure nonspecific occupational stress. The 30 of the 39 items found to be mutually applicable in the PSS and TSS were used in the development of the JSS. According to Spielberger and Vagg (Vagg & Spielberger, 1998b)

“Each JSS item describes a specific stressor event that is likely to be encountered by managerial, professional, clerical, and maintenance workers in widely different occupational settings” (p. 299). In the first portion of the JSS, respondents used a Likert-type scale ranging from 1 (least stressful) to 9 (most stressful) with 5 as a midpoint to rate their perceptions of the severity of each of the 30 stressors represented in the questionnaire. The following section had the respondents review the 30 stressors rated in severity to evaluate the frequency of occurrence on a nine-point scale ranging from 0 to 9 days in the past six months. Normative data was collected by the researchers from the responses of 1,791 university and corporate employees in order to insure applicability to a wide variety of workers (Vagg & Spielberger, 1998a).

Since the creation of the JSS, the questionnaire has been adapted and used as a stress measurement tool in many different disciplines. Spielberger and Reheiser (1998a) administered the JSS to 2,389 adults employed in university, corporate, and military settings in 1994. Scores were analyzed to compare not only group differences among respondents but also gender differences. Findings showed that the military employees

reported greater total stress frequency than other respondents, while the corporate group reported significantly higher total stress severity scores (Spielberger & Reheiser, 1994). Gender breakdowns indicated that “female employees reported a slightly higher level of perceived Pressure-Severity than males, whereas the males scored substantially higher on the JSS Pressure-Frequency and the overall Pressure-Index. The females had much higher Organizational Support-Index Scores, indicating greater overall perceived lack of organizational support, whereas males had significantly higher JSS Total-Frequency scores ” (Spielberger & Reheiser, 1994, p. 28). One study focused on job stress in secondary agriculture teachers (Torres, Lawver, & Lambert, 2008) using the JSS and found that although overall these teachers are not in a state of stress, one-third of the teachers do experience elevated levels of stress. This study of stress in secondary agriculture teachers conducted by Torres, Lawver, and Lambert served as a model for this study.

CHAPTER III

METHODS

Although occupational stress has been measured expansively (Barone, et al., 1988; Brief & George, 1991; Chemers, et al., 1985; Cooper & Cartwright, 1994; Dewe, 1989; Hurrell & McLaney, 1988; Insel & Moos, 1974; Karasek & Theorell, 1990; Kuchinsky, 2006; Murphy & Hurrell, 1987; Northwestern National Life, 1991; Renn, Swiercz, & Incenogle, 1993; Theorell & Karasek, 1996; Turnage & Spielberger, 1991; Wright & Smye, 1996) throughout different occupational fields, this study focuses on a unique population, disaster case managers. Due to the limited studies related to disaster case managers and the stressors faced in the profession of disaster case management, this chapter will address the methodological development of this study from research design to data analysis.

Population and Sample

The population for this non-experimental, quantitative study was disaster case managers working for the faith-based recipient organization in the FEMA-funded Disaster Case Management Pilot (DCM-P) project providing case management services to Hurricane Ike survivors in the southeast Texas region. Due to the unique nature of multiple organizations providing case management service (N = 10), a census was taken to include the case managers from all ten of the faith-based sub-recipient organizations providing disaster case management services related to this project. The frame used to identify the number of case managers per sub-recipient organization within the population was provided to the researcher by the head of the larger recipient

organization's head of Measurement and Evaluation (M&E). The frame indicated that a total of 145 (N = 145) disaster case managers in 22 regional offices were employed by the sub-recipient organizations.

Instrumentation

The Job Stress Survey, developed by Spielberger and Vagg (1991) was modified by the researcher and served as the data collection instrument for this study (Appendix A). The one page (front and back) scannable document, commercially available from Psychological Assessment Resources, Inc., was modified to consist of three sections to address the objectives of this study.

The first section of the questionnaire asked respondents for basic demographic information: date of birth, gender, level of education, ethnicity, and marital status. The second section asked respondents to rate the perceived amount of stress inflicted by 30 specific job related events on a Likert type scale ranging from one through nine with one relating to low stress and nine relating to high stress: 1 = *Low*, 5 = *Moderate*, 9 = *High*. Respondents were provided a baseline stressful job related event—assignment of disagreeable duties—rated as inflicting moderate stress, or level five on the Likert-type scale, to compare other stressful job related events against. Other events included, working overtime, lack of opportunity for advancement, assignment of new or unfamiliar duties, fellow workers not doing their job, etc.

The third section of the questionnaire asked respondents to indicate the frequency of the occurrence of the same 30 job related stressful events from the second section.

Respondents were asked to indicate the number of days on which the event occurred during the past six months on a nine point Likert-type scale ranging from zero to nine or more days in the last six months.

The design and format of the data collection instrument was guided by Dillman (2007). Dillman suggested that self-administered questionnaires should be “constructed in ways that make them easy to understand and answer” (p. 79). Dillman also noted that “respondent-friendly questionnaire design can improve response rates” (p. 81).

The commercial questionnaire and the modified questionnaire for this study were near identical in format and construction; however, each case-scenario and question was reworded to apply to the subject receiving the questionnaire to avoid confusion. Specifically, rather than making generic statements or providing generic response options such as “in your relationship with your counterpart,” questionnaires sent to case managers referred to their counterparts as supervisors. The scanning system used for this research was Teleform (Cardiff Software Inc., 1998). Because the questionnaire was based on the commercial instrument but the actual commercial instrument was not used, it was necessary for the researchers to use a system that was easily accessible to the Texas AgriLife Extension Service. Other minor changes included removing the occupation block from the demographics section because all respondents share the same occupation and changing the “identification” number block to “case manager identification number”. Also, a block was added to the demographics section to quantify

case manager's experience levels in terms of the amount of time employed as a disaster case manager for the DCM-P project.

Validity and Reliability

An instrument "can be reliable without being valid; but it cannot be valid unless it is first reliable" (Ary, Jacobs, Razavieh, & Sorensen, 2006, p. 256); reliability must be established by an appropriate method. The modified data collection instrument was constructed based on the JSS (Spielberger & Vagg, 1991). At issue was the validity and reliability of the questionnaire.

Validity

"Validity is the most important consideration in developing and evaluating measuring instruments" (Ary, et al., 2006, p. 243). Three types of validity were determined for the data collection instrument used in this study: face validity, content validity, and construct validity. Face validity was determined by a panel of experts, which included case manager supervisors and measurement and evaluation experts from the recipient organization. Each member of the panel was asked to determine if the paper questionnaire "appeared valid for its intended purpose" (Ary, et al., 2006, p. 439).

Construct validity of the data collection instrument was also determined by the previously noted panel of experts. Each of the experts assessed the "appropriateness and representativeness of the items" on the questionnaire (Ary, et al., 2006, p. 256).

Construct underrepresentation and construct-irrelevant variance was addressed by providing each of the experts with a paper copy and the research questions. The experts were asked to determine if the questionnaire adequately addressed the "important

dimensions of the construct” and did not contain questions which would be “extraneous to the construct” (Ary, et al., 2006, pp. 243-244).

Construct validity was previously established during the creation of the JSS using factor analysis. The creators of the questionnaire reported alpha coefficients of .89 or higher for the JS-X, JS-S, and JS-F, and .80 or higher for the 10-item JP and LS subscales (Spielberger & Vagg, 1991)

Reliability

The JSS (Spielberger & Reheiser, 1994) was originally developed for and previously administered to populations including teachers (Grier, 1982), police officers (Spielberger et. al. 1981), and military, university, and corporate professionals (Spielberger & Reheiser, 1994). Disaster case managers are not necessarily similar to the populations the instrument had previously been provided to; therefore, some additional measures were necessary to determine the reliability of the modified instrument.

Miller, Torres, and Lindner (2004) noted that “a measure of reliability can also be obtained using a single administration of an instrument” (p. 14) by determining internal consistency. Miller, Torres, and Lindner further noted that Cronbach’s α coefficient can be used when items have multiple response categories, such as the Likert-type response categories present in the second section of the questionnaire used in this study, and “will provide an appropriate estimate of reliability” (p. 15). A Cronbach’s α coefficient of .940 was established for the JS-X scale, .865 for the LS-X subscale, and .851 for the JP-X subscale.

Institutional Approval

After the data collection instrument was developed, but prior to implementation of the data collection process, the researcher submitted a proposed plan outlining the data collection process and all related materials to the Texas A&M University Institutional Review Board. The data collection process began after receiving approval (Appendix B) from the Institutional Review Board and followed the requirements and specifications set forth in the approval notice.

Data Collection

Organizational Approval

Before the data collection process could begin, permission had to be granted for the JSS to be administered. A meeting was held with the vice president and the head of the measurement and evaluation team of the faith-based organization at the organization's facility. During this time, a plan for the data collection process was outlined by all members present at the meeting. Upon approval of the research, the instrument was submitted for review. Feedback was collected from the vice president and case manager supervisors.

Distribution and Collection

Contents

Twenty envelopes were compiled and sent to point-of-contact people, as indicated by the head of the measurement and evaluation (M&E) team from the faith-based organization, at regional offices for each of the organization's sub-recipients. As noted previously, 22 regional offices existed however the researcher was asked to mail

questionnaires for two locations of the same sub-recipient organization to one regional office for two of the sub-recipient organizations. Each envelope included a postage paid, pre-addressed (to the M&E team at the recipient organization's office) return envelope. The following additional items were included in the envelope, paper clipped together as one packet, with one packet per case manager based on the number of case managers, as reported by M&E team, at the sub-recipient regional office: one cover letter addressing the participant (Appendix C), one scannable, paper copy of the DCM version of the Job Stress Survey (Appendix D), and one, self-sealing envelope, which had instructions for completion printed on the front.

Envelopes were mailed through the United States postal service on April 20th, 2010. Postage for these envelopes was paid through university and thus, was printed on the envelopes instead of affixing postage stamps. The cover letter included on the front of the packets outlined instructions for completion. Respondents were asked to fill out the questionnaire in its entirety, fold it into thirds, insert the questionnaire into the self-sealing envelope, seal the envelope, his or her name across the flap of the envelope (to ensure confidentiality), and return the envelope to the supervisor. Supervisors were asked to collect the sealed envelopes, place them in the pre-addressed, postage-paid envelope, and send the envelope through the U.S. Postal Service.

The postage on the return envelopes varied based on the number of packets included in each envelope. Ten return envelopes were affixed with postage in the amount of \$2.41 (two one dollar stamps, one twenty-eight cent stamp, one ten cent

stamp, and one three cent stamp), enough to mail 13 packets, which was the largest number of case managers reported at any one regional office. The remaining ten return envelopes were marked with postage stamps in the amount of \$1.56 (one one dollar stamp, and two twenty-eight cent stamps), enough postage to mail five packets. In the initial mailing, a total of 145 questionnaire packets were sent out according to the case manager numbers by office as reported in the frame provided by the M&E team.

Distribution issues and additional mailings

Upon arrival of the questionnaire packets at regional offices, ten additional packets were requested via email by one sub recipient organization. These packets were mailed by the researcher, to the organization the following business day. Four envelopes were returned through the mail to the researcher due to insufficient addresses. The point of contact (POC) people at the regional offices with returned packets were emailed to verify correct addresses. Required changes to addresses, which included the addition of suite numbers for two organizations, a spelling change for one sub-recipient's street name, and one new office address not previously provided, were made by the researcher and cover letters were updated to reflect a new return date for completed questionnaires. The envelope for one sub-recipient's regional office was returned a second time for an insufficient address although the address was confirmed with the POC at that location. Based on the recommendation of that POC, the envelope was mailed to a different POC at a nearby location to distribute the questionnaires once received.

Data return

Upon arrival of return envelopes at the M&E office, the unopened envelopes from the regional offices containing the completed and sealed questionnaires from the case managers were mailed to the researcher. The responses were received by the researcher in five waves. The final set of responses brought the total responses to 89 out of 145, for a response rate of 61.4%.

Non response error

Multiple attempts were made to encourage participation from as many disaster case managers within the recipient organization as possible. Forethought was given to response rate prior to the study's commencement and the planning included efforts to create a "respondent friendly questionnaire design" (Dillman, 2007, p. 81) .

Approximately three weeks following initial distribution, the researcher made a reminder announcement to sub-recipient organization directors during a conference call. The researcher allowed three weeks from initial mailing prior to beginning the reminder process to allot for the time lost by some sub-recipient organizations due to mailing issues. Reminders began approximately two weeks after the first round of returned packets were re-addressed and mailed for a second time. Following the conference call reminder, POC people as well as the head of the M&E team received a reminder email (Appendix D) from the researcher. Four responses to the email were received, two from organizations that had already mailed responses and two from organizations indicating responses would be mailed the following week.

Although many attempts were made to increase response rate, additional considerations are necessary in order to ensure that respondents are representative of the target population (Ary, et al., 2006). In order to verify that the case managers that did respond were, in fact, representative of case managers as a whole at the faith-based recipient organization, selected demographic variables of respondents, including gender, racial background, age, and education level were compared to the same demographic variables of the organization's entire case management team. These demographics were obtained through Texas AgriLife Extension Agency's May Quarterly Report to HHSC (2010) and based on a questionnaire filled out by all case managers at the mandatory case management trainings facilitated by a third party. Frequencies and percentages for the respondents in this study were thus able to be compared to the frequencies and percentages for the full population ($N = 145$). Variables which differed by 10 percentage points or less were considered approximate to one another

A total of 89 disaster case managers responded to the survey however, not all case managers completed all items. This may be due to the length of the instrument, lack of understanding, or time restraints. Because of these omissions by some respondents, varying population numbers will be reported in tables throughout this document. For each item, the maximum number of respondents who completed the item served as n for data analysis and reporting purposes.

Initially, both the population from this study and the population from the third party training, representative of all case managers within the faith based organization,

were compared based on age range and gender representation. Age range between populations was similar with a range of 23-61 years for respondents in this study and a range of 18-75 years for the recipient organization's full case management staff. As displayed below, (Figure 3) gender breakdowns were similar, a difference of 10 percentage points or below as outlined above, between populations and thus, in this facet, the population of this study was considered representative of the faith-based organization's full case manager population.

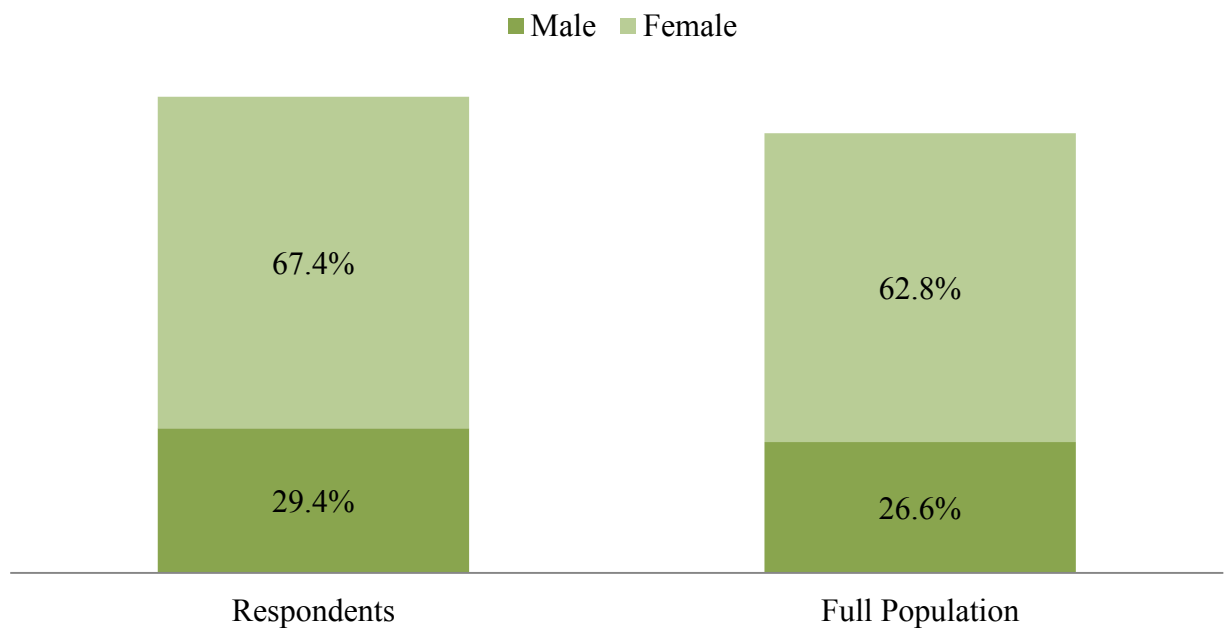


Figure 3. Gender comparison between respondents and organization's full population.

A comparison of education levels of the two populations of case managers is shown below in Figure 4. In all but two categories of education level, the two populations of case managers had approximate representation. Not all education levels listed as options on the two questionnaires were identical. For example, “some college” and “some college or technical school” provided as options on the DCM job stress study questionnaire and the training questionnaire respectively, we deemed near identical and compared. Other options that fell into this category were “some high school or less” and “some high school”, “high school graduate or GED” and “high school graduate”, “vocational or technical degree” and “associate or technical degree”, again each pair representing answer options on the DCM job stress study questionnaire and the training questionnaire respectively. The DCM job stress questionnaire did not divide the “post-graduate degree” option into “Master’s degree” and “Professional or Doctorate degree” as was done in the training questionnaire thus, to enable comparison with the “post-graduate degree(s)” option from the DCM job stress questionnaire, percentages for “Master’s degree” and “Professional or Doctorate degree” were added together.

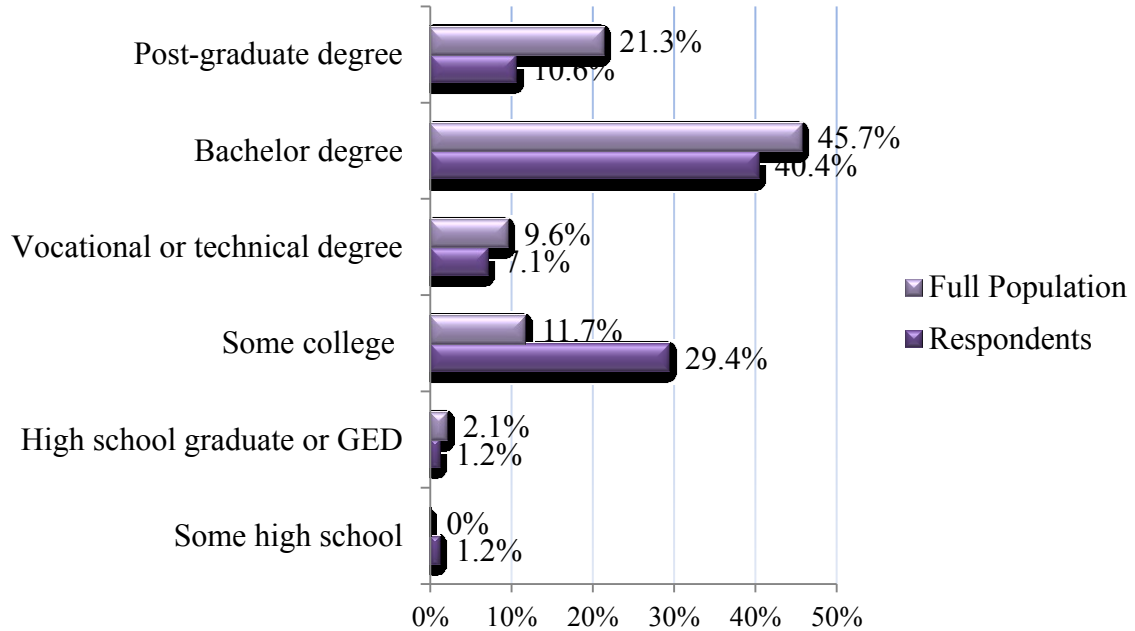


Figure 4. Comparison of education levels of respondents and full population.

Figure 5 illustrates the racial/ethnic backgrounds of respondents and the recipient organization's full staff of disaster case managers. As with education level answer choices, race/ethnicity answer choices were not identical but were similar enough to enable evaluation between populations. In order to make comparisons, the following pairs of race/ethnicity choices were set equal to each other;

- "African American (non-Hispanic)" and "African American or Black".
- "Asian American" and "Asian".
- "Hispanic" and "Hispanic/Latino".

- “White (non-Hispanic)” and “Caucasian or White”.
- “Native American” and the combination of “American Indian or Alaska Native”, “Native Hawaiian or Pacific Islander”, and Tribal Affiliation”.

As shown below, ethnic representation in both populations was approximate across most racial categories however, African American and White, non-Hispanic case managers were not proportionately represented in the population for this study.

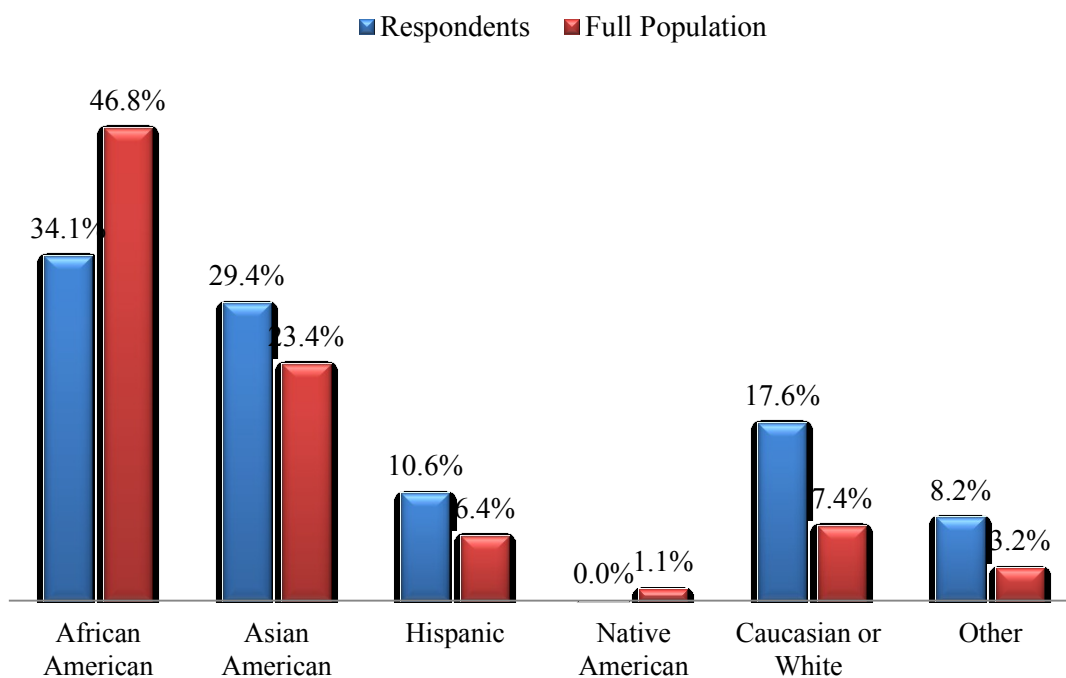


Figure 5. Comparison of ethnic backgrounds of respondents and full population.

Larger than a ten percentage point difference existed in African American and Caucasian representation or the “post-graduate” and “some college” education levels between the populations existed however, representation in the remaining categories and demographics between populations were on the whole approximate. Although not all findings from this study can be inferred across this particular organization or, disaster case managers and social workers as a whole, the group of respondents for this study was sufficiently representative to facilitate a multitude of observations that are applicable to related populations.

Data Analysis

The scannable version of the Job Stress Survey questionnaire was distributed to case managers employed by the faith based organization. Scales of measurement as outlined by Ary, Jacobs, Razavieh, and Sorensen (2006) served as the primary guide in determining the appropriate analysis of the data.

Data were input into the TeleForm program and then uploaded and analyzed using SPSS. Mean scores and standard deviations for each component of the three indexes; Job Stress Index (JS-X) which serves as an overarching index, Job Pressure Index, and the Lack of Support Index (LS-X), scores were determined. The components calculated were Job Stress-Frequency (JS-F), Job Stress-Severity (JS-S), Lack of Support-Frequency (LS-F), Lack of Support-Severity (LS-S), Job Pressure- Severity (JP-S), and Job Pressure- Frequency (JP-F), the six subscales that measured various forms of stress.

For this study, an additional frequency variable was calculated.

The commercial version of the Job Stress Survey, requires respondents to indicate how often stressors are experienced over the course of the previous six months in order to calculate a frequency score. Respondents use a Likert scale with a low of 0 and a high of 9+ to indicate frequency. Due to the nature and timeline of the DCM-P project, and the indication from the literature that social workers experience higher levels of stress than other professions, the disaster case manager version of the Job Stress Survey asked respondents to indicate how often stressors were experienced over the last month. Six month frequencies were calculated based on the one month frequencies indicated by respondents. Individual stressor severity and frequency scores were multiplied by six and summed by construct to determine grand mean and standard deviation scores.

CHAPTER IV

FINDINGS

Research Objective One

Research objective one sought to describe the characteristics of disaster case managers employed by the faith-based organization to assist in Hurricane Ike recovery efforts. Eighty-nine disaster case managers responded to the paper Job Stress Survey questionnaire distributed by case manager supervisors at the various regional offices of the faith-based organization. Table 1 provides demographic data for gender, marital status, education level, racial/ethnic background, and length of employment in current position. The majority of respondents, 60 (67.4%) identified their gender as female and 25 (29.4%) respondents identified their gender as male. Marital status varied among case managers. Approximately 43% ($n = 37$) of respondents indicated single for marital status followed by married ($n = 35$, 39.3%), divorced ($n = 9$, 10.6%), separated ($n = 3$, 3.5%), and widowed ($n = 2$, 2.3%). The majority of disaster case managers had either attended some college ($n = 25$, 29.4%) or earned a bachelor degree ($n = 43$, 50.6%). The remaining respondents indicated post-graduate degree or degrees ($n = 9$, 10.6%), vocational or technical degree ($n = 6$, 7.1%), high school graduate or GED ($n = 1$, 1.2%), or some high school or less ($n = 1$, 1.2%) as highest level of education obtained. African American case managers comprised 34.1% of the population ($n = 29$) followed by Asian American ($n = 25$, 29.4%), White ($n = 15$, 17.6%), Hispanic ($n = 9$, 10.6%), and other ($n = 7$, 8.2%). A majority of disaster case managers ($n = 73$, 84.9%) had been in their current position since the beginning of recovery efforts, more than six months

prior to data collection and two disaster case managers (2.3%) had been in their position since slightly less than the full term of the project, at exactly six months. The remaining respondents had been in their current positions for less than two months ($n = 6$, 7.0%), 4-5 months ($n = 3$, 3.5%), or 2-3 months ($n = 2$, 2.3%). Demographic data for age is displayed in Table 2. Age of disaster case managers ranged from 23 to 61 years with an average age of 37 ($M = 36.60$; $SD = 11.32$).

Table 1 *Characteristics of Selected Disaster Case Managers*

Characteristic	<i>f</i>	%
Gender		
Male	25	29.4
Female	60	67.4
Marital Status		
Single	37	43.0
Married	35	39.3
Widowed	2	2.3
Separated	3	3.5
Divorced	9	10.5
Education Level		
Some high school or less	1	1.2
High school graduate or GED	1	1.2
Vocational or technical degree	6	7.1
Some college	25	29.4
Bachelor degree	43	50.6
Post-graduate degree(s)	9	10.6
Racial/Ethnic background		

Table 1 *Continued*

Characteristic	<i>f</i>	%
African American (non-Hispanic)	29	34.1
Characteristic	<i>f</i>	%
Asian American	25	29.4
Hispanic	9	10.6
Native American	--	--
White (non-Hispanic)	15	17.6
Other	7	8.2
Months in current position		
Less than 2 months	6	7.0
2-3 months	2	2.3
4-5 months	3	3.5
6 months	2	2.3
More than 6 months	73	84.9

Table 2 *Age of Respondents (n =87)*

Characteristic	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Age	37.01	10.06	23	61

Research Objective Two

Research objective two sought to describe disaster case managers' perceived level of job stress. Table 3 contains the mean scores and standard deviations for the three indexes: the Job Stress index (JS-X), the Job Pressure index (JP-X), and Lack of Support index (LS-X). Each index is broken down into two components, severity and

frequency which were multiplied to calculate the index score. In Table 3, both the one month frequency and the six month frequency are displayed. As mentioned previously, the commercial version of the Job Stress Survey, requires respondents to indicate how often stressors are experienced over the course of the previous six months in order to calculate a frequency score. Respondents use a Likert scale with a low of 0 and a high of 9+ to indicate frequency. Due to the nature and timeline of the DCM-P project, and the indication from the literature that social workers experience higher levels of stress than other professions, the disaster case manager version of the Job Stress Survey asked respondents to indicate how often stressors were experienced over the last month. Six month frequencies were calculated based on the one month frequencies indicated by respondents. Individual stressor severity and frequency scores were multiplied by six and summed by construct to determine grand mean and standard deviation scores.

Disaster case managers identified the stressors related to job pressure as causing the most stress ($M = 4.16$; $SD = 1.49$) and occurring the most frequently over the past month ($M = 2.93$; $SD = 2.07$). Stressors related to lack of support in the workplace scored lower on both the severity score ($M = 3.64$; $SD = 1.63$) and one month frequency score ($M = 1.90$; $SD = 1.99$). The job stress scores, a product of the job pressure and lack of support scores, indicated a severity score of 3.77 ($SD = 1.42$), a one month frequency of two days in the past month ($M = 2.18$; $SD = 1.77$) and a frequency score of 13 days ($M = 13.07$; $SD = 10.64$) over the course of six months. Table 4 displays the mean and standard deviation scores for six month frequency for each individual stressor, in the same order as presented in the questionnaire.

Table 3 *Mean and Standard Deviation Scores by Construct*

Construct	Grand	
	<i>M</i>	<i>SD</i>
Job Stress		
Severity ^a	3.77	1.42
1 month frequency ^b	2.18	1.77
6 month frequency ^c	13.07	10.64
Job Pressure		
Severity ^a	4.16	1.49
1 month frequency ^b	2.93	2.07
6 month frequency ^c	17.61	12.43
Lack of Support		
Severity ^a	3.64	1.63
1 month frequency ^b	1.90	1.99
6 month frequency ^c	11.40	11.94

Note: ^a scale= 1-9 with 1=low, 5=moderate and 9=high; ^b scale= 0-9 representing number of occurrences within the last month; ^c scale= 0-54 representing number of occurrences within the last six months.

Table 4 *Stressors by Six Month Frequency Mean Score*

Stressor	<i>n</i>	<i>M</i>	<i>SD</i>
Excessive paperwork	86	33.49	20.44
Meeting deadlines	87	23.86	20.66
Frequent interruptions	86	23.09	21.18
Assignment of increased responsibility	87	20.21	20.40
Fellow workers not doing their job	85	18.49	21.22
Inadequate salary	87	16.14	21.81
Inadequate or poor quality equipment	85	14.75	19.14
Performing tasks not in job description	84	14.57	17.46
Noisy work area	87	14.28	17.94
Frequent changes from boring to demanding	87	14.07	18.14
Poorly motivated coworkers	87	14.07	19.54
Lack of opportunity for advancement	86	13.81	20.29
Making critical on-the-spot decisions	87	13.38	16.49
Assignment of new or unfamiliar tasks	86	13.26	14.76
Dealing with crisis situations	85	12.56	14.77
Lack of participation in policy making	87	12.41	18.41
Working overtime	86	11.93	16.30
Insufficient personnel to handle an assignment	86	11.79	17.64
Covering work for another employee	87	10.90	15.30
Lack of recognition for good work	84	10.71	16.35
Assignment of disagreeable duties	87	10.21	14.15
Experiencing negative attitudes toward the organization	87	8.69	15.08
Inadequate support by supervisor	86	8.16	15.40
Poor or inadequate supervision	87	7.65	15.22
Insufficient personal time	87	7.38	13.93

Table 4 *Continued*

Stressor	<i>n</i>	<i>M</i>	<i>SD</i>
Conflicts with other departments	86	6.63	13.18
Competition for advancement	87	5.93	13.59
Periods of inactivity	86	5.86	11.53
Difficulty getting along with supervisor	86	5.30	12.73
Personal insult from client or colleague	85	5.29	11.16

Research Objective Three

Research objective three sought to identify the stressors that are most frequently and least frequently experienced among disaster case managers with high stress. Data indicating the percentage of selection of the frequency in which disaster case managers experienced each stressor are contained in Appendix E. Stressors are listed in the same order in which presented on the questionnaire distributed to disaster case managers. Table 5 illustrates the most frequently experienced stressors by disaster case managers within the month prior to completion of the questionnaire, in order based on mean score. Excessive paperwork was the stressor experienced most often with a mean score of 5.58 ($SD = 3.407$), indicating that on average, disaster case managers had experienced this occurrence approximately six days out of the prior month. Other more frequently experienced stressors included meeting deadlines ($M = 3.98$; $SD = 3.444$), frequent interruptions ($M = 3.85$; $SD = 3.530$), assignment of increased responsibility ($M = 3.37$; $SD = 3.400$), fellow workers not doing their job ($M = 3.08$; $SD = 3.536$), and inadequate salary ($M = 2.69$; $SD = 3.635$). Personal insult from client or colleague was the least

frequently experienced stressor ($M = 0.88$; $SD = 1.861$), with an indicated experience frequency of approximately one day over the course of the previous month. Similarly, stressors such as insufficient personal time ($M = 1.23$; $SD = 2.321$), conflicts with other departments ($M = 1.10$; $SD = 2.196$), competition for advancement ($M = .99$; $SD = 2.264$), periods of inactivity ($M = 0.98$; $SD = 1.922$), and difficulty getting along with supervisors ($M = 0.88$; $SD = 2.122$) all scored lower on frequency of experience by disaster case managers during the previous month.

Table 5 *Stressors Ordered by Frequency Mean Score*

Stressor	<i>n</i>	<i>M</i>	<i>SD</i>
Excessive paperwork	86	5.58	3.407
Meeting deadlines	87	3.98	3.444
Frequent interruptions	86	3.85	3.530
Assignment of increased responsibility	87	3.37	3.400
Fellow workers not doing their job	85	3.08	3.536
Inadequate salary	87	2.69	3.635
Inadequate or poor quality equipment	85	2.46	3.191
Performing tasks not in job description	84	2.43	2.909
Frequent changes from boring to demanding	87	2.34	3.023
Poorly motivated coworkers	87	2.34	3.256
Lack of opportunity for advancement	86	2.30	3.382
Making critical on-the-spot decisions	87	2.23	2.748

Table 5 *Continued*

Stressor	<i>n</i>	<i>M</i>	<i>SD</i>
Assignment of new or unfamiliar tasks	86	2.21	2.460
Dealing with crisis situations	85	2.09	2.462
Lack of participation in policy making	87	2.07	3.068
Working overtime	87	1.99	2.716
Insufficient personnel to handle an assignment	86	1.97	2.940
Covering work for another employee	87	1.82	2.550
Lack of recognition for good work	84	1.79	2.725
Noisy work area	87	1.74	2.754
Assignment of disagreeable duties	87	1.70	2.358
Experiencing negative attitudes toward the organization	87	1.45	2.514
Inadequate support by supervisor	86	1.36	2.566
Poor or inadequate supervision	87	1.28	2.537
Insufficient personal time	87	1.23	2.321
Conflicts with other departments	86	1.10	2.196
Competition for advancement	87	0.99	2.264
Periods of inactivity	86	0.98	1.922
Difficulty getting along with supervisor	86	0.88	2.122
Personal insult from client or colleague	85	0.88	1.861

Research Objective Four

The fourth and final objective sought to rank the factors that cause the highest and lowest levels of stress in disaster case managers. Data describing the levels of stress inflicted by particular stressors in order based on the mean score of each item are contained in Table 6. A table of frequency of selection of each score for severity can be found in Appendix F. Excessive paperwork ($M = 5.97$; $SD = 2.40$) was indicated by disaster case managers as the item that caused the highest level of job stress. Meeting deadlines ($M = 4.85$; $SD = 2.25$), fellow workers not doing their job ($M = 4.76$; $SD = 2.82$), inadequate salary ($M = 4.56$; $SD = 2.57$), dealing with crisis situations ($M = 4.41$; $SD = 2.01$), and assignment of increased responsibility ($M = 4.44$; $SD = 2.24$) were also identified as items responsible for higher stress levels in disaster case managers. Stressors such as personal insult from a client or colleague ($M = 3.34$; $SD = 2.41$), poor or inadequate supervision ($M = 3.11$; $SD = 2.35$), experiencing negative attitudes toward the organization ($M = 3.06$; $SD = 2.25$), insufficient personal time ($M = 2.88$; $SD = 2.07$), and conflicts with other departments ($M = 2.84$; $SD = 2.16$) were identified as factors inflicting lower levels of stress on case managers. Difficulty getting along with supervisor caused the least amount of stress ($M = 2.50$; $SD = 2.18$) in the workplace.

Table 6 *Stressors by Severity Mean Score*

Stressor	<i>n</i>	<i>M</i>	<i>SD</i>
Excessive paperwork	88	5.97	2.40
Meeting deadlines	87	4.85	2.25
Fellow workers not doing their job	88	4.76	2.82
Inadequate salary	89	4.56	2.57
Dealing with crisis situations	85	4.41	2.01
Assignment of increased responsibility	87	4.41	2.24
Lack of opportunity for advancement	87	4.31	2.35
Frequent interruptions	89	4.30	2.50
Inadequate or poor quality equipment	86	4.17	2.56
Frequent changes from boring to demanding	88	3.94	2.38
Insufficient personnel to handle an assignment	86	3.87	2.40
Poorly motivated coworkers	87	3.86	2.64
Assignment of new or unfamiliar tasks	87	3.85	2.17
Lack of participation in policy making	87	3.85	2.49
Noisy work area	86	3.76	2.50
Assignment of disagreeable duties	88	3.64	2.08
Performing tasks not in job description	85	3.55	2.17
Inadequate support by supervisor	89	3.51	2.67
Making critical on-the-spot decisions	89	3.46	2.03
Competition for advancement	88	3.42	2.22
Covering work for another employee	86	3.41	2.36
Working overtime	87	3.40	2.28
Lack of recognition for good work	89	3.37	2.04
Personal insult from client or colleague	88	3.34	2.41
Poor or inadequate supervision	89	3.11	2.35
Experiencing negative attitudes toward the organization	87	3.06	2.25

Table 6 *Continued*

Stressor	<i>n</i>	<i>M</i>	<i>SD</i>
Periods of inactivity	87	2.98	1.82
Insufficient personal time	88	2.88	2.07
Conflicts with other departments	87	2.84	2.16
Difficulty getting along with supervisor	88	2.50	2.18

CHAPTER V

CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

Summary

Research Objective One: Describe the Characteristics of Disaster Case

Managers

The majority of disaster case managers (67%) who participated in this study were female, with males representing the other 29.4% as illustrated in Figure 6.

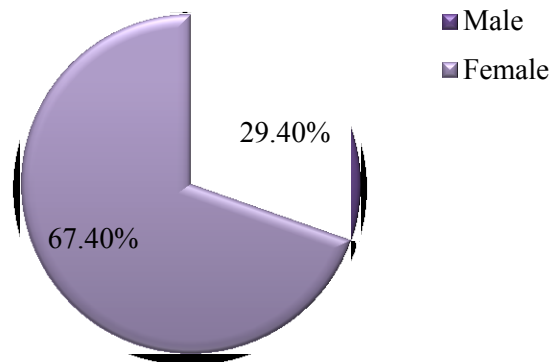


Figure 6. Gender breakdown for respondents.

Figure 7 shows the breakdown of marital status indicated by disaster case managers. The highest percentage of disaster case managers identified single for their marital status followed closely by married. Only two case managers indicated widowed for his or her marital status.

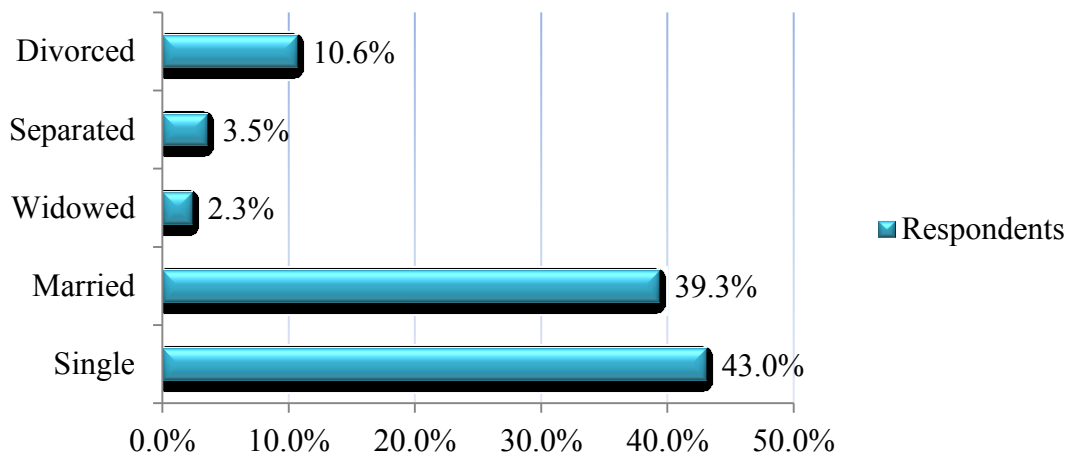


Figure 7. Marital status of respondents indicated by category.

Education level varied from respondent to respondent. As Figure 8 indicates, the largest percentage of case managers (50.6%) indicated that they hold a bachelor degree. Only one case manager indicated high school graduate or GED or some high school or less as his or her highest degree obtained.

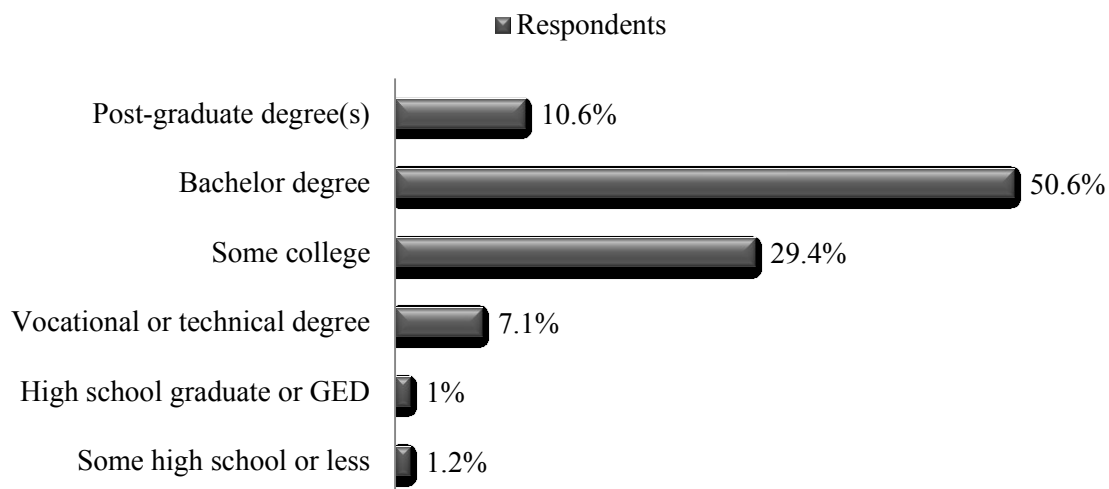


Figure 8. Education level of respondents by category.

Figure 9 depicts racial/ethnic background of disaster case managers. The largest ethnic group represented is African American making up 34.1% of the respondents. None of the disaster case managers indicated that they identify as Native American.

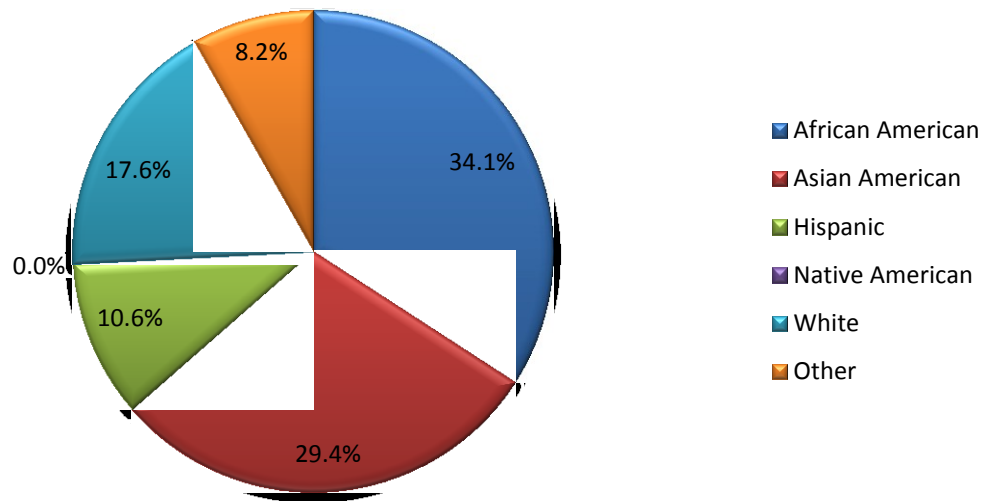


Figure 9. Ethnic representation of respondents.

Figure 10 illustrates the length of employment of disaster case managers in the position held at the time of survey in months. A vast majority of the respondents (84.9%) had held their current position for more than six months or, the duration of the DCM-P project.

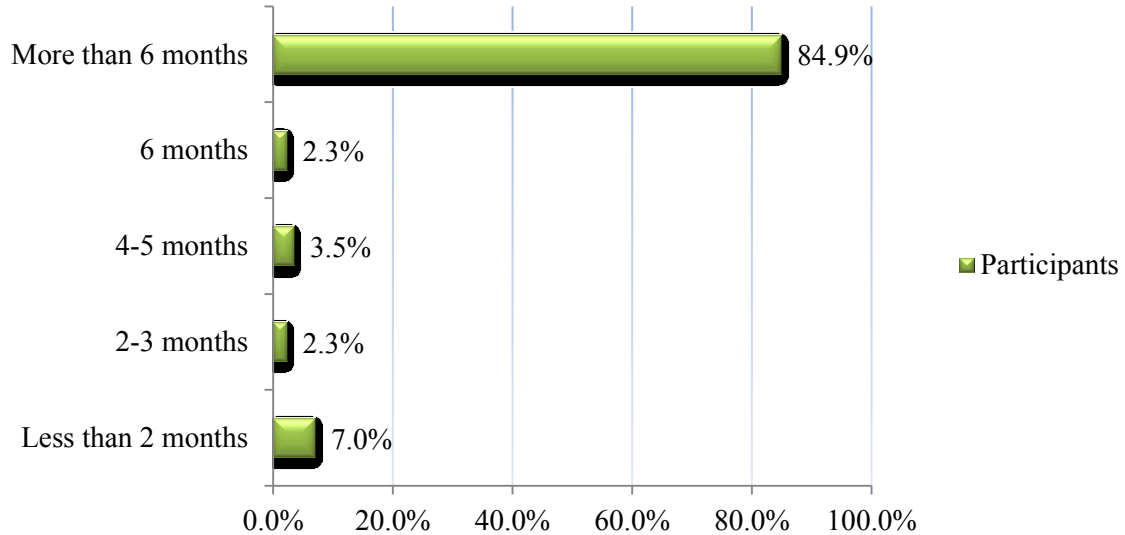


Figure 10. Length of employment of respondents.

The age range of disaster case managers was 23 to 61 years with a mean of approximately 37 years.

The May Quarterly Report to HHSC included selected demographics of case managers from a questionnaire given to case managers who attended the third party training. All case managers were required to attend a training hosted by the third party thus making the demographic data included in the report a complete representation of the organization's disaster case managers. Marital status was not indicated in the training questionnaire and thus could not be compared between populations. Answer choices for length of employment were different between questionnaires and overlapped, making length of employment another demographic that could not be compared. Age range between populations was similar with a range of 23-61 years in the population from this

study and a range of 18-75 years for the training population. Figure 11 illustrates the comparison of gender data collected in this study with the gender information for the complete population of the faith-based organization's disaster case managers. While percentages of males and females represented in each group are not identical, percentages are similar.

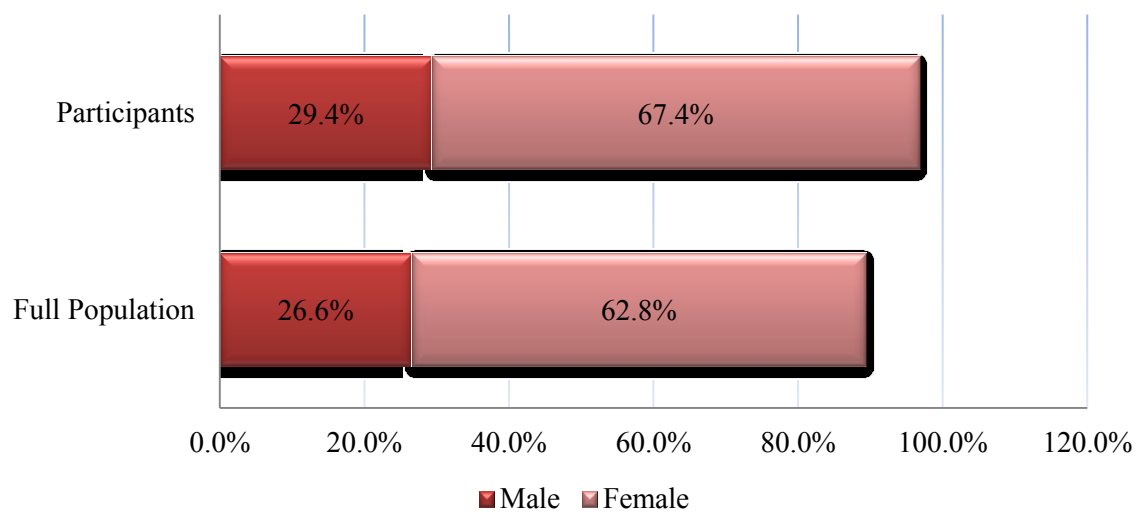


Figure 11. Comparison of gender of respondents and recipient's full case management staff.

A comparison of education level between the groups is displayed in Figure 12. Education levels listed on questionnaires were not identical. One level, “Bachelor degree”, was offered as an option on both questionnaires and thus was easy to compare. “Some college” and “some college or technical school” provided as an option on the disaster case manager job stress questionnaire and the training questionnaire respectively, we deemed near identical and compared. Other options that fell into this category were “some high school or less” and “some high school”, “high school graduate or GED” and “high school graduate”, “vocational or technical degree” and “associate or technical degree”, and “some college” and “some college or technical school”, again each pair representing answer options on the disaster case manager job stress questionnaire and the training questionnaire respectively. The job stress questionnaire did not divide the “post-graduate degree” option into “Master’s degree” and “Professional or Doctorate degree” as was done in the training questionnaire thus, to enable comparison with the “post-graduate degree(s)” option from the job stress questionnaire, percentages for “Master’s degree” and “Professional or Doctorate degree” were added together.

Percentages of individuals who identified an education level of Bachelor degree, vocational or technical degree, high school graduate or GED, and some high school were similar between populations. Substantial differences existed between the representation of respondents identifying post-graduate degree and some college for education level, between populations.

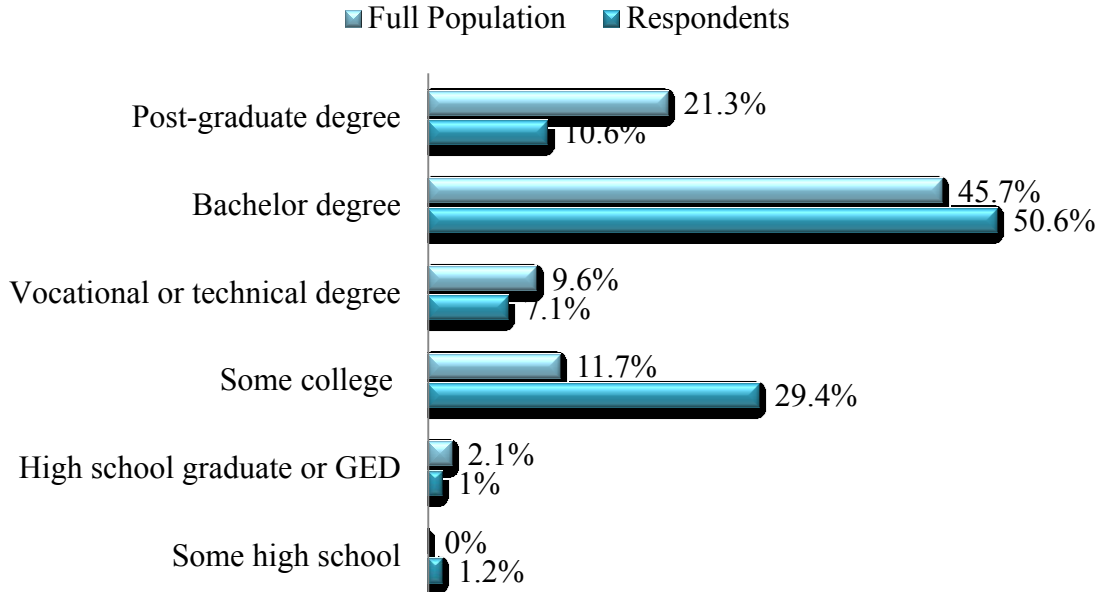


Figure 12. Comparison of education levels between respondents and organization's full case management staff.

Figure 13 illustrates a comparison of racial/ethnic backgrounds represented in each group of disaster case managers. Similar to education level answer choices, race/ethnicity answer choices were not completely identical but were able to be compared. In order to compare populations, the following pairs of race/ethnicity choices were set equal to each other; “African American (non-Hispanic)” and “African American or Black”, “Asian American” and “Asian”, “Hispanic” and “Hispanic/Latino”, “White (non-Hispanic)” and “Caucasian or White”, and “Native American” and the combination of “American Indian or Alaska Native”, “Native Hawaiian or Pacific Islander”, and Tribal Affiliation”.

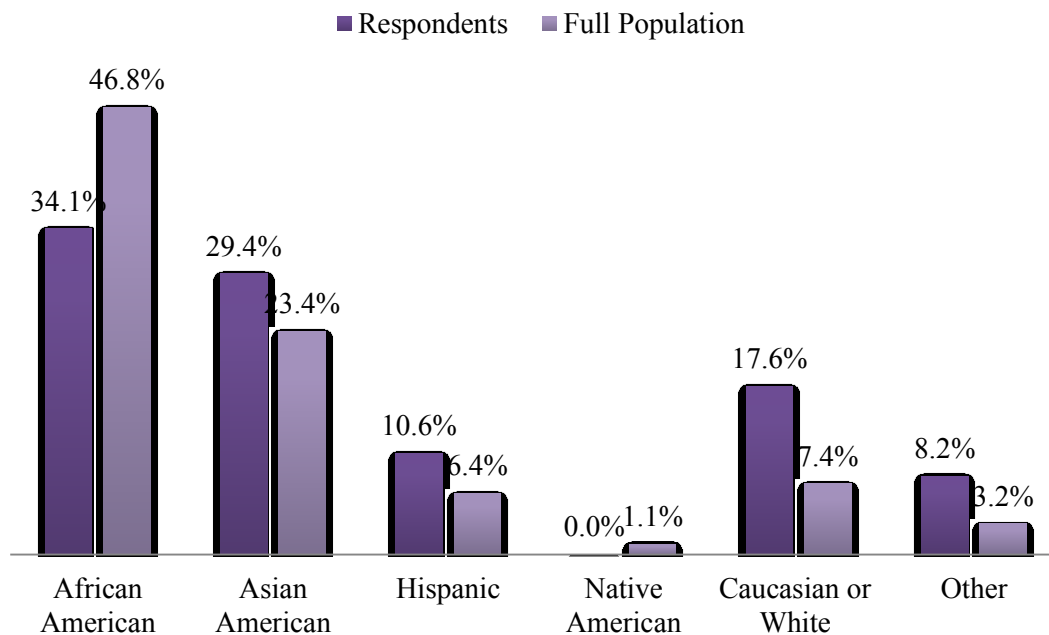


Figure 13. Comparison of racial and ethnic backgrounds of respondents and organization's full population of case managers.

Research Objective Two: Describe the Levels of General and Categorized Job Stress as Perceived by Disaster Case Managers

The levels of general and categorized job stress as perceived by respondents were identified by calculating the components of the three stress index scores tested by the JSS; the Job Stress Index (JS-X), the Job Pressure Index (JP-X), and the Lack of Support Index (LS-X). Severity (Figure 14) and frequency scores (Figure 15) for items that addressed each of these indexes as identified in the JSS Professional Manual were

calculated. In addition, a six month frequency score for each index was included. Both the severity and frequency scores for the JP-X were higher than severity and frequency scores for the LS-X. JS-X frequency and severity scores, which are calculated based on all 30 JSS items, ranked second highest resulting in the LS-X having the lowest scores in each category.

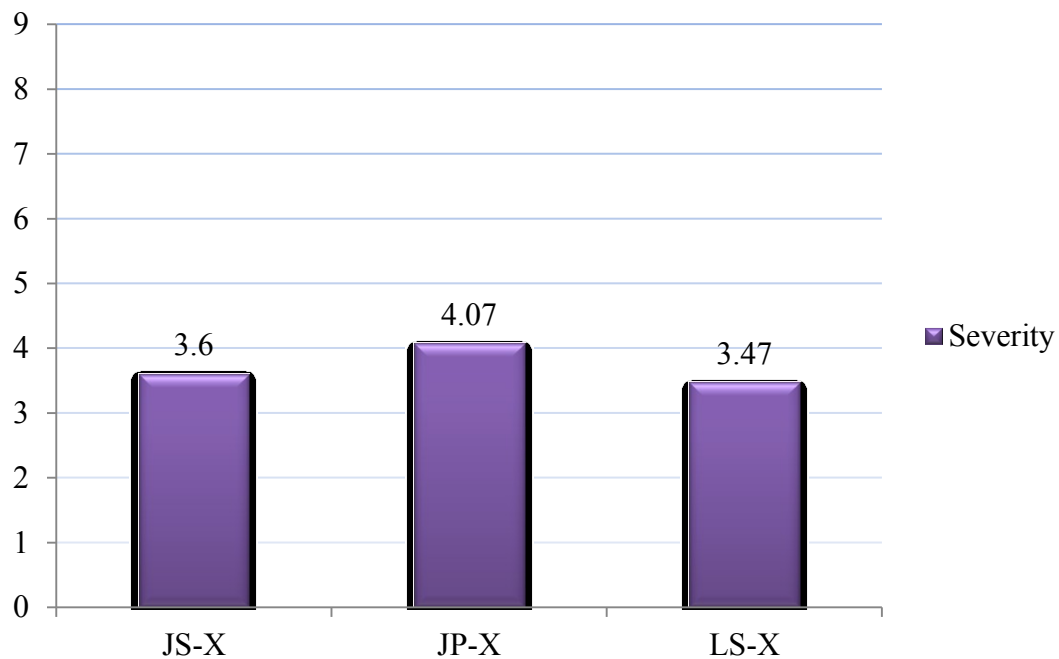


Figure 14. Comparison of Severity Scores by Index.

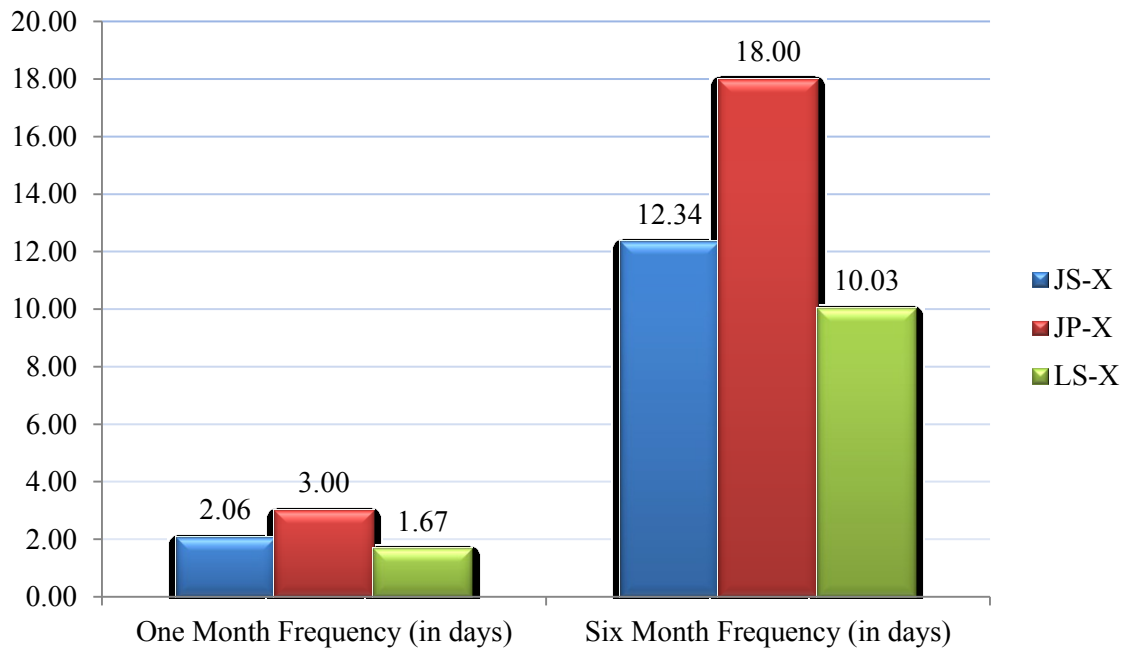


Figure 15. Comparison of one month frequency and six month frequency mean scores by index.

Research Objective Three: Identify the Stressors That Are Most Frequently and Least Frequently Experienced Among Disaster Case Managers with High Stress

Below in Table 7, the ten most frequently experienced stressors are color coded by corresponding index. Excessive paperwork was indicated by respondents as the most frequently experienced stressor. When items were ordered from highest frequency score to lowest frequency score, six of the ten highest scoring items corresponded with the JP-X while only five items related to the LS-X were in the top ten. In fact, nine out of the ten JP-X related stressors scored in the top half of the frequency scores. On the opposite

end of the scale, personal insult was indicated as the stressor least frequently experienced by respondents. Half of the LS-X related items scored in the lower half of the frequency scores.

Table 7 Top Ten Stressors by Frequency and Index

Stressor	<i>n</i>	<i>M</i>	Index
Excessive paperwork	86	5.58	JP-X
Meeting deadlines	87	3.98	JP-X
Frequent interruptions	86	3.85	JP-X
Assignment of increased responsibility	87	3.37	JP-X
Fellow workers not doing their job	85	3.08	LS-X
Inadequate salary	87	2.69	JS-X
Inadequate or poor quality equipment	85	2.46	LS-X
Performing tasks not in job description	84	2.43	JP-X
Frequent changes from boring to demanding	87	2.34	JP-X
Poorly motivated coworkers	87	2.34	LS-X

Note. Items with index JS-X identified correspond with the JS-X only. Items labeled as JP-X or LS-X were also used to calculate JS-X scores.

Research Objective Four: Rank the Factors That Cause the Highest and Lowest Levels of Stress in Disaster Case Managers

Factors that inflict the highest and lowest levels of stress amongst disaster case managers employed by the faith-based organization were identified through the

calculation of severity mean scores. Excessive paperwork was indicated as the factor that causes the most stress in disaster case managers while difficulty getting along with supervisor was indicated as the least stressful factor. Seven of the ten items related to the JP-X scored in the top half of items based on severity score and six of the ten items scored in the top third (Table 8). By comparison, five of the ten LS-X related items were ranked in the bottom half of severity scores.

Table 8 *Top Ten Stressors by Severity and Index*

Stressor	<i>n</i>	<i>M</i>	Index
Excessive paperwork	88	5.97	JP-X
Meeting deadlines	87	4.85	JP-X
Fellow workers not doing their job	88	4.76	LS-X
Inadequate salary	89	4.56	JS-X
Dealing with crisis situations	85	4.41	JP-X
Assignment of increased responsibility	87	4.41	JP-X
Lack of opportunity for advancement	87	4.31	LS-X
Frequent interruptions	89	4.30	JP-X
Inadequate or poor quality equipment	86	4.17	LS-X
Frequent changes from boring to demanding	88	3.94	JP-X

Note. Items with index JS-X identified correspond with the JS-X only. Items labeled as JP-X or LS-X were also used to calculate JS-X scores.

Conclusions and Implications

Information about lack of support in the workplace as a contributing factor to occupational stress and specifically to job stress in the field of social work is abundant indicating this component of job stress as more prevalent. In this study however, items related to job pressure items exhibited higher mean scores in both severity and frequency, than lack of support related items. Some factors that may contribute to this difference within disaster case managers from the recipient organization can be easily identified.

The scope and nature of the DCM-P project itself may have the biggest influence on perceived higher levels of job pressure related stress. The title of “disaster” case management itself implies a high stress situation. One unique aspect of the DCM-P project that may contribute to stress is the time frame allotted for the project. Disaster case managers working on this project were asked to accept a job that only ensured employment for one year, after which disaster case managers would have to find alternative means for employment. This in itself could contribute to high levels of stress, especially for disaster case managers with dependents. Furthermore, whereas employees in other occupational settings or even other case managers and social workers have deadlines, a stressor that scored second highest for both frequency and severity, for particular assignments or projects, disaster case managers at this faith-based organization have a deadline not just for individual cases, but for completion of the entire recovery project. At the onset of the DCM-P project, completion for the entire project was scheduled for May 2010, allotting one year for disaster case managers to help all of their

clients achieve recovered status. Faced with this challenge, disaster case managers working for the DCM-P project may have felt pressure when trying to obtain recovery resources for clients.

The task of finding resources may have been another significant source of stress for DCM-P case managers. Lack of resources has been indicated in previous literature (Söderfeldt, et al., 1995) as a source of stress for social workers. For this project however, there was an even more finite pool of resources. Disaster case managers for the DCM-P project were significantly dependent on government grants to fund resources for clients' recovery. As mentioned in the FEMA impact report, Hurricane Ike may have been one of most costly disasters that had occurred however the magnitude of recovery resources that were provided may not have proportionately reflected the cost of damages. Disaster case manager's difficulties locating resources may have resulted in clients' frustration in addition to their own, resulting in additional pressures placed on case managers.

Another stressor inherent to the DCM-P project was the excessive paperwork, the item that scored highest in both severity and frequency, that had to be completed for each case. Disaster case managers were required to submit various forms to secure resources and report progress. Paperwork made up such a large part of a disaster case manager's role that there was an entire session of the third party training focused solely on forms (Cummings, et al., 2010). Disaster case managers may have experienced elevated stress due to the amount of time that was required to complete paperwork which

in turn, reduced the amount of time that case managers were able to spend performing other case management duties such as meeting with clients and seeking resources.

Fellow workers not doing their jobs and inadequate or poor quality equipment were the only two LS-X items that scored in the top third of both the frequency and severity scores. The perception that the respondents co-workers are not contributing equally to the success of the project may be related to training and experience levels. Although all case managers attended a third party training, several trainings were offered and information may have been inconsistent. Another factor might be that some case managers joined the DCM-P project with no case management experience whereas others may have had several years of social work or case management related experience. Seasoned case managers may take for granted prior experience and see a less experienced case manager's halt in progress as laziness or a poor attitude as instead of attributing lack of progress to confusion or lack of clarity. Furthermore, additional trainings were held by individual sub-recipient organizations (Texas AgriLife Extension Service, 2010). The quality and frequency of these trainings may not have been consistent between organizations. Additionally, it is possible that as the project progressed and most case managers had been involved since the inception, in-organization trainings were reduced, further widening the gap between new employees and those that had been involved since the beginning.

Equipment issues are another item inherent to the DCM-P project itself. In a long term position, equipment merits a higher portion of the budget and is updated at least

every few years. Due to a lack of resources and the short time frame of this project, it is unlikely that organizations would be willing to spend a significant amount of money on equipment that might only be used for the year. The same could be assumed of office space. Because disaster case management jobs for this program are not permanent and are limited to the time frame of the project, it is unlikely that office space was selected based on efficiency of workspace for case managers. It is likely that due to the temporary nature of the project, office buildings were selected based on availability and location. Many of these offices may have a set up that allows for frequent interruptions and a noisy work area which both scored in the top half of stressors by severity.

Another contributing factor to respondents' stress may be that nine stressors scored in the top ten of both the frequency scores and the severity scores. This means that nine of the ten items that inflict the highest levels of stress on respondents are the same stressors that respondents experience the most frequently.

Recommendations

Future Practice

- Based on the findings of this study, disaster case managers would achieve reduction in stress levels first and foremost through the reduction of paperwork. The stressor excessive paperwork was indicated by respondents as both the most severe and most frequently occurring of the 30 stressors given. If possible, efforts should be made to streamline

paperwork for disaster case managers to reduce the amount of time and frustration associated with this task.

- Reduction of paperwork could also assist with reducing the amount and frequency of stress associated with meeting deadlines which scored second in both severity and frequency. With the reduction of paperwork and thus, time spent filling out and submitting paperwork, case managers would have more time to spend on additional case management duties such as meeting with clients or locating resources for clients.
- Along the same lines, central employees could be hired by each sub-recipient organization to facilitate the paperwork process. This would also aid in removing some of the paperwork and deadline associated disaster case manager stress.
- Frequent interruptions, noisy work area, and inadequate or poor quality equipment can also be addressed as the three of these can be related to funding for office space and equipment although the constructs represented are different. Because inadequate or poor quality equipment scored 4.17 on severity and 2.46 in frequency, efforts could be made to keep equipment ready to be sent to the location where disaster case management services will be needed next. Equipment could include computers and electronics as well as furniture or cubical dividers to help reduce the interruptions and noise in offices which had frequency mean scores of 3.85 and 1.74 and severity mean scores of 4.30 and 3.76

respectively. Office equipment such as dividers could however, remain in sufficient condition to be used for many different projects. At the very least, without the advance purchase of furniture or dividers, efforts should be made by supervisors to reduce the amount of noise and number of interruptions plaguing case managers.

- There was some stress associated with the quality of support from supervisors as well as an increased amount of stress related to poorly motivated or performing coworkers. Inadequate support by supervisor and poor or inadequate supervision had severity mean scores of 1.36 and 1.28 and frequency scores of 3.51 and 3.11 respectively. Both the larger recipient organization and the smaller sub-recipient organizations should attempt to ensure that newer employees receive the same caliber of training as was provided to employees at the beginning of the project.
- Perhaps a suggestion from previous literature for “efforts to focus on training of supervisors to fulfill roles beyond ensuring compliance with agency mandates are essential” (Chenot et al., 2009). Supervisors should receive specialized training on effective ways to perform roles associated with being a supervisor as well as methods for keeping disaster case managers motivated and efficiently operating within the bounds of their position.

Although results of this study draw attention to factors inherent to the occupation and organization as causes of stress in the workplace, it remains important to incorporate

personal stress management techniques to facilitate stress reduction. Care-for-the-caregiver suggestions were given to case managers during the third party training however, more time needs to be spent explaining these techniques to case managers. The ability to reduce personal stress is important to address items that cause stress but cannot be adjusted by the organization such as frequent changes from boring to demanding, personal insult from a client or colleague, and dealing with crisis situations which are inherent to the position of disaster case manager itself. Equipping case managers to internally cope with stress while ensuring that case managers are aware that stressful aspect of their jobs are often out of their control is essential.

Future Research

- In the Job Stress Survey, respondents are asked to allot severity scores to stressors based on a moderate rating of five for assignment of disagreeable duties. In order to compare case managers to the normative population, severity scores would need to be adjusted up based upon this level five rating. For example, if the respondent gave a severity score of two for assignment of agreeable duties, all severity scores would need to be adjusted by three in order to compare to normative data.
- A factor that may have influenced respondents is that completed questionnaires were returned to supervisors for compilation. Out of the 89 questionnaires returned, more than 90% of case managers refused to report a Case Manager ID Number indicating a possible fear of repercussions. Collecting questionnaires in person or waiting to collect

data until the end of the project may have prevented some of this fear and thus changed responses.

- This study focused on one population of case managers in one unique, faith-based organization and may not be characteristic of all disaster case managers involved with Hurricane Ike recovery. Future studies should attempt to include a sample representative of all case managers involved with recovery.
- Severity and frequency scores should be calculated and correlated with the characteristics of case managers to indicate if these characteristics influence stress levels.
- Outside stressors and their effect on work stress should also be examined. For example, a majority of respondents in this study were female. Additionally, a large percentage of respondents also indicated single or divorced for marital status. This indicates that many of the respondents could be single mothers that may experience stress in their personal lives which in turn may affect job stress.

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APPENDIX A

LIST OF LITERATURE RELATED TO JOB STRESS

Literature Related to Occupational Stress

A comparison of job stress in law enforcement and teaching (Grier, 1982)

A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings (Jackson & Schuler, 1985)

A meta-analysis of the correlates of role conflict and ambiguity (Fisher & Gitelson, 1983)

A model of job stress and physical health: The role of individual (Cooper, Kirkcaldy, & Brown, 1994)

A person- environment analysis of job stress: A contingency model explanation (Chemers, et al., 1985)

Causes, coping, and consequences of stress at work (Cooper & Payne, 1998)

Corporate abuse: How lean and mean robs people and profits (Wright & Smye, 1996)

Counseling and psychotherapy of work dysfunctions (Lowman, 1993)

Current issues relating to psychosocial job strain and cardiovascular disease research (Theorell & Karasek, 1996)

Definition and conceptualization of stress in organizations (Schuler, 1980)

Developing a transactional psychology of work stress (Barone, 1994)

Development of the Job Diagnostic Survey (Hackman & Oldham, 1975)

Employee Burnout: America's Newest Epidemic (Northwestern National Life, 1991)

Employee Burnout: Causes and Cures (Northwestern National Life, 1992)

Employee reactions to job characteristics (Hackman & Lawler, 1971)

Epidemiological contributions to the study of work stress (Kasl, 1978)

Examining the nature of work stress: Individual evaluations of stressful experiences and coping (Dewe, 1989)

Exposure to job stress: A new psychometric instrument (Hurrell & McLaney, 1988)

Literature Related to Occupational Stress

Foreword in Handbook on Job Stress (Schuler, 1991)

Handbook on Job Stress (Perrewe, 1991)

Healthy mind: Healthy organization- a proactive approach to occupational stress
(Cooper & Cartwright, 1994)

Healthy work: stress, productivity, and the reconstruction of working life (Karasek & Theorell, 1990)

Intro to NIOSH proposed national strategy for work and well being: An agenda for the nineties (Sauter, 1992)

JCQ user's project summary '95: 10 years of job content questionnaire use (Karasek, Hulbert, & Simmerman, 1995)

Job control and worker health (Sauter & Hurrell, 1989)

Job demands, job decision latitude and mental strain: Implications for job redesign
(Karasek, 1979)

Job stress in managers, professionals, and clerical workers (Turnage & Spielberger, 1991)

Job stress in university, corporate, and military personnel (Spielberger & Reheiser, 1994)

Job Stress Interventions (Murphy, Hurrell, Sauter, & Keita, 1995)

Job stress, employee health and organizational effectiveness: A facet analysis, model and literature review (Beehr & Newman, 1978)

Managing job stress and health: The intelligent person's guide (Matteson & Ivancevich, 1982)

Manual for the State- Trait Anxiety Inventory (Form Y) (Spielberger, 1983)

Measurement of job characteristics: Comparison of the original and the revised Job Diagnostic Survey (Kulik, Oldham, & Langner, 1988)

Measurement properties of the revised Job Diagnostic Survey: More promising news from the public sector (Renn, et al., 1993)

Literature Related to Occupational Stress

Measuring Stress in the workplace: The Job Stress Survey (Spielberger, Reheiser, & Vagg, 1999)

Occupational stress and failures of social support: When helping hurts (Beehr, Bowling, & Bennett, 2010)

Occupational stress and individual strain (French, Caplan, & Harrison, 1972)

Occupational Stress Inventory manual- research version (Osipow & Spokane, 1987)

Occupational Stress Inventory- Revised: Professional Manual (Osipow, 1998)

Occupational stress: Measuring job pressure and organizational support in the workplace (Vagg & Spielberger, 1998b)

Occupational stress: Review and reappraisal (Sharit & Slavendy, 1982)

Organizational stress: studies in role conflict and ambiguity (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964)

Preventing work stress (Levi, 1981)

Preventive stress management in organizations (Quick, Quick, Nelson, & Hurrell, 1997)

Psychological stress in the workplace (Lazarus, 1991)

Psychological stress in the workplace: A brief comment on Lazarus' outlook (Brief & George, 1991)

Relationship of role conflict and role ambiguity to job involvement measures (Hamner & Tosi, 1991)

Ryland and Greenfeld 1991 Handbook on Job Stress (Ryland & Greenfeld, 1991)

STAI manual for the State- Trait Anxiety Inventory ("Self- Evaluation Questionnaire) (Spielberger, et al., 1970)

Stress at Work (Cooper & Payne, 1978)

Stress Diagnostic Survey (SDS) (Ivancevich, et al., 1990)

Stress Diagnostic Survey (SDS): Comments and psychometric properties of a multidimensional self-report inventory (Ivancevich & Matteson, 1976)

Literature Related to Occupational Stress

Stress in the workplace: Assessing differences judicially (O'Roark, 1995)

Stress measurement and management in organizations: Development and current status (Murphy & Hurrell, 1987)

The enigma of social support and occupational stress: source congruence and gender role effects (Beehr, Farmer, et al., 2010)

The Florida police stress survey (Spielberger, Grier, & Pate, 1980)

The mechanisms of job stress and strain (French, Caplan, & Harrison, 1982)

The occupational stress indicator: management guide (Cooper, et al., 1998)

The person- environment fit approach to stress: Recurring problems and some suggested solutions (Edwards & Cooper, 1990)

The role of social support in the process of work stress (Viswesvaran, Sanchez, & Fisher, 1999)

The Social Readjustment Scale: A cross cultural study of Western Europeans and American (Holmes & Rahe, 1967)

The utility of the transaction approach for occupational stress research (Harris, 1991)

The Work Stress Inventory: Organizational stress and job risk (Barone, et al., 1988)

Understanding executive stress (Cooper & Marshall, 1978)

Validation of a survey instrument for job-related cardiovascular illness (Karasek, et al., 1983)

Work environment scale, Form R (Insel & Moos, 1974)

Note. Literature indicated may not be all inclusive.

APPENDIX B
IRB APPROVAL

TEXAS A&M UNIVERSITY**DIVISION OF RESEARCH AND GRADUATE STUDIES - OFFICE OF RESEARCH COMPLIANCE**

1186 TAMU, General Services Complex

979.458.1467

College Station, TX 77843-1186

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<http://researchcompliance.tamu.edu>

Human Subjects Protection Program

Institutional Review Board

DATE: 04-May-2010**MEMORANDUM****TO:** FORMAN, MEGAN
77843-3578**FROM:** Office of Research Compliance
Institutional Review Board**SUBJECT:** Initial Review

**Protocol
Number:** 2010-0323**Title:** Job Related Stress of Disaster Case
Managers**Review
Category:** Exempt from IRB Review

It has been determined that the referenced protocol application meets the criteria for exemption and no further review is required. However, any amendment or modification to the protocol must be reported to the IRB and reviewed before being implemented to ensure the protocol still meets the criteria for exemption.

This determination was based on the following Code of Federal Regulations:
(<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm>)

45 CFR 46.101(b)(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Provisions:

This electronic document provides notification of the review results by the Institutional Review Board.

APPENDIX C

COVER LETTER TO PARTICIPANTS

Greetings,

When Hurricane Ike struck the coast of Texas in September of 2008, it impacted many Texans by causing widespread chaos and destruction—no one knows this better than you. We realize that you and your fellow disaster case managers are often the only resource people have to help them recover from the devastation caused by Hurricane Ike. What we don't know is how your hard work is affecting you. We are conducting a study to describe stress levels of disaster case managers. Only you and people like you can provide this information.

Attached to this sheet, you will find one, 4-page questionnaire and one envelope. Please take a few minutes to complete the questionnaire. Your response is very important, because a summary of the data collected will be shared with FEMA to provide support for possible 'care for the caregiver' funding opportunities. Additionally, results from this survey will be used to influence future disaster case management programs. Participation in this study is voluntary; in no way are you required to participate.

Please fill out the questionnaire in its entirety, fold it in thirds, and place it in the envelope. For confidentiality reasons, please seal the envelope, by removing the white strip from the back of the envelope flap and pushing the flap against the back of the envelope. Please double-check that the envelope is sealed. After sealing the envelope with the questionnaire inside, please sign your name across the back flap of the sealed envelope so that we can ensure that the envelope was not tampered with and return it to <<NAME>> by <<DATE>>. Once <<NAME>> has collected each case manager's completed questionnaire, <<he/she>> will send them to Fran and the Measurement and Evaluation team at LSSDR.

Confidentiality is very important to us. Your individual responses will not be shared with anyone, including your supervisor or your employer. We will only release results in a summary, so that no one can identify your responses. Rest assured your name will not be associated with any summary of the data. Thank you in advance for your time and participation.

APPENDIX D
DCM JOB STRESS SURVEY

MARKING INSTRUCTIONS

CORRECT: ● INCORRECT: ☒ ☓ ☐ ☑

DCM JOB STRESS SURVEY

The purpose of this study is to determine stressful job-related events and if disaster case managers are more or less stressed than professionals in other careers. Summarized results from this study will be shared with FEMA and others interested in work-life balance in the Disaster Case Management profession.

This survey will measure your perceptions of important sources of stress in your work. The survey lists 30 job-related events that many employees find stressful. First, you will be asked to rate the amount of stress associated with each event. Then, indicate the number of times within the last month that you have experienced each event.

In rating the amount of stress for each stressor event, use all of your knowledge and experience. Consider the amount of time and energy that you would need to cope with or adjust to the event. Base your ratings on your personal experience as well as what you have seen to be the case for others. Rate the average amount of stress that you feel is associated with each event, rather than the extreme.

EXAMPLE:		Amount of Stress								
		Low			Moderate			High		
STRESSFUL JOB-RELATED EVENTS		1	2	3	4	5	6	7	8	9
1A.	Taking out the trash.	○	○	○	○	●	○	○	○	○

Please continue on the back.

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Part A. Instructions: Consider each of the job-related events below; then fill in the bubble that best reflects the amount of stress that that particular event causes you. The scale for each item ranges from 1 to 9 - Select a number from 1 to 3 for items that cause you little to no stress, 4 to 6 for items that cause you a moderate amount of stress, and 7 to 9 for items that cause you a great amount of stress.

STRESSFUL JOB-RELATED EVENTS	Amount of Stress								
	Low			Moderate			High		
	1	2	3	4	5	6	7	8	9
1. Assignment of disagreeable duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Working overtime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Lack of opportunity for advancement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Assignment of new or unfamiliar tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Fellow workers not doing their job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Inadequate support by supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Dealing with crisis situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Lack of recognition for good work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Performing tasks not in job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Inadequate or poor quality equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Assignment of increased responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Periods of inactivity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Difficulty getting along with supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Experiencing negative attitudes toward the organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Insufficient personnel to handle an assignment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Making critical on-the-spot decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Personal insult from client or colleague	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Lack of participation in policy making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Inadequate salary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Competition for advancement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Poor or inadequate supervision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Noisy work area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Frequent interruptions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Frequent changes from boring to demanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Excessive paperwork	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Meeting deadlines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Insufficient personal time (e.g. coffee breaks, lunch)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Covering work for another employee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Poorly motivated coworkers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Conflicts with other departments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue on the next page.

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Part B. Instructions: For each of the job-related events listed, please indicate the approximate NUMBER OF DAYS during the past month on which you have personally experienced this event. Mark the 0 if the event did not occur; mark 9+ for each event that you experienced personally on 9 or more days during the past month.

STRESSFUL JOB-RELATED EVENTS	Number of Days on Which the Event Occurred During the Past Month									
	0	1	2	3	4	5	6	7	8	9+
31. Assignment of disagreeable duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Working overtime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Lack of opportunity for advancement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Assignment of new or unfamiliar tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Fellow workers not doing their job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Inadequate support by supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Dealing with crisis situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Lack of recognition for good work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Performing tasks not in job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Inadequate or poor quality equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Assignment of increased responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Periods of inactivity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Difficulty getting along with supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Experiencing negative attitudes toward the organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Insufficient personnel to handle an assignment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. Making critical on-the-spot decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Personal insult from client or colleague	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Lack of participation in policy making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Inadequate salary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. Competition for advancement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Poor or inadequate supervision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Noisy work area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. Frequent interruptions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. Frequent changes from boring to demanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. Excessive paperwork	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Meeting deadlines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. Insufficient personal time (e.g. coffee breaks, lunch)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. Covering work for another employee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. Poorly motivated coworkers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60. Conflicts with other departments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue on the next page.

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Part C. Instructions: Please provide the following information. None of your responses will be shared with your supervisor or administrators. Your answers are completely confidential and will be released only as summaries-your answers CANNOT be identified. Your Case Manager ID number is being requested for follow up purposes only.

1.) **You are ...**

- Male
- Female

2.) **Your year of birth?**

--	--	--	--

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.) **Your marital status?**

- Single
- Married
- Widowed
- Separated
- Divorced

4.) **Highest level of education obtained?**

- Some high school or less
- High school graduate or GED
- Vocational or technical degree
- Some college
- Bachelor degree
- Post-graduate degree(s)

5.) **Racial/Ethnic Background?**

- African American (non-Hispanic)
- Asian American
- Hispanic
- Native American
- White (non-Hispanic)
- Other

6.) **Months in current position?**

- Less than 2 months
- 2-3 months
- 4-5 months
- 6 months
- More than 6 months

7.)

CASE MANAGER ID NUMBER									
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you!

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APPENDIX E
REMINDER EMAIL TO POCs

Good Evening <<NAME>>,

I recently mailed you a packet of questionnaires for your case managers to fill out regarding the job-related stress they have experienced while employed through this project. Some of the packets have been returned and some have not. Because of anonymity, I can't verify that I have received responses from your case managers. If you have already mailed your case managers' responses to Fran, thank you for your efforts and please disregard the rest of this e-mail.

The information being collected from your case managers is very important for future disaster recovery projects. Summarized results from this study will be provided to Texas Health and Human Services Commission (HHSC) and FEMA which will aid them in determining if funding for care-for-the-caregiver support is needed. I'm sure that you will agree this is a goal worthy of your support. Only your case managers can provide this very important information.

Participation in this study is voluntary; in no way are your case managers required to participate. However, they can help us very much by taking a few minutes to share their thoughts and opinions about the job related stress that they have experienced over the course of this project. Many case managers have already responded, but it is important that all case managers' job stress levels are included so that HHSC and FEMA understand the importance of this issue.

Again, if you have already collected questionnaires from your case managers and mailed them to Fran, please accept my apology and appreciation for your participation. Thank you in advance for your prompt response. If you have any questions as you collect the questionnaires, please contact me at any time on my cell phone 713-459-9380 or e-mail me at mforman@aged.tamu.edu.

Thank you again,

Megan Forman

Graduate Research Assistant

Department of Agricultural Leadership, Education, and Communications

Texas A&M University

APPENDIX F**TABLE OF FREQUENCY OF SCORES FOR STRESSORS MEASURED BY
FREQUENCY OF OCCURRENCE**

Table A-F1 *Frequency of Scores for Stressors Measured by Frequency of Occurrence*

Stressor	0		1		2		3		4		5		6		7		8		9	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Assignment of disagreeable duties	41	47.1	14	16.1	9	10.3	8	9.2	3	3.4	4	4.6	2	2.3	2	2.3	2	2.3	2	2.3
Working overtime	39	45.3	12	14	11	12.8	6	7.0	3	3.5	5	5.8	1	1.2	2	2.3	1	1.2	6	7.0
Lack of opportunity for advancement	51	59.3	3	3.5	4	4.7	4	4.7	4	4.7	3	3.5	1	1.2	2	2.3	2	2.3	12	14.0
Assignment of new or unfamiliar tasks	--	--	--	--	8	9.3	11	12.8	9	10.5	6	7.0	3	3.5	--	--	1	1.2	4	4.5
Fellow workers not doing their job	34	40.0	8	9.4	8	9.4	5	5.9	3	3.5	6	7.1	1	1.2	2	2.4	1	1.2	17	20.0
Inadequate support by supervisor	58	67.4	8	9.3	5	5.8	--	--	--	--	6	7.0	2	2.3	2	2.3	2	2.3	3	3.5
Dealing with crisis situations	31	36.5	12	14.1	15	17.6	11	12.9	1	1.2	7	8.2	1	1.2	1	1.2	3	3.5	3	3.5
Lack of recognition for good work	48	57.1	7	8.3	6	7.1	6	7.1	--	--	7	8.3	2	2.4	3	3.6	--	--	5	6.0
Performing tasks not in job description	28	33.3	17	20.2	11	13.1	7	8.3	3	3.6	6	7.1	--	--	3	3.6	--	--	9	10.7
Inadequate or poor quality equipment	41	48.2	7	8.2	7	8.2	5	5.9	4	4.7	7	4.7	2	2.4	4	4.7	2	2.4	9	10.6
Assignment of increased responsibility	25	28.7	12	13.8	12	13.8	2	2.3	6	6.9	7	8.0	3	3.4	3	3.4	--	--	17	19.5
Periods of inactivity	58	67.4	12	14.0	3	3.5	3	3.5	2	2.3	3	3.5	3	3.5	1	1.2	--	--	1	1.2
Difficulty getting along with supervisor	68	79.1	3	3.5	2	2.3	5	5.8	1	1.2	2	2.3	1	1.2	1	1.2	--	--	3	3.5
Experiencing negative attitudes toward the organization	55	63.2	9	10.3	3	3.4	4	4.6	4	4.6	3	3.4	3	3.4	2	2.3	--	--	4	4.6
Insufficient personnel to handle an assignment	48	55.8	10	11.6	3	3.5	4	4.7	1	1.2	7	8.1	2	2.3	4	4.7	1	1.2	6	7.0

Table A-F1 *Continued*

Stressor	0		1		2		3		4		5		6		7		8		9	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Making critical on-the-spot decisions	33	37.9	16	18.4	8	9.2	9	10.3	5	5.7	5	5.7	1	1.1	2	2.3	2	2.3	6	6.9
Personal insult from client or colleague	60	70.6	9	10.6	7	8.2	--	--	1	1.2	5	5.9	--	--	2	2.4	--	--	1	1.2
Lack of participation in policy making	50	57.5	5	5.7	7	8.0	2	2.3	2	2.3	8	9.2	2	2.3	2	2.3	--	--	9	10.3
Inadequate salary	46	52.9	8	9.2	3	3.4	2	2.3	1	1.1	6	6.9	2	2.3	1	1.1	1	1.1	17	19.5
Competition for advancement	67	77.0	4	4.6	3	3.4	3	3.4	1	1.1	3	3.4	1	1.1	1	1.1	1	1.1	3	3.4
Poor or inadequate supervision	65	74.7	1	1.1	4	4.6	2	2.3	1	1.1	6	6.9	2	2.3	2	2.3	--	--	4	4.6
Noisy work area	39	44.8	10	11.5	7	8.0	5	5.7	5	5.7	6	6.9	3	3.4	2	2.3	4	4.6	6	6.9
Frequent interruptions	21	24.4	12	14.0	10	11.6	3	3.5	5	5.8	6	7.0	5	5.8	1	1.2	4	4.7	19	22.1
Frequent changes from boring to demanding	36	41.4	12	13.8	13	14.9	5	5.7	2	2.3	3	3.4	3	3.4	3	3.4	1	1.1	9	10.3
Excessive paperwork	7	8.1	9	10.5	6	7.0	6	7.0	8	9.3	7	8.1	1	1.2	4	4.7	2	2.3	36	41.9
Meeting deadlines	18	20.7	10	11.5	11	12.6	8	9.2	8	9.2	3	3.4	3	3.4	3	3.4	3	3.4	20	23.0
Insufficient personal time	59	67.8	8	9.2	2	2.3	6	6.9	1	1.1	4	4.6	1	1.1	3	3.4	1	1.1	2	2.3
Covering work for another employee	42	48.3	13	14.9	11	12.6	2	2.3	3	3.4	5	5.7	4	4.6	3	3.4	1	1.1	3	3.4
Poorly motivated coworkers	46	52.9	8	9.2	5	5.7	2	2.3	3	3.4	6	6.9	3	3.4	3	3.4	--	--	11	12.6
Conflicts with other departments	61	70.9	6	7.0	5	5.8	1	1.2	2	2.3	6	7.0	2	2.3	--	--	1	1.2	2	2.3

APPENDIX G**TABLE OF FREQUENCY OF SCORES FOR STRESSORS MEASURED BY
SEVERITY**

Table A-G1 *Frequency of Scores for Stressors Measured by Severity*

Stressor	1		2		3		4		5		6		7		8		9	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Assignment of disagreeable duties	17	19.3	12	13.6	18	20.5	12	13.6	12	13.6	7	8.0	7	8.0	1	1.1	2	2.3
Working overtime	24	27.6	14	16.1	14	16.1	6	6.9	15	17.2	4	4.6	4	4.6	3	3.4	3	3.4
Lack of opportunity for advancement	12	13.8	10	11.5	15	17.2	11	12.6	15	17.2	3	3.4	11	12.6	6	6.9	4	4.6
Assignment of new or unfamiliar tasks	16	18.4	10	11.5	13	14.9	19	21.8	10	11.5	8	9.2	5	5.7	3	3.4	3	3.4
Fellow workers not doing their job	12	13.6	13	14.8	14	15.9	4	4.5	11	12.5	5	5.7	9	10.2	5	5.7	15	17.0
Inadequate support by supervisor	32	36.0	12	14.6	8	9.0	3	3.4	12	13.5	6	6.7	4	4.5	5	5.6	6	6.7
Dealing with crisis situations	10	11.8	8	9.4	7	8.2	15	17.6	21	24.7	11	12.9	8	9.4	4	4.7	1	1.2
Lack of recognition for good work	22	24.7	12	13.5	16	18.0	13	14.6	14	15.7	6	6.7	2	2.2	2	2.2	2	2.2
Performing tasks not in job description	17	20.0	15	17.6	16	18.8	10	11.8	14	16.5	2	2.4	6	7.1	2	2.4	3	3.5
Inadequate or poor quality equipment	18	20.9	10	11.6	12	14.0	8	9.3	11	12.8	8	9.3	8	9.3	5	5.8	6	7.0
Assignment of increased responsibility	11	12.6	9	10.3	9	10.3	17	19.5	17	19.5	6	6.9	10	11.5	3	3.4	5	5.7
Periods of inactivity	24	27.6	18	20.7	17	19.5	5	5.7	14	16.1	6	6.9	2	2.3	1	1.1	--	--
Difficulty getting along with supervisor	46	52.3	11	12.5	11	12.5	5	5.7	7	8.0	--	--	3	3.4	2	2.3	3	3.4
Experiencing negative attitudes toward the organization	32	36.8	15	17.2	8	9.2	10	11.5	7	8.0	6	6.9	5	5.7	2	2.3	2	2.3
Insufficient personnel to handle an assignment	19	22.1	13	15.1	12	14.0	7	8.1	11	12.8	9	10.5	7	8.1	6	7.0	2	2.3
Making critical on-the-spot decisions	20	22.5	11	12.4	16	18.0	20	22.5	9	10.1	4	4.5	4	4.5	4	4.5	1	1.1

Table A-G1 *Continued*

Stressor	1		2		3		4		5		6		7		8		9	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Personal insult from client or colleague	32	36.4	10	11.4	10	11.4	7	8.0	9	10.2	10	11.4	3	3.4	5	5.7	2	2.3
Lack of participation in policy making	19	21.8	15	17.2	13	14.9	6	6.9	11	12.6	8	9.2	5	5.7	5	5.7	5	5.7
Inadequate salary	15	16.9	7	7.9	11	12.4	8	9.0	23	25.8	5	5.6	5	5.6	3	3.4	12	13.5
Competition for advancement	21	23.9	18	20.5	14	15.9	5	5.7	16	18.2	3	3.4	7	8.0	1	1.1	3	3.4
Poor or inadequate supervision	34	38.2	14	15.7	10	11.2	5	5.6	9	10.1	6	6.7	6	6.7	3	3.4	2	2.2
Noisy work area	26	30.2	11	12.8	7	8.1	4	4.7	14	16.3	9	10.5	8	9.3	5	5.8	2	2.3
Frequent interruptions	19	21.3	8	9.0	9	10.1	9	10.1	16	18.0	6	6.7	11	12.4	7	7.9	4	4.5
Frequent changes from boring to demanding	17	19.3	15	17.0	10	11.4	10	11.4	11	12.5	12	13.6	6	6.8	2	2.3	5	5.7
Excessive paperwork	6	6.8	2	2.3	5	5.7	12	13.6	12	13.6	11	12.5	13	14.8	8	9.1	19	21.6
Meeting deadlines	8	9.2	7	8.0	13	14.9	5	5.7	23	26.4	7	8.0	12	13.8	8	9.2	4	4.6
Insufficient personal time	35	39.8	11	12.5	13	14.8	8	9.1	12	13.6	1	1.1	6	6.8	1	1.1	1	1.1
Covering work for another employee	27	31.4	12	14.0	14	16.3	3	3.5	11	12.8	8	9.3	4	4.7	6	7.0	1	1.2
Poorly motivated coworkers	22	25.3	12	13.8	16	18.4	5	5.7	6	6.9	7	8.0	9	10.3	3	3.4	7	8.0
Conflicts with other departments	36	41.4	11	12.6	16	18.4	3	3.4	10	11.5	4	4.6	3	3.4	2	2.3	2	2.3

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